

UPPER OHIO NAVIGATION PROJECT

INLAND WATERWAYS USERS BOARD MEETING NO. 103

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U.S. Army Corps of Engineers
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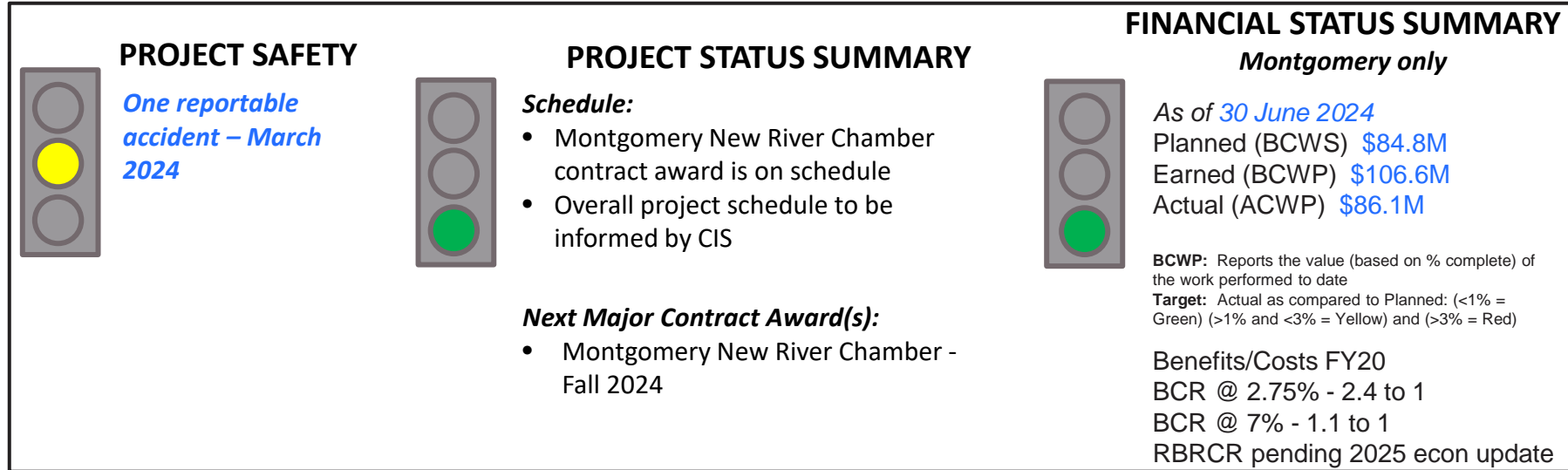
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UPPER OHIO PROJECT – BLUF STATUS / DASHBOARD



EXECUTIVE SUMMARY:

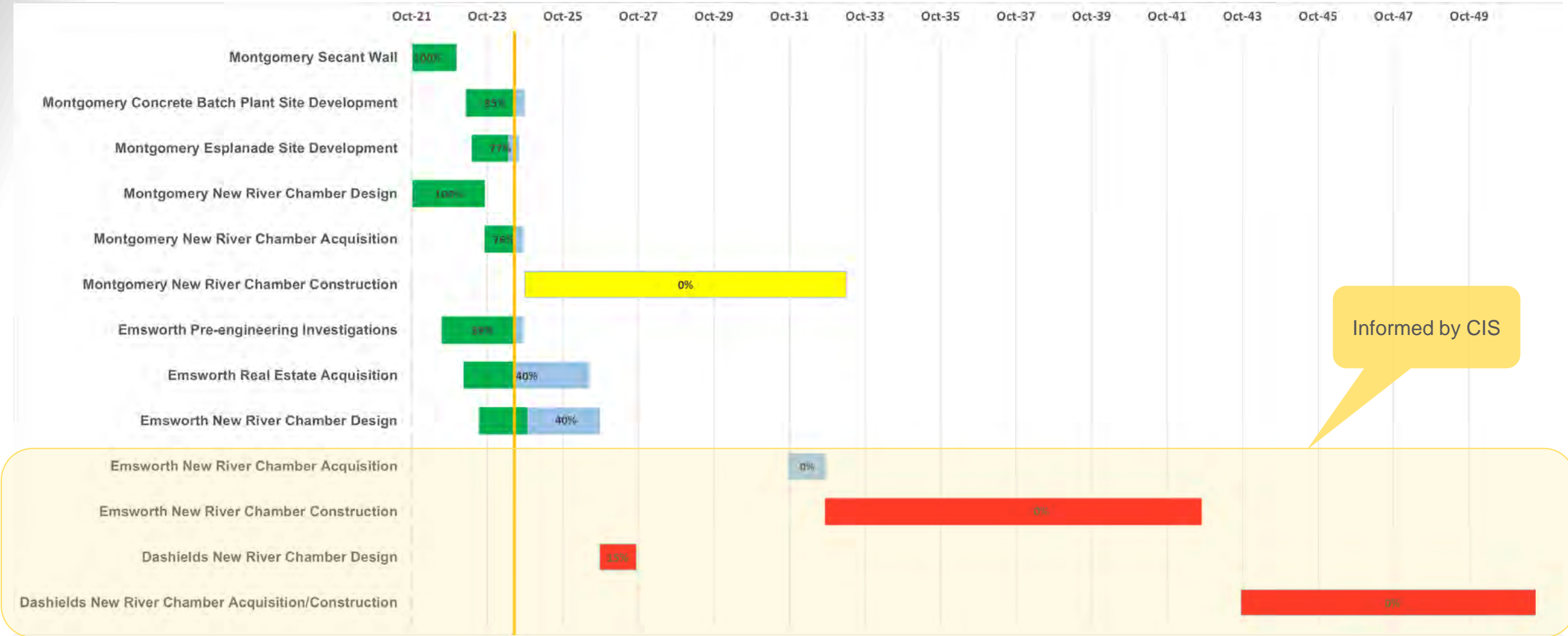
- *Focusing on safety*
- Montgomery lock design and a significant portion of the construction was funded by the Bipartisan Infrastructure Law (BIL)
- Emsworth lock design, real estate, and a small portion of construction was funded by the BIL
- Overall project schedule to be informed by the Capital Investment Strategy (CIS)



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UPPER OHIO NAVIGATION PROJECT SCHEDULE/FUNDING

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Schedule comments:

- Emsworth and Dashiels construction are highly dependent on funding.
- Montgomery and Emsworth are funded through design.
- Montgomery Construction is partially funded.

Schedule Legend:

- Green represents completed
- Yellow represents partially funded
- Blue represents remaining
- Red represents unfunded



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UPPER OHIO – PROJECT FUNDING SUMMARY

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Allocations:	GI-PED (\$M)	CG (\$M)	IWTF (\$M)	BIL (\$M)	Total (\$M)
Prior to FY 22	\$18.08	\$14.30	\$7.70		\$40.08
FY 22		\$1.99	\$10.81	\$934.71	\$947.51
FY 23					
FY 24					
Total to Date:	\$18.08	\$16.29	\$18.51	\$934.71	\$987.59
Remaining TPC Balance:					\$4,700.00

Total Project Cost:	\$5,687.58	December 2023
Authorized Cost:	\$3,146.12	August 2016
Escalated Cost:	\$5,119.77	December 2023
902 Limit:	\$5,658.09	December 2023

Source selection
sensitive until after
contract award

Fiscal Year Funding Scenario Breakout:

	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2031	TOTAL
Montgomery Efficient							
Emsworth Efficient			\$1,850M				\$1,850M
Dashields Efficient			\$26M	\$26M	\$20M	\$1,980M	\$2,052M



MONTGOMERY LOCK FUNDING AND KEY ACTIVITIES

Allocations:	GI-PED (\$M)	CG (\$M)	IWTF (\$M)	BIL (\$M)	Total (\$M)
Prior to FY 22	\$18.08	\$14.30	\$7.70		\$40.08
FY 22				\$857.71	\$857.71
FY 23					
FY 24					
Total to Date:	\$18.08	\$14.30	\$7.70	\$857.71	\$897.79
Remaining TPC Balance:					

Total Project Cost:	\$1,688.97	December 2023
Authorized Cost:	Not specific for Montgomery Lock. Upper Ohio Navigation Project carries these at the program level	
902 Limit:		

**Source selection
sensitive until after
contract award**

Fiscal Year Funding Scenario Breakout:

[illegible]



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MONTGOMERY LOCK – ISSUES/CHALLENGES

- **Challenge:** Facility failure prior to completion
 - **Mitigation Strategies:**
 1. Completing maintenance repairs prior to construction
 2. Conducting routine inspections during construction
 3. Continuing maintenance during construction as needed
- **Challenge:** Construction cost/Inflation
 - **Mitigation Strategies:**
 1. Evaluated transfer of risk contractually
 2. Utilized Economic Price Adjustment (EPA) clause
- **Challenge:** Market condition
 - **Mitigation Strategies:** Engaged with industry partners



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MONTGOMERY LOCK – LOOK AHEAD



- **Advance Construction Contracts**

- Complete the Esplanade and Batch Plant Site development construction contracts

- **Acquisition**

- Award the Montgomery New River Chamber contract
 - Award the Montgomery New River Chamber contract options



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MONTGOMERY LOCK - PROGRESS

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Concrete batch plant site development – Grading



Esplanade site development – Resident Engineer Office



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EMSWORTH LOCK – FUNDING SUMMARY

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Allocations:	GI-PED (\$M)	CG (\$M)	IWTF (\$M)	BIL (\$M)	Total (\$M)
Prior to FY 22					\$ -
FY 22		\$ 1.0	\$ 5.4	\$ 77.0	\$ 83.4
FY 23					
FY 24					
Total to Date:		\$1.0	\$5.4	\$77.0	\$83.4
Remaining TPC Balance:					\$1,849.0

Total Project Cost:	\$1,939.32	December 2023
Authorized Cost:	Not specific for Emsworth Lock. Upper Ohio Navigation Project carries these at the program level	
Escalated Cost:		
902 Limit:		

Fiscal Year Funding Scenario Breakout:

	FY 2024	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	FY 2037	FY 2038	TOTAL
Efficient		\$1.11B (\$1.85B)	\$266M	\$271M	\$203M	-	-	-						\$1,850M
Inefficient *														

* Inefficient - Not able to speculate on an inefficient funding scenario until the next Capital Investment Strategy is released



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EMSWORTH LOCK – ISSUES/CHALLENGES

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- **Challenge:** Failure of Lock Chamber before or during construction
 - **Mitigation Strategies:**
 1. Advanced maintenance being implemented (has its own risks)
 2. CIS development that support timely construction

- **Challenge:** Design funding uncertainty
 - **Mitigation Strategies:**
 1. Provide sufficient notice in advance to reposition designers
 2. Outline benefits of designing to completion with available funding

- **Challenge:** Real Estate Acquisition in an Industrial Corridor
 - **Mitigation Strategies:**
 1. Vertical coordination in acquisition planning
 2. Shield existing funding for acquisition



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EMSWORTH LOCK – LOOK AHEAD



- **Complete lock design**
 - Currently in 60% design phase
 - Completed design schedule for late 2026
- **Secure real estate**
 - Real Estate package to higher headquarters in July 2024
 - LRD/HQ/ASA approvals to follow
 - Acquisition complete: mid/late 2026
- **Award advance contracts**
 - Esplanade equipment building
 - Secant pile wall
- **Advertise and award lock contract**
 - CY 2027 or beyond



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EMSWORTH LOCK – PROGRESS

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DASHIELDS LOCK FUNDING AND KEY ACTIVITIES

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Allocations:	GI-PED (\$M)	CG (\$M)	IWTF (\$M)	BIL (\$M)	Total (\$M)
Prior to FY 22					\$0.00
FY 22		\$1.00	\$5.40		\$6.40
FY 23					
FY 24					
Total to Date:		\$1.00	\$5.40		\$6.40
Remaining TPC Balance:					\$2,052.89

Total Project Cost:	\$2,059.29	December 2023
Authorized Cost:	Not specific for Dashields Lock. Upper Ohio Navigation Project carries these at the program level	
Escalated Cost:		
902 Limit:		

Fiscal Year Funding Scenario Breakout:

	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	FY 2037	FY 2038	TOTAL
Efficient		\$62M	\$12M		\$1.18B (\$1.98B)	\$285M	\$290M	\$217M	-	-	-	-	\$2,052M
Inefficient *													

* Inefficient - Not able to speculate on an inefficient funding scenario until the next Capital Investment Strategy is released



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DASHIELDS LOCK DETAILS – ISSUES/CHALLENGES



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- **Challenge:** Funding for major contract
 - **Mitigation Strategies:** CIS development
- **Challenge:** Failure of Lock Chamber before or during construction
 - **Mitigation Strategies:** Advanced maintenance being implemented
- **Challenge:** Real Estate Acquisition in an Industrial Corridor
 - **Mitigation Strategies:** Advance acquisition activities early



DASHIELDS LOCK – LOOK AHEAD

- Begin real estate acquisition



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THANK YOU

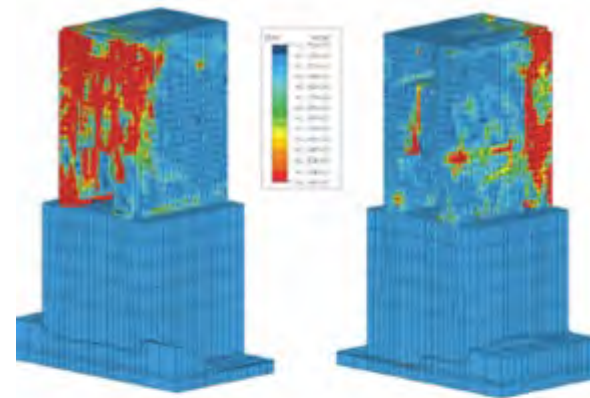
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Montgomery Lock



Monolith Joint Deterioration



Middle Wall Cracking Pattern
Projected in Year 2060
Monolith Faces