

LOWER MONONGAHELA RIVER LOCKS AND DAMS 2,3 & 4

Inland Waterways Users Board Meeting No. 104

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U.S. Army Corps of Engineers
Pittsburgh District
13 December 2024



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US Army Corps
of Engineers

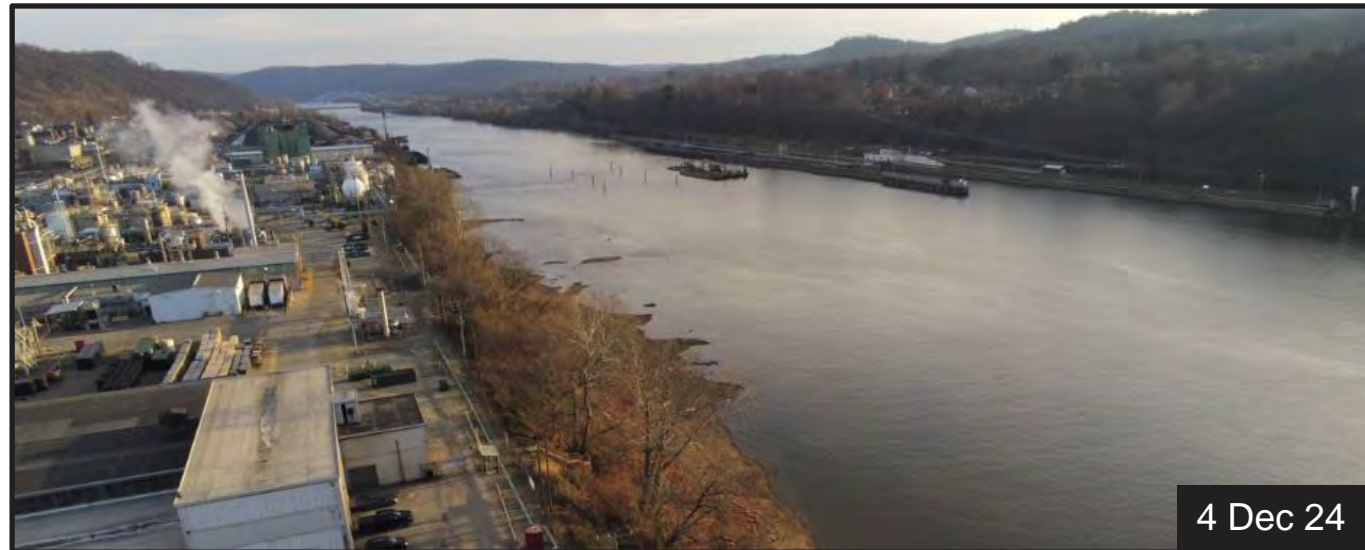
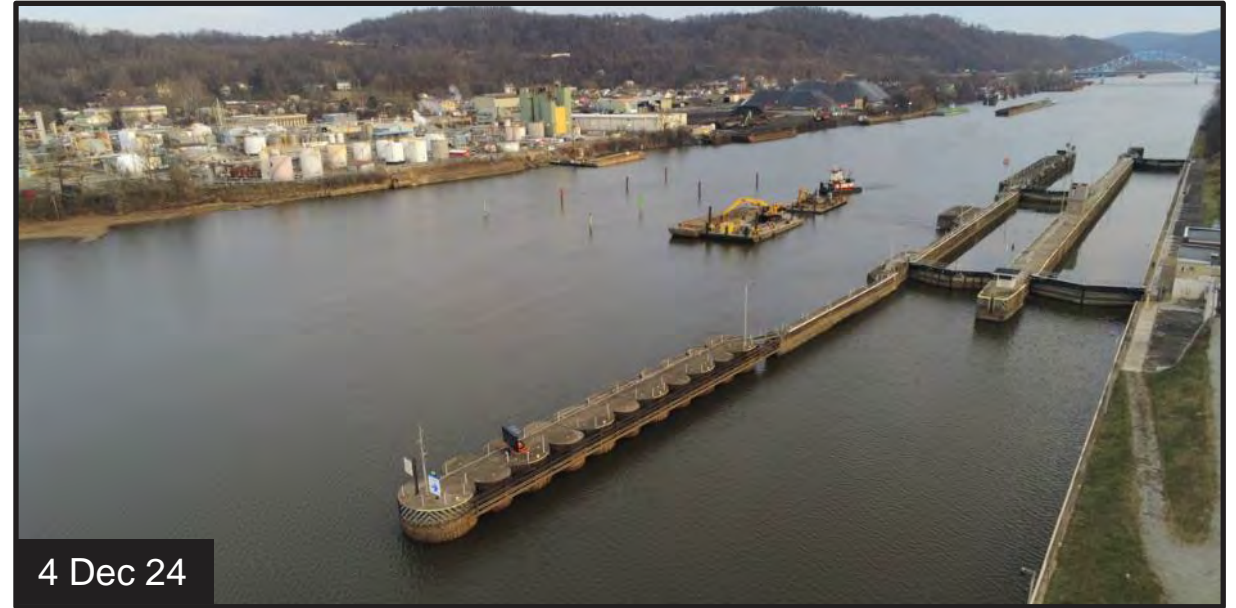


POOL 3 KEY POINTS

- L/D 3 Before and After
- Ongoing Challenges
- Emergency Dredging
- Pool 3 Status and Way Forward



L/D 3 BEFORE AND AFTER





ONGOING CHALLENGES



Elizabeth (L/D 3), Circa 1907



Youghiogheny River Lake, Present



11 DEC 24 MONONGAHELA RIVER POOL 3 EMERGENCY DREDGING

Situation:

In the navigable channel from JP Murtha Locks and Dam to Elizabeth Locks and Dam multiple high spots above the 9-foot draft were identified.

Resolution:

Complete emergency dredging to a channel depth of 10 feet with an allowable 1-foot over-depth.

Current Activities: 9 December – 14 December

- Complete dredging to RM 40.5 and work downstream

Scheduled Activities: 16 December – 21 December

- Continue dredging from RM 40.5 and work downstream

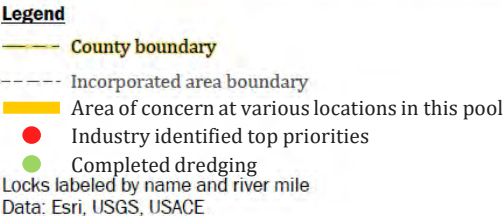
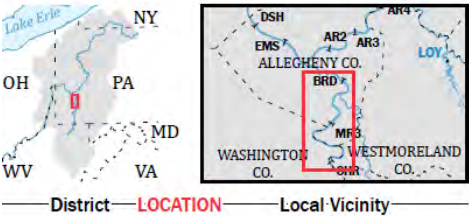
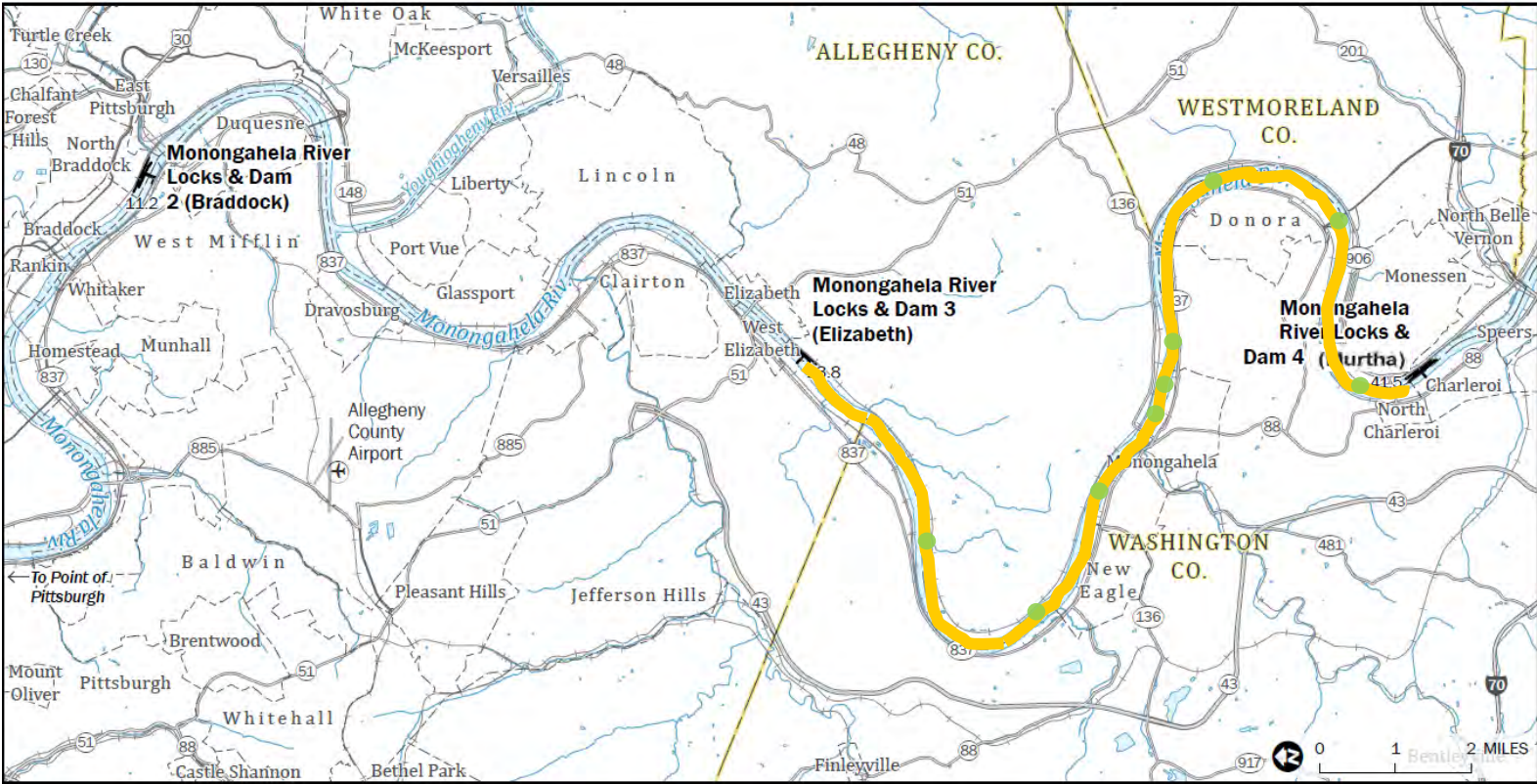
Current Progress:

- 70,500 cy of 91,000 cy (77%)



Dredging Channel

SCHEDULE: Contract Completion 18 Jan 2025



LOWER MONONGAHELA MEGAPROJECT
Location Map



Pub. 30 June 2023
USACE LRP Geospatial
erik.w.breedon

Progress Chart by River Mile (following prioritized areas, dredging will begin at the upstream and progress downstream, green = completed amber = to be dredged)





POOL 3 - WAY FORWARD

- Continue to work with shoreside facility owners on permitting
- Advanced maintenance dredging
- Channel widening
- Driveway dredging – by Port of Pittsburgh





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LOCKS AND DAMS 2, 3, AND 4 BLUF STATUS SUMMARY DASHBOARD



7

PROJECT SAFETY



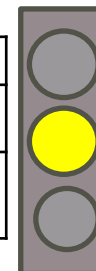
River Chamber Completion, Mon
3 Decommissioning, Fish Reefs &
CHR Elevator Refurb
-4 incidents in FY22
-4 incidents in FY23
-0 incidents in FY24

PROJECT STATUS SUMMARY



	<u>Orig.</u>	<u>Last</u>	<u>Current</u>
Operational (90% benefits)	Jul 2027	Dec 2024	Dec 2024
Completion (Physically complete)	Jan 2029	April 2027	Apr 2027

FINANCIAL STATUS SUMMARY



Project is ahead of baseline
schedule

Planned: \$1,066.3 M

Earned: **\$1,019.2 M**

Actual: **\$1,082.5 M**

Cost Performance Index: **0.94**

*through October 2024

EXECUTIVE SUMMARY:

- Continued focus on safety
- New John P. Murtha river chamber is fully operational
 - 60-day troubleshooting period complete
- Demolition of LD3 – Ongoing
 - Dam removal / 300-foot wide channel status - separate slide
- Emergency Dredging – separate slide
- FY 2024 appropriation \$41 M BIL funds
- Cost Update

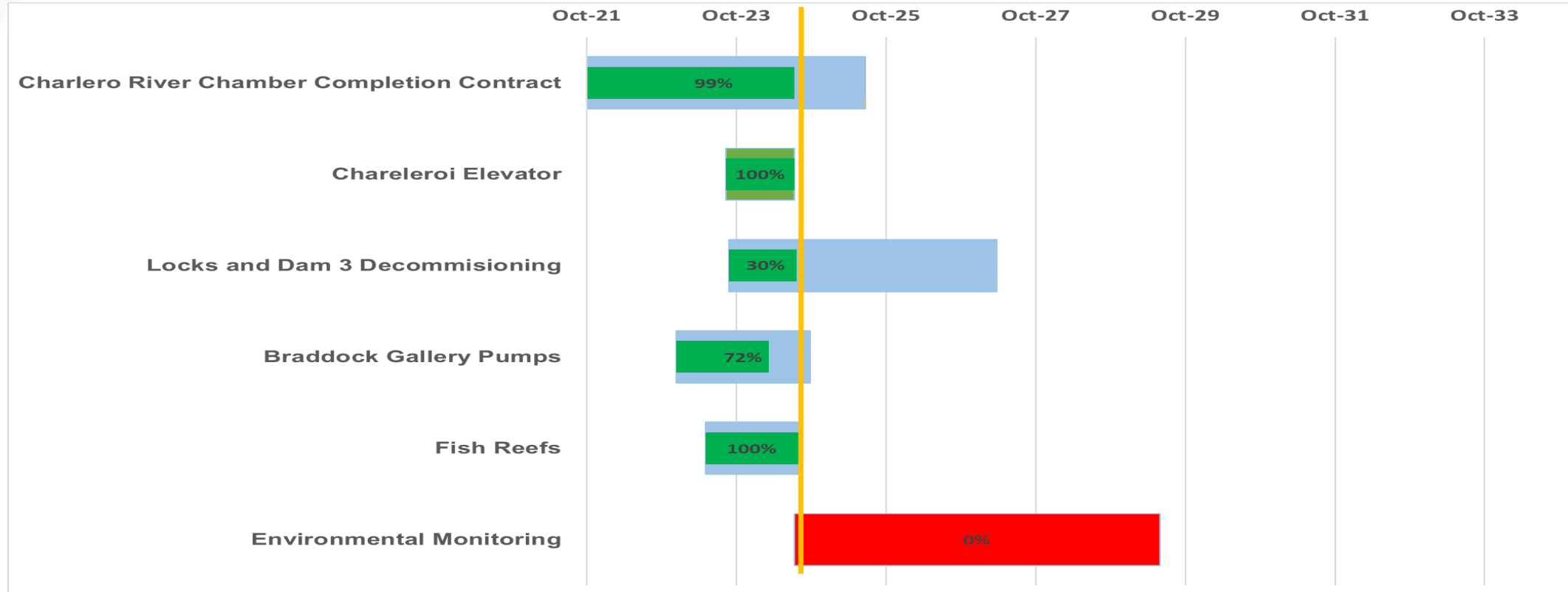


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LOCKS AND DAMS 2, 3, AND 4 SCHEDULE



8



Schedule comments:

- Final John P. Mutha close out contract not shown
- Environmental monitoring to begin

Legend:

- Green – Completed work
- Blue – Funded, in progress
- Red – Not yet started



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LOCKS AND DAMS 2, 3, AND 4 FUNDING SUMMARY

9



Allocations:	ARRA (\$M)	GI(\$M)	CG(\$M)	IWTF(\$M)	BIL(\$M)	Total(\$M)
Prior to FY 22:	\$68.3	\$12.5	\$515.5	\$528.1	\$0	\$1,124.4
FY 22:						\$0
FY 23:						\$0
FY 24:					\$41	\$41
Total to Date:	\$68.3	\$12.5	\$515.5	\$528.1	\$41	\$1,165.4
Remaining TPC Balance:						\$67.6

Total Project Cost (TPC) ^{*1}	\$1,233M	May 2018
Authorized Cost:	556.4M	Oct 1991
902 Limit:	\$1,764.4	Mar 2019

Lowermon Fiscal Year Funding Scenario Breakout:

	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	Total
Efficient	\$41M ^{*2}	Not specifically identified in the CIS									
Capability ^{*3}	\$41M		TBD	TBD	TBD	TBD					TBD

*1 - Total project cost update expected in December 2024

*2 - \$41M received in FY24 is from the bipartisan infrastructure law

*3 – Capability values are shown as TBD. Currently developing cost estimates and investigating funding options for emerging conditions such as siltation and widening of certain bends.

LOCKS AND DAMS 2, 3, AND 4

ISSUES/CHALLENGES

- **Challenge:** Completing the 90% benefits project with funding provided
- **Mitigation Strategies:**
 - Prioritize the remaining work
 - Efficiently use the funds allocated
- **Challenge:** Post pool change residual risks not funded
- **Mitigation Strategies:**
 - Siltation – Monitor pool 3 channel depths. This risk is being realized and dredging is ongoing
 - Advanced maintenance dredging – Seeking funding to address areas that have a higher likelihood of siltation
 - Widen channel in bends – Investigating funding source
 - Braddock dam scour – Monitor scour progression and repair if necessary.
 - Wetland mitigation – Monitor known wetland areas and emerging wetland areas to determine net gain or loss.



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LOCKS AND DAMS 2, 3, AND 4 – LOOK AHEAD

11



John P Murtha new river chamber

- Completed operational testing
- Completed final inspection
- Working punch list

Locks and Dam 3 removal

- Complete dam removal – December 2024
- Lock usage ends – river passage opens – December 2024
- Removal of river and middle walls – Spring 2027

Monitoring post pool change conditions to assess residual project risk

- Siltation
- Channel widening
- Braddock dam scour
- Wetland monitoring

Remaining items (summary)

- Lower pool 3 to authorized elevation
- Permanent John P Murtha land chamber closure contract
- Relocations
- Land deposition
- Victory hollow bridge



LOCKS AND DAMS 2, 3, AND 4 – JOHN P. MURTHA DEDICATION CEREMONY 28 AUGUST 2024





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LOCKS AND DAMS 2, 3, AND 4 – QUESTIONS?

13



Victory Hollow Dredged Material Placement

