

CHICKAMAUGA LOCK REPLACEMENT

Inland Waterways Users Board Meeting No. 103

Elizabeth Burks
Chief, Integrated Project Office
Nashville District

1 August 2024



US Army Corps
of Engineers®



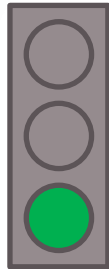


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CHICKAMAUGA LOCK REPLACEMENT BLUF STATUS / DASHBOARD



PROJECT SAFETY



Hours/Rate	Lock Chamber
Exp Hours	3,205,898
PDART	0.0
Hours/Rate	USAW
Exp Hours	104,632
PDART	0.00

PROJECT STATUS SUMMARY



Upstream Approach Walls
Construction Complete: December 2024

Lock Chamber
Construction Complete: January 2026

Next Major Contract Award(s):
Approach Wall and Decommissioning– September 2024

FINANCIAL STATUS SUMMARY



Planned	(BCWS)	\$575.1 M
Earned	(BCWP)	\$436.4 M
Actual	(ACWP)	\$488.0 M

EXECUTIVE SUMMARY:

- **Lock Chamber Contract:**
 - **Schedule:** Required contract completion is 27 January 2026; Contract's critical path is focused on electrical and mechanical work.
 - **Concrete Placements:** Contractor currently averaging 2,999 CY per month, [230K of 250K CY complete](#).
 - **Certified Claim:** Hearing scheduled for August 2025.
 - **Gate installation:** Start in Fall 2024, [critical path activities will then transition to electrical work for the operations building](#).
- **Upstream Approach Wall Contract:**
 - **Schedule:** Required contract completion 12 December 2024 pending resolution of VECP.
 - **Construction Status:** [All fourteen shaft have been drilled and concrete placed](#). Two of four intermediate piers are being constructed.
 - **GFE Approach Wall Beams:** Being removed from TVA Watts Bar in early 2025 for installation.
- **Approach Walls and Decommissioning Contract:**
 - Contractors revising proposals, award is schedule for September 2024.



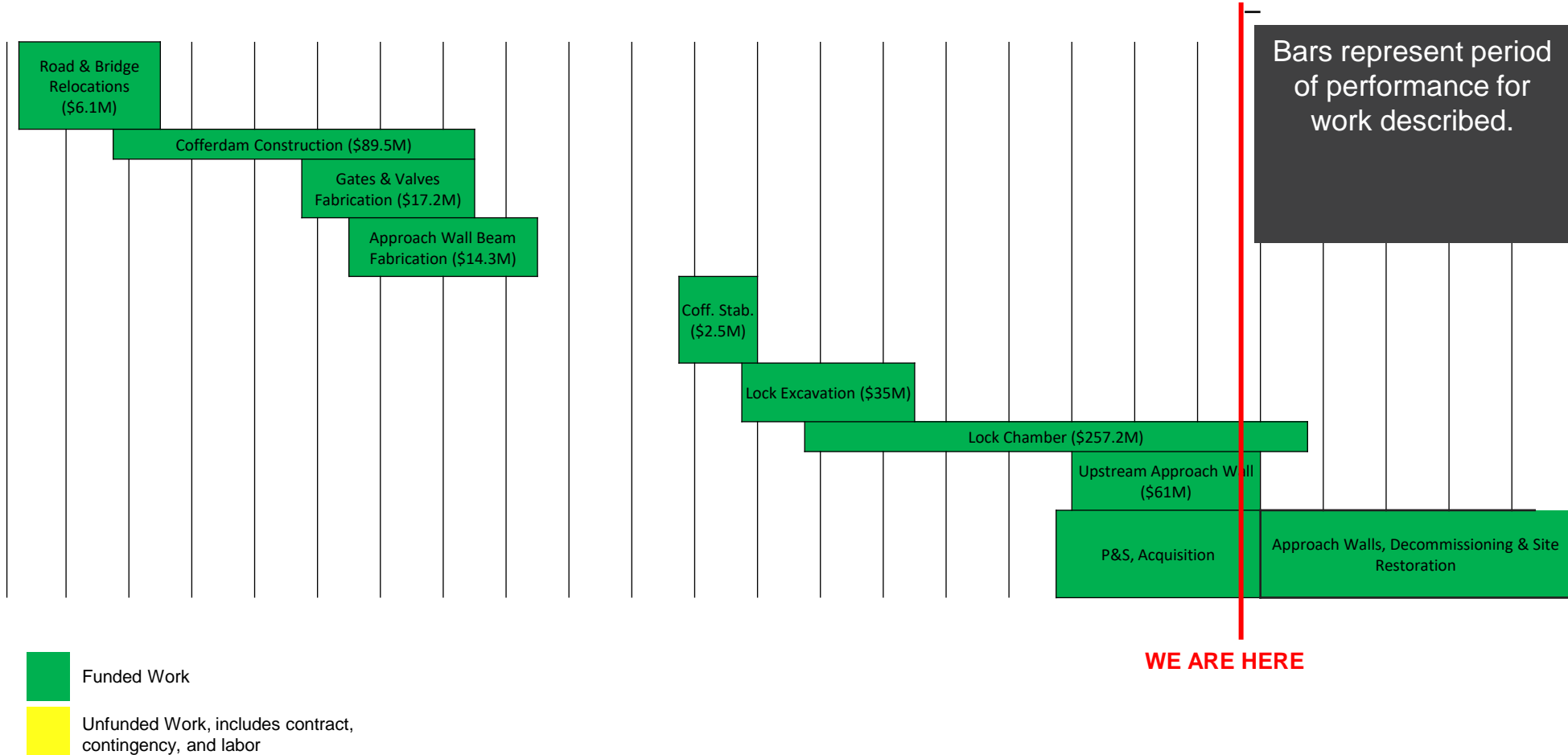
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CHICKAMAUGA LOCK – SCHEDULE & FUNDING

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FY2005 FY2006 FY2007 FY2008 FY2009 FY2010 FY2011 FY2012 FY2013 FY2014 FY2015 FY2016 FY2017 FY2018 FY2019 FY2020 FY2021 FY2022 FY2023 FY2024 FY2025 FY2026 FY2027 FY2028 FY2029



Schedule comments:

- The March 2023 certified Total Project Cost and Schedule update estimated baseline project completion in September 2028 (80% confident completion by August 2030).
- The new lock will become operational during the Approach Wall, Decommissioning, and Site Restoration contract, likely November 2027.



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CHICKAMAUGA LOCK – FUNDING SUMMARY



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ALLOCATIONS	INV (M)	CG (M)	IWTF (M)	ARRA (M)	BIL (M)	TOTAL (M)
Prior to FY 22	\$3.3	\$406.2	\$258.9	\$49.3	\$0	\$717.6
FY22	\$0	\$0	\$0	\$0	\$0	\$0
FY23	\$0	\$0	\$0	\$0	\$0	\$0
FY24	\$0	\$0	\$0	\$0	\$236.8	\$236.8
Total to Date:	\$3.3	\$406.2	\$258.9	\$49.3	\$236.8	\$954.4
Remaining TPC Balance:						\$ 0

Total Project Cost (TPC)	\$954.4 M	FY23 Price
Authorized Cost:	\$954.4 M	E/W 2024
Escalated Cost:	\$954.4 M	E/W 2024
902 Limit:	\$1,116 M	FY22
PED Cost:	\$74.7M	1 Jun 2024
S&A Cost:	\$32.2 M	1 Jun 2024

Fiscal Year Funding Capabilities:

FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	TOTAL
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Commentary:

- The project was funded to the 2023 TPCS price level, \$954.4M
- The FY2023 Total Project Cost and Schedule update has been certified as of 16 March 2023.
 - 2025 TPCS will be certified in March 2025.
- Follow on contracts for site remediation at Watts Bar and Muscle Shoals will be required in 2027



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CHICKAMAUGA LOCK – ISSUES/CHALLENGES

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- **Challenge:** The Lock Chamber Certified Claim alleges cost and schedule impacts due to a variety of items, most notably COVID-19.
- **Way Forward:** Claim is scheduled to be heard in August 2025.
- **Challenge:** Multiple contractors mobilized to the project site presents concerns with laydown area availability and congestion inside the cofferdam.
- **Way Forward:** Phased access will help with deconflicting site access with existing contractors.



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CHICKAMAUGA LOCK – LOOK AHEAD

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- **Progress:** Lock Chamber-
 - 10/35 monoliths are at final elevation with 7 more that require one more placement.
 - Miter gates will be delivered to site in September 2024.
 - Electrical and Mechanical submittals are under review for the operations building.
- **Progress:** Upstream Approach Walls–
 - All 14 shafts have concrete placed to final elevation.
 - Two of four intermediate piers are under construction.
 - Nose piers are being fabricated.
- **Progress:** Approach Walls and Decommissioning –
 - Scheduled for award – Sept 2024



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LOCK CHAMBER – PROGRESS

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Culvert Valve Delivery and M1 Monolith Placement





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UPSTREAM APPROACH WALLS – PROGRESS

Intermediate Pier Concrete Placement June 2024





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THANK YOU

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November 1938



June 2024



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BACKUP SLIDES



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CHICKAMAUGA LOCK - OVERVIEW



Authorization:

- Energy and Water Appropriations Act of 2003
- Reauthorized in America's Infrastructure Act of 2018

Purpose/Description:

Construction of a new 110' x 600' lock replacement for Chickamauga Lock on TN River Mile 471 in Chattanooga, Tennessee. Construction of a new lock is required due to Alkali Aggregate Reaction (AAR), which threatens the stability and operability of the existing lock. Chickamauga passes approximately 1M tons annually and the new lock would reduce commercial transit times by 80%. In addition, the lock is the most active lock on the TN River for recreation vessels (~3,500 vessel lockages annually).

Schedule:

DESCRIPTION	ORIGINAL	CURRENT
Lock Operational (Online)	2024	2027
Project Completion Date (Base Schedule)	2025	2029

Cost:

- Total Project Cost Estimate: \$ 954,396,000 (Oct 2022 P.L.); Certified 16 Mar 2023
- Section 902 Limit = \$1,116,000,000 (FY22)
- August 2024 non-certified TPCS and March 2025 certified TPCS will be updated with contractor bids/schedule.



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CHICKAMAUGA LOCK - SCOPE

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