Chickamauga Lock Project Update Inland Waterways Users Board Meeting No. 95

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"The views, opinions and findings contained in this report are those of the authors(s) and should not be construed as an official Department of the Army position, policy or decision, unless so designated by other official documentation."







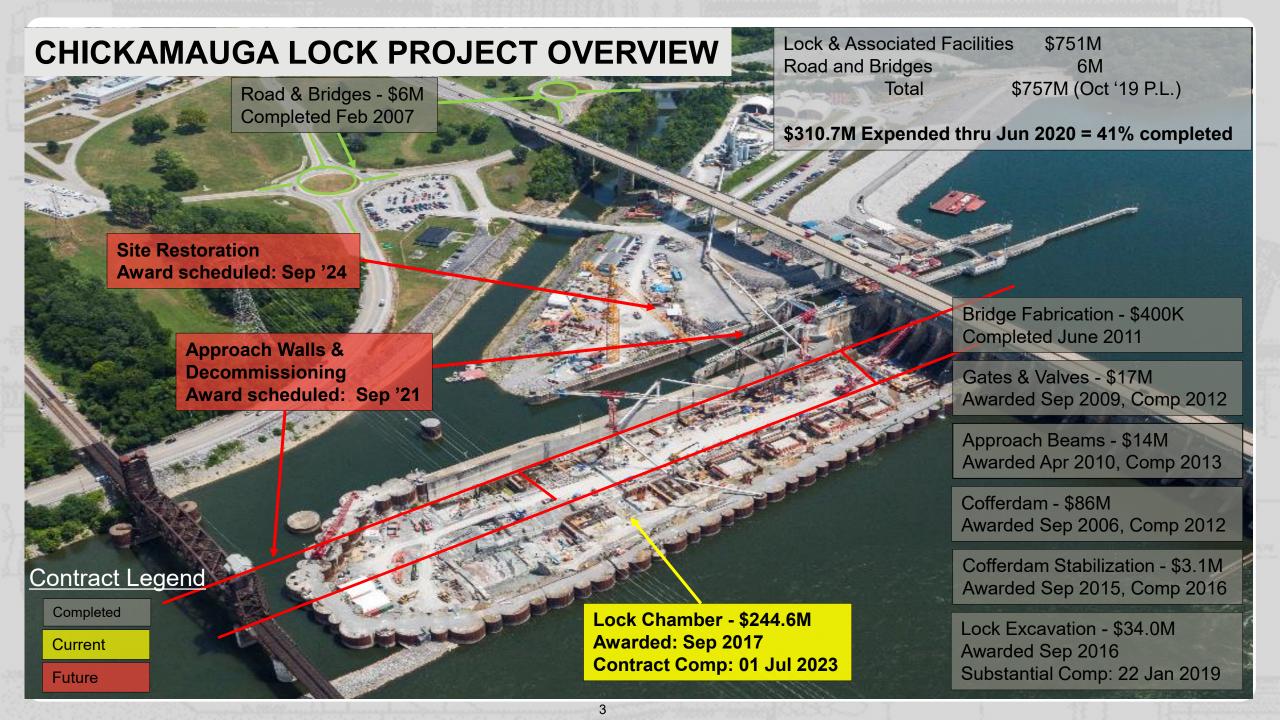
Chickamauga Lock Replacement

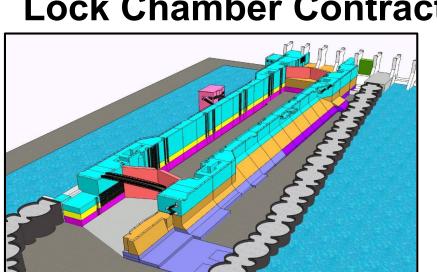
- Bottom Line Up Front
 - ► Lock Excavation Construction
 - Contract closeout pending
 - **▶** Lock Chamber Construction
 - Rebaselined schedule submittal including all contract options currently under review.
 - Contractor experiencing delays, no supporting details have been submitted to Government.
 - ► Approach Wall and Decommissioning Contract Solicitation
 - Developing contract documents for a Best Value Trade Off (BVTO) solicitation.
 - Anticipated award in September 2021.















Current project photos





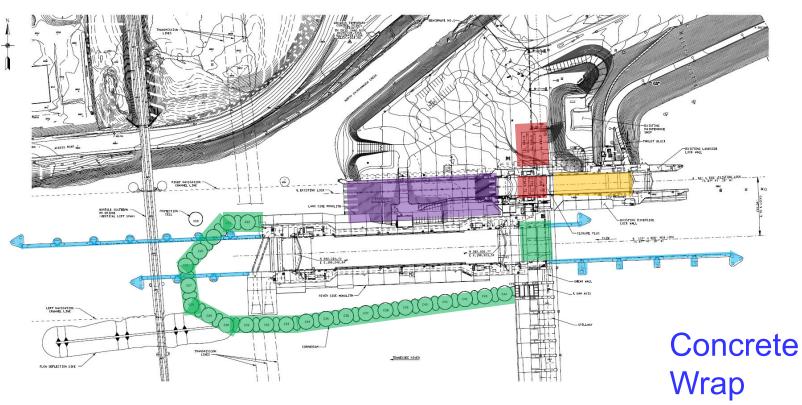
- 1. 05 Oct 2020 Looking downstream showing placed concrete and monolith R4, R6, R8, R10, R12, R15, L4, L6, & L8 formwork and rebar installation.
- 2. 31 Aug 2020 Landside monolith L17 culvert formwork installation.



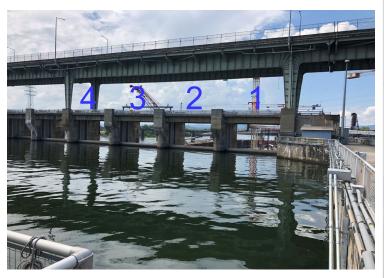




APPROACH WALL AND DECOMMISSIONING CONTRACT - MAJOR FEATURES



- Approach Wall construction/installation
- Demolition of the Cofferdam/Spillway Removal
- Thrust Block/Closure Plug
- Ramp to Operations Building
- Backfill Existing Chamber











Chickamauga Lock & Dam, Tennessee River, TN

	ARRA	CG	IWTF	Total
Total Project Cost (TPC):	\$756,880,000 ¹			
Allocations through FY2015:	\$49,307,619	\$69,891,511	\$69,889,500	\$189,088,630
FY16 Allocation:	NA	\$14,800,000	\$14,800,000	\$29,600,000
FY17 Allocation:	NA	\$20,000,000	\$20,000,000	\$40,000,000
FY18 Allocation:	NA	\$38,250,000	\$38,250,000	\$76,500,000
FY19 Allocation:	NA	\$76,245,000	\$13,455,000	\$89,700,000
FY20 Allocation:	NA	\$66,105,000	\$35,595,000	\$101,700,000
Total Allocations to Date:	\$49,307,619	\$285,291,511	\$191,989,500	\$526,588,630
Remaining TPC Balance:				\$230,291,370
Remaining Balance Change From	\$ <mark>0</mark>			

Note: ¹Project cost data is reflective of Jun 2020 certified cost at an Oct 2019 price level, Fully Funded, Nov 2025 completion

Funding Overview

Authorized Cost: \$757,666,000 (Oct 17 \$)

902 Limit: \$909,199,200 (Oct 17 \$)

ARRA Funds: \$49,307,619 (total FY09-12)

Engineering & Design Cost: \$58,486,000 (thru FY19)

Supervision & Admin Cost: \$11,613,000 (thru FY19)

Mitigation Cost: TBD

Current Status of the Project

- Lock Chamber contract (fully awarded) valued at ~\$244.6M; 29% financially complete.
- Lock Excavation contract contract closeout pending.

Next Steps

- Lock Excavation Contract final VEQ Mod and Release of Claims.
- Lock Chamber Contract rebaseline Contractor work schedule to include options exercised on 15 June 2020.
- Approach Wall and Decommissioning Contract Developing Plans &Specifications package for anticipated FY21 award. 95% Agency Technical Review scheduled to begin 15 Jan 2021.



Chickamauga Lock & Dam, Tennessee River, TN

Schedule of Remaining Work	Design Initiated	Contract Award	Construction Complete *	Project Benefits**	Capitalized Cost Closeout
Task 1 – Approach Walls Fabrication	30-Mar-04	05-Apr-10	08-Mar-13		
Task 2 – Cofferdam Stabilization	31-Sep-05	25-Sep-15	18-Jul-16		
Task 3 – Lock Excavation	31-Sep-05	26-Sep-16	1 Feb 2019***		
Task 4 – Lock Chamber	11-Aug-05	28-Sep-17	01 Jul 2023		
Task 5 – Approach Walls and Decommission	11-Aug-05	30-Sep-21	Dec 2024	Nov 2023	
Task 6 – Site Restoration	11-Aug-05	30-Sep-24	Nov 2025		







^{*}Dates are achievable based on the most efficient funding profile.

^{**}Based on June 2020 Certified cost estimate Cost and Schedule Risk Assessment, the project has an 80% confidence level of being completed by Aug 2027.

^{***}Date Lock Excavation contractor demobilized from cofferdam work area and laydown yard.

Chickamauga Lock Project Time and Cost Scorecard



Expenditures 1 Jul

Planned (BCWS) \$312.0M Earned (BCWP) \$308.1M Actual (ACWP) \$310.7M

BCWP: Reports the value (based on % complete) of the work performed to date.

Target:

Actual as compared to Planned: (<1% = Green) (>1% and <3% = Yellow) and (>3% = Red)

Schedule 1 Jul

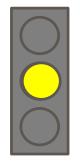
(Baseline)/(Current)

Project Complete Jan 2027 / Nov 2025 Lock Operational Jan 2027 / Nov 2023

Measures: Planned project completion and Lock operational

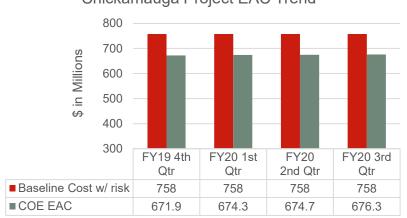
dates

Target: Lock Chamber contract completion July 2023



Budget

Chickamauga Project EAC Trend



Major Activity Schedule

Activity	Baseline	Current
Lock Excavation – Contract Closeout	18 Dec 2018	30 Oct 2020
Lock Chamber – Partnering Meeting to discuss delays	NA	05 Nov 2020
Approach Wall and Decommissioning Contract 95% P&S ATR	05 Feb 2021	05 Feb 2021







Chickamauga Lock Summary and Challenges

- Lock Excavation contract is substantially complete.
 - Contract closeout pending final modification with Contractor.
- Lock Chamber contract on-going.
 - Contractor experiencing delays that have not been fully quantified.
- Award of the Approach Wall and Decommissioning Contract planned for September 2021.
- Efficient Funding Profile:

	FY 2021	FY 2022	FY 2023	FY 2024	FY2025	Total
July 2020	\$60.4M ¹	\$88.5M	\$62.8M	\$10.6M	\$8M	\$230.3M ²

¹ Includes reduced contingencies and one year of labor while considering FY21 carry-in amounts.







² Reflects new 2020 Total Project Cost with 80% confidence level contingencies.