

# KENTUCKY LOCK ADDITION

Inland Waterways Users Board Meeting No.  
103

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# KENTUCKY LOCK ADDITION–BLUF STATUS / DASHBOARD



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## PROJECT SAFETY



Downstream Lock Monolith CT  
*\*Over one-million-man hours  
without a lost time accidents*

## PROJECT STATUS SUMMARY



Downstream Lock Monolith  
Construction Complete: May 2027

KY Lock Operational  
Lock Operational Date: July 2029

**Next Major Contract Award(s):**  
Lock Operational Construction Contract – FY25

## FINANCIAL STATUS SUMMARY



Design is on budget  
Planned: **\$793.7M**  
Earned: **\$764.8M**  
Actual: **\$769.9M**  
Cost Performance Index: **.99**

## EXECUTIVE SUMMARY:

- Downstream Lock Monolith – On track to complete in May-2027.
- The Certified FY22 TPCS Update identified additional funding need of ~\$332M to complete the project.
  - LRN is on track to complete a full certified Cost Estimate in 4th Quarter of 2024.
- Team is working on the operation contract package, using an integrated design and construction acquisition to reduce risk to the operation date scheduled in 2029. Contract award is planned for FY25.



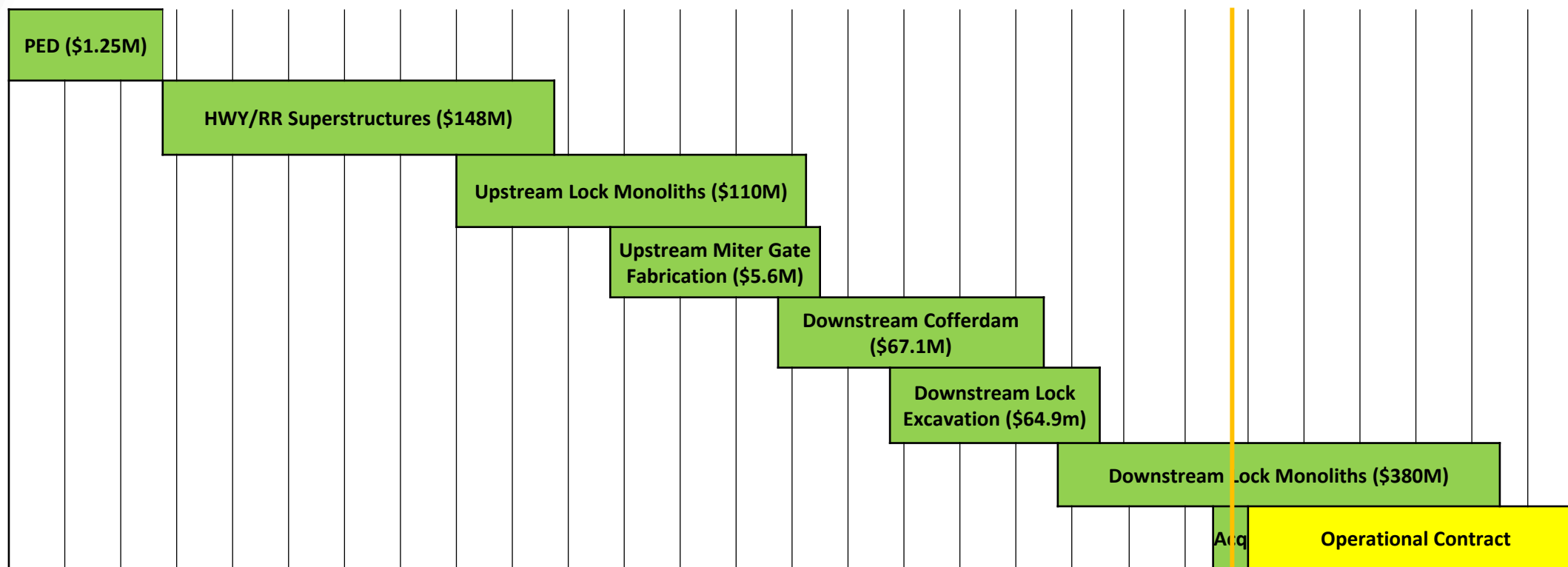
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# KENTUCKY LOCK ADDITION–SCHEDULE/FUNDING



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FY03 FY04 FY05 FY06 FY07 FY08 FY09 FY10 FY11 FY12 FY13 FY14 FY15 FY16 FY17 FY18 FY19 FY20 FY21 FY22 FY23 FY24 FY25 FY26 FY27 FY28 FY29 FY30



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## Schedule comments:

- Schedule dates have not changed since last meeting
- The Lock Operational Construction Contract is the next significant award to bring the project on-line; Award planned for FY25



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# KENTUCKY LOCK ADDITION–FUNDING SUMMARY



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Allocations:	ARRA (\$M)	CG (\$M)	IWTF (\$M)	BIL (\$M)	Total (\$M)
Prior to FY 2017:	\$88.8	\$229.3	\$189.6	NA	\$507.8
FY18 Allocation:	NA	\$20.6	\$20.6	NA	\$41.2
FY19 Allocation:	NA	\$21.8	\$21.8	NA	\$43.6
FY20 Allocation:	NA	\$30.5	\$30.5	NA	\$61
FY21 Allocation:	NA	\$71.5	\$38.5	NA	\$110.1
FY22 Allocation:	NA	\$0	\$0	\$465.5	\$465.5
FY23 - 24 Allocation:	NA	\$0	\$0	\$0	\$0
Total to Date:	\$88.83	\$373.9	\$301.1	\$465.5	\$1,229.3
Remaining TPC Balance:					\$332

Total Project Cost (TPC)	\$1,561 M	FY22 Price
Authorized Cost:	\$1,229 M	WRDA 2020
Escalated Cost:	\$1,397 M	FY22 Price
902 Limit:	\$1,630 M	May 2022
PED Cost:	\$9.2 M	FY97
EDC Cost:	\$131.6 M	17 May 2024
S&A Cost:	\$38.4M	17 May 2024

## Fiscal Year Funding Scenario Breakout:

	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2036	TOTAL
Efficient	\$332M										\$332M
Inefficient	\$218M	\$114M									\$332M

\* While full capability for FY25 is \$332M, minimum funding required to stay on schedule is \$218M

\*\* The Future Annual Efficient funding stream is subject to change based on economic conditions, e.g. future contract award amounts.



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# KENTUCKY LOCK ADDITION–ISSUES/CHALLENGES

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- **Challenge:** A funds assurance memorandum is required prior to solicitation, indicating high probability that KY Lock will receive funding in FY 25.
- **Mitigation Strategies:** Communication through the vertical team for consideration of USACE comptroller to sign the funds assurance memorandum.
- **Challenge:** In order to meet the 2029 operation date, additional funds will be needed in 2<sup>nd</sup> Quarter of FY25. The scope includes Approach Walls, Electrical/Mechanical, Buildings, Bridges, and Utilities.
- **Mitigation Strategies:** Structure Lock Operational Contract to account for uncertain funding availability.



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# KENTUCKY LOCK ADDITION – LOOK AHEAD



- **Progress:** Downstream Lock Monoliths Contract
  - Construction Completion May 2027
  - Concrete Production: ~25.56% Complete, over 100K CY
    - 8,957 CY in June '24
    - 8,817 CY in May '24
  - Offsite Miter Gate Fabrication: 71.8% Complete
- **Progress:** KY Lock Operational Contract
  - Scheduled for Award – FY25

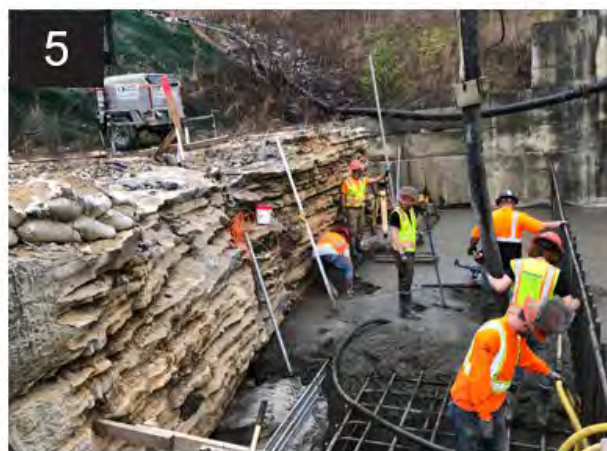


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# KENTUCKY LOCK ADDITION-PROGRESS



1. Mud Mat – L30 2. Downstream Monolith Progression 3. Upstream Monolith Progression  
4. Placing Backstep Concrete – L9-L7 5. Placing Mass Concrete – L9-L6 6. Placing Mass Concrete – L32-L5



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# THANK YOU

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# BACKUP SLIDES



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# KENTUCKY LOCK - OVERVIEW

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## Authorization:

- Water Resources Development Act (WRDA) of 1996 (P.L 104-303)
- Reauthorized in WRDA 2020 (P.L. 116-260)

## Purpose/Description:

Construction of a new 110' x 1200' lock addition at Kentucky Lock. The existing navigation lock is too small to meet current and future traffic demands without significant delays. The new Lock will accommodate 15 barges (Max amount allowed on TN river) per lockage as opposed to the existing 110 ft x 600 ft lock's 9 barge per lockage Kentucky Lock's delays are among the highest in the country.

## Schedule:

	Original	Current
Lock Operational (Online)	SEP-2025	JUL-2029
Project Completion Date (Base Schedule)	MAY-2028	SEP-2030
(80% Confidence Level) Project Completion Date = March 2033		

## Cost:

Cost Estimate = \$1,561,073,000 (FY2022 Price Level). Certified 21-Apr-2022

Note: LRN performed an interim Total Project Cost Estimate (Not Certified) on 25-May-2023. No significant changes were identified. LRN plans to conduct a full certified Cost Estimate in 4<sup>th</sup> Quarter 2024.

Section 902 Limit = \$1,630,303,000



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# KENTUCKY LOCK ADDITION - SCOPE

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Total Project Cost Estimate – \$1,561M (2022 TPCS)  
\$769,990,556 Expended thru 30 June 2024

