

Kentucky Lock Project Update Inland Waterway Users Board

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KY Lock Addition Bottom Line Up Front

- **Downstream Cofferdam Construction**
 - ▶ Construction proceeding well
- **Downstream Lock Excavation contract (\$25M to \$100M) on track for FY18 award.**
- **Economic Update and Post Authorization Change Report progressing.**

KY Lock Project Overview

Bridges Superstructures - \$104M
Completed Jul 2014

Bridges Substructures - \$44M
Completed Mar 2006

D/S Lock Excavation
Award – Sept. 2018

D/S Cofferdam - \$67.1M
Award - Sept. 2016

U/S Miter Gate Fab. - \$5.6M
Completed Dec 2016

D/S Lock Monoliths
Award – Sept. 2020

Upstream Cofferdam - \$17M
Completed Nov 2006

Site, Demolition, &
Utilities - \$4.1M
Award – Jan 2018

Approach Walls
Award – Sept. 2021

Upstream Lock - \$110M
Completed Feb 2017

Lock & Associated Facilities	\$1,044M
TVA Transmission Towers	13M
P & L Railroad	97M
Hwy 62 and other roadways	100M
Total	\$1,254M

\$499M Obl thru Sep 2017 = 40% complete

Contract Legend

- Completed
- Current
- Future

Downstream Cofferdam

Low Bid: \$67.1M

Current amount: \$65.5M

Contractor: Johnson Bros.

Award: September 2016

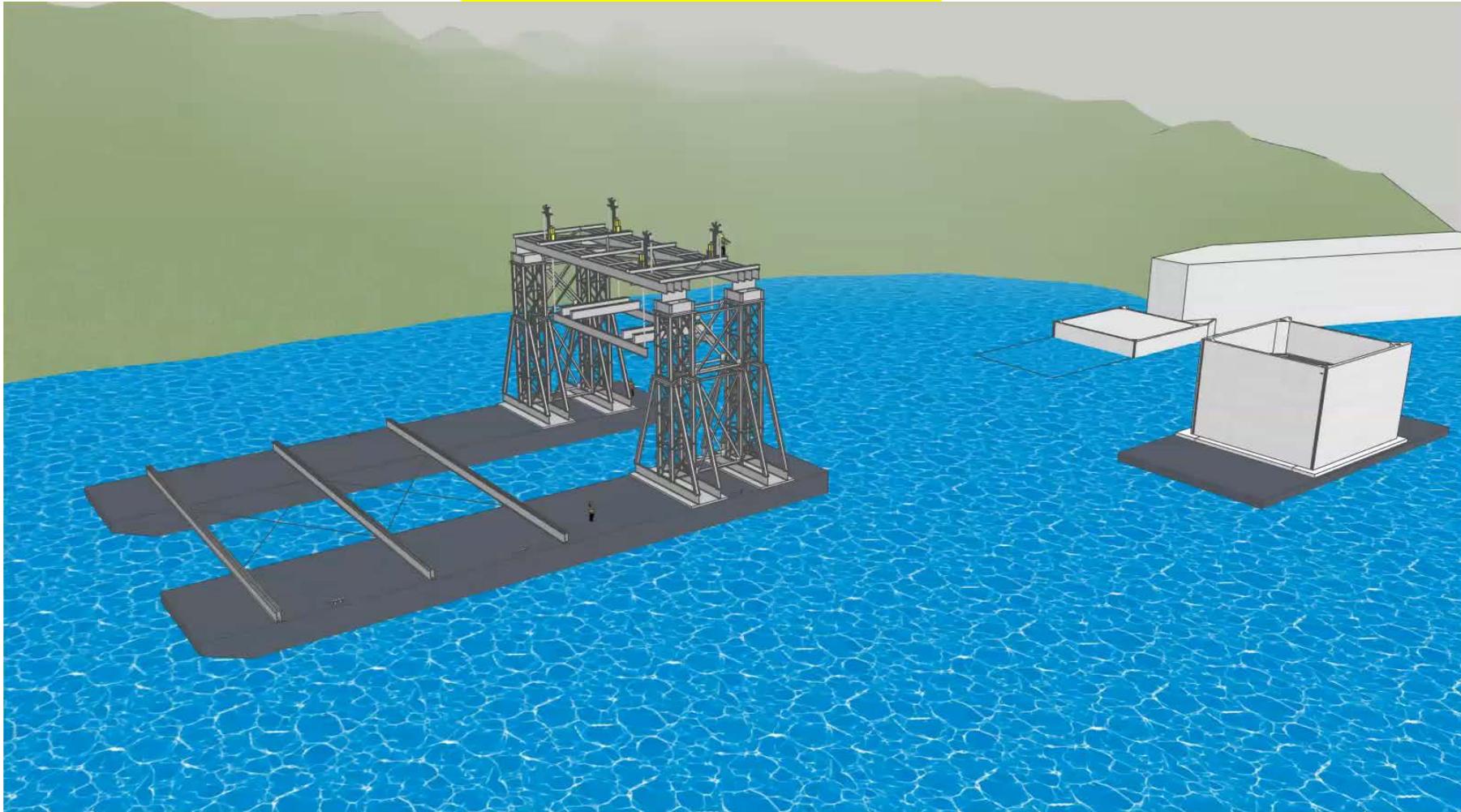
Complete: March 2020

Downstream
Cofferdam



KENTUCKY LOCK – DOWNSTREAM COFFERDAM

Lift-in 3D Animation



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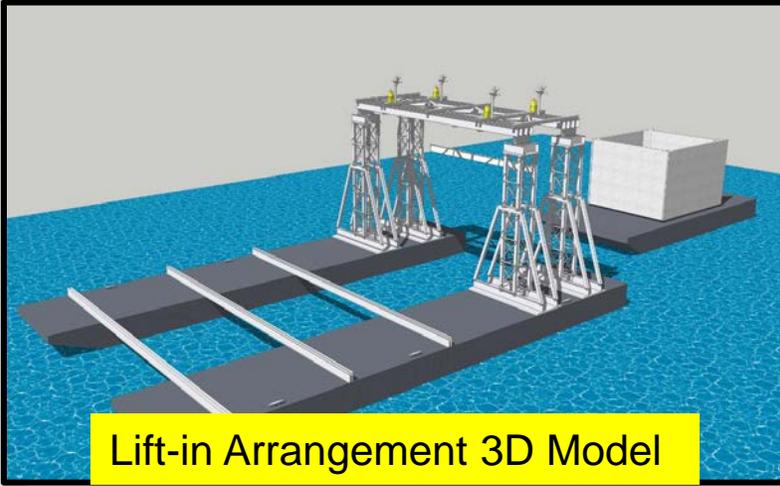


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Kentucky Lock First Downstream Cofferddam Shell Set-Down (Aug. 2-6, 2018)

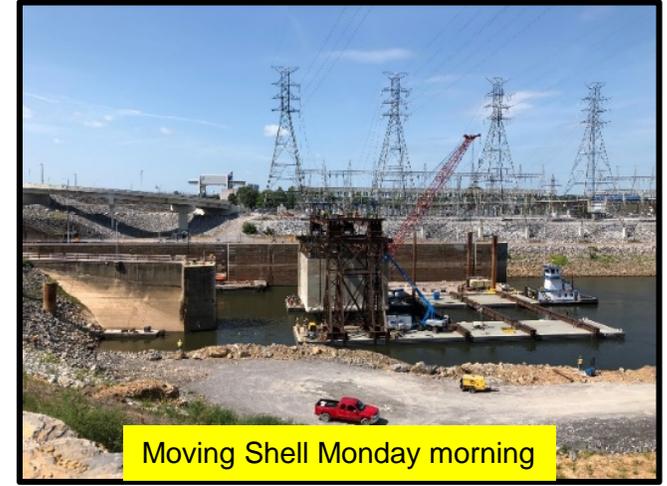
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Lift-in Arrangement 3D Model



Lift-off Saturday morning



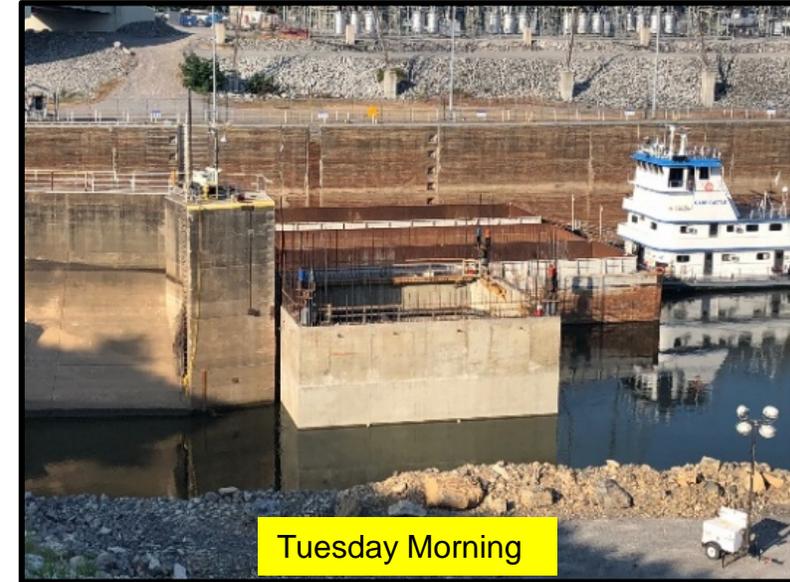
Moving Shell Monday morning



Near final position



11:55 Monday night – Success!



Tuesday Morning

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Downstream Lock Excavation
Award: September 2018

Key Financial Information

- Bid Opening – 6 Sep 2018
- Invitation for Bid (Low Bid) Solicitation
- Base with 12 Options
 - 9 Options expire by 30 Sep 2019
 - 3 Options expire by 30 Sep 2020
- FAR Range
 - \$25M to \$100M
- Excellent turn-out of prospective bidders at pre-bid site visit

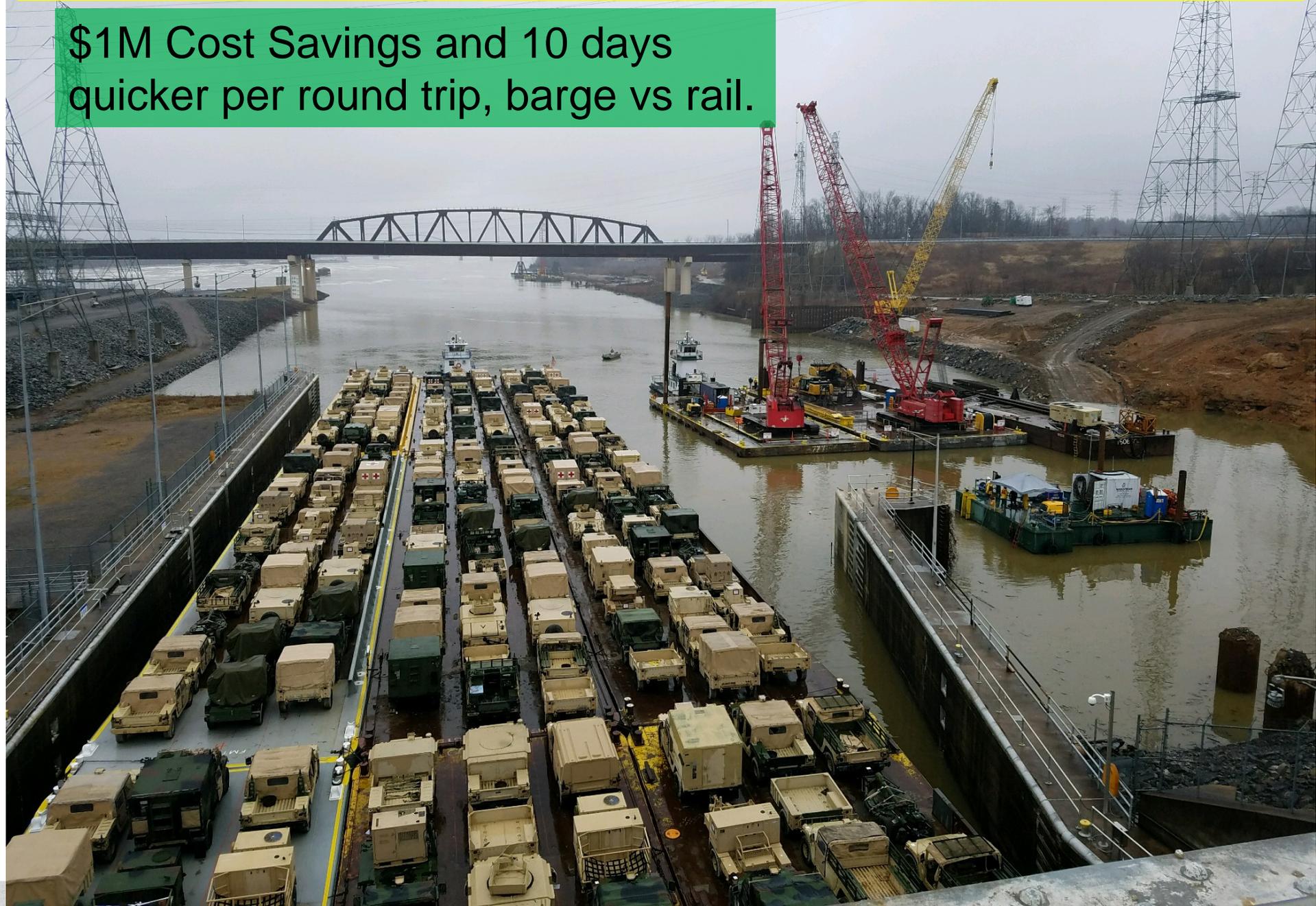


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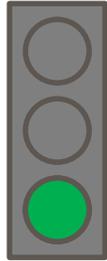


KY Lock - Ft. Campbell Unit traveling to Louisiana February 2018

\$1M Cost Savings and 10 days quicker per round trip, barge vs rail.



Kentucky Lock Project Time and Cost Scorecard



Expenditures

30 June

Planned (BCWS)	\$462.6M
Earned (BCWP)	\$457.8M
Actual (ACWP)	\$455.7M

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

30 June

(Baseline)/(Current)

Project Complete	May 2028 / Jul 2024
Lock Operational	May 2028 / Jul 2024

Measures: Planned project completion and Lock operational dates

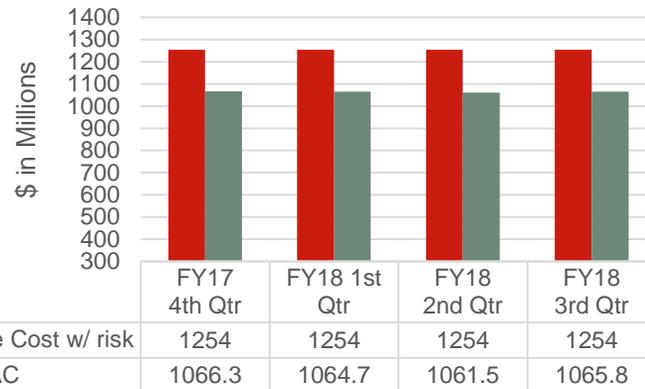
Target:

PACR Anticipated in FY19.



Budget

KY Lock Project EAC Trend



Major Activity Schedule

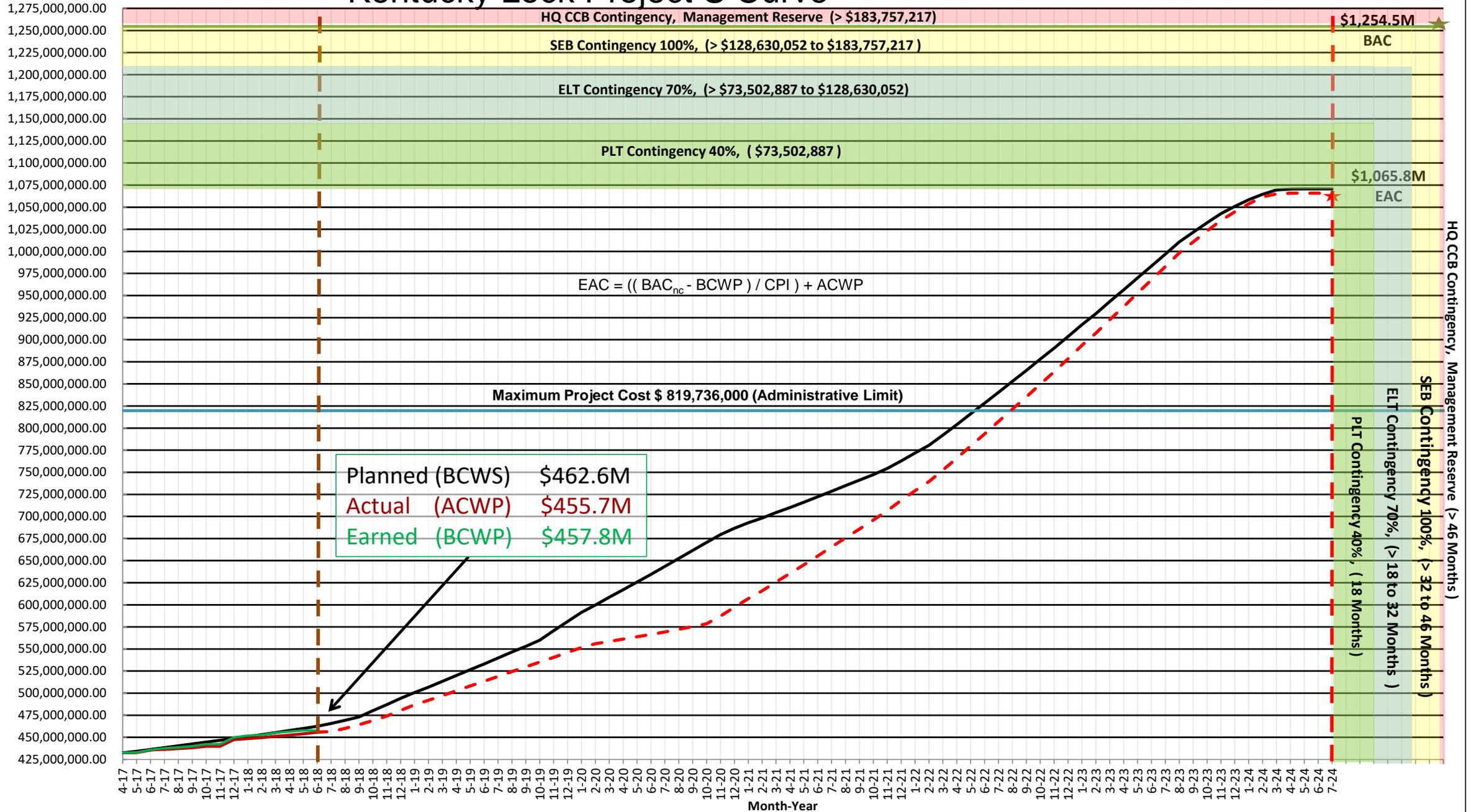
Activity	Baseline	Current
Level 3 Economic Update – Draft Report	14 Nov 2017	Jan 2019
Site, Demolition, & Utilities – Award Contract	Sep 2017	Jan 2018(A)
PACR to HQ	Feb 2018	Sep 2019
Downstream Lock Excavation Award Contract	Sep 2018	Sep 2018



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Kentucky Lock Project S Curve



KY Lock Project Schedule

Major Project Activity	Start/Award	Complete ²
Upstream Lock Monoliths Construction Contract	Jan 2010	Feb 2017
Downstream Cofferdam Construction Contract	Sep 2016	Mar 2020
Site, Demolition & Utilities Construction Contract	Jan 2018(A)	Jan 2019
Downstream Lock Excavation Construction Contract	Sep 2018	Mar 2021
Downstream Lock Monoliths Construction Contract	Sep 2020	Mar 2024
Approach Walls Construction Contract	Sep 2021	Nov 2023
Total Project Cost Estimate (2 year cycle)	Sep 2018	Dec 2018
Economic Update	Jan 2017	June 2019
Post Authorization Change Report for 902 Exceedance ¹	Jul 2017	Sep 2019

Note: Red indicates revised date from previously reported

¹902 Exceedance expected as early as FY2022

² Assumes no risk. 80% confidence schedule adds 46 months to project completion date.

KY Lock

Summary and Challenges

- Downstream Cofferdam construction going well but it is a high risk contract due to constricted marine area and geology.
- Recent years average delays at KY Lock >7 hours and traffic levels remain robust. This should bode well for benefits in ongoing Economic Update.
- Downstream Lock Excavation is on track for award by Sep 30, 2018 and is configured to maximize funding flexibility.