

OLMSTED LOCKS & DAM

IWTF Project Update Inland Waterways Users Board Meeting No. 93

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**US Army Corps
of Engineers**

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OLMSTED BOTTOM LINE UP FRONT



✓ Current Schedule: **Ahead of Schedule**

Operational Milestone

1 Oct 2022 (80% cert. (PACR))

1 Oct 2018 Scheduled

6 Sep 2018 Actual

Completion Milestone

2026 (80% cert. (PACR))

2022 Scheduled

✓ Current Cost: **Under Budget**

TEP (Total Estimated Price) = \$2.824B vs. \$3.1B (80% certainty)

Project is \$275M under budget (FY20 Work Plan Request - \$38M)

✓ Keys:

1. Efficient funding (annual capability) has allowed the PDT to effectively plan and execute our annual work plan.
2. Advantageous river conditions have allowed the work to expand beyond the contractual low water season (15 Jun – 30 Nov).



2019 LOW WATER SEASON (LWS) ACCOMPLISHMENTS



- Completed all remaining Key Features of the dam to include:
 - Concrete Spall Repairs in TG Bays and Nav Pass Shells
 - Isolation Joint Bracing and Grouting
 - Complete Grouting
 - Left Boat Abutment/Fixed Weir
 - U/S Mooring Cells
 - Wicket 32 Repair
- 53 Marine Demo Ph I approximately 65% complete. Remainder will be included in Ph II scope of work
- 52 Marine Demo is about 25% complete and expected to finish in spring 2021
- Cost-Reimbursement Dam contract work ended 30 Nov. Contractor is demobilizing from the site



2020 EXECUTION PLAN

- Continue 52 Marine Demo
- Award work that was deferred from FY19 to complete dam key features including:
 - L&D 53 Demo Phase II
 - Landside Demo of 52 and 53
 - County Road resurfacing
 - Final Site Restoration and Resident Office Conversion
 - Refurbish Bulkheads
 - U/S Harbor Access
 - Cultural Resource Requirements
 - Abutment Wicket Blanks
 - Z- drive work boat procurement - **Awarded**
- Overall impact to the current budget is estimated at \$63M (\$38M FY20 and \$25M FY21)



OLMSTED LOCKS AND DAM, OHIO RIVER, IL & KY

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	ARRA	CG	IWTF	Total
Total Project Cost:				*\$2,867,296,000
Allocations through FY2014:	\$29,515,929	\$943,838,592	\$861,338,594	\$1,834,693,115
FY15 Allocation:	\$0	\$180,803,500	\$31,906,500	\$212,710,000
FY16 Allocation:	NA	\$227,800,000	\$40,200,000	\$268,000,000
FY17 Allocation:	NA	\$212,500,000	\$37,500,000	\$250,000,000
FY18 Allocation:	NA	\$148,750,000	\$26,250,000	\$175,000,000
FY19 Allocation:	NA	\$42,500,000	\$7,500,000	\$ 50,000,000
FY20 Work Plan:				
Total Allocations to Date:	\$29,515,929	\$1,756,192,092	\$1,004,695,094	\$2,790,403,115
Remaining TPC Balance:		\$65,384,452	\$11,528,433	\$76,922,885
Remaining Balance Change From Last Meeting				\$0

Note: * Cost and Schedule data reflective of the latest Certified Cost Estimate (01 OCT 2017 price levels) completed May 2018.
Next Certified Cost Estimate (01 OCT 2019 price levels) expected APR 2020.
Remaining TPC Balance is difference between Total Project Cost and Total Allocations to date.

Changes

- None

Funding Overview

- Original Authorized Cost: \$ 775.0M
- 902 Limit: \$3,559.0M
- ARRA Funding (FY09-11): \$ 29.5M
- Engineering & Design Cost: \$ 168.5M
- Supervision & Admin Cost: \$ 131.0M
- Mitigation: \$ 16.0M

Current Status of the Project

- L&D in full operation
- **Remaining dam key features - COMPLETED**
- L&D 52 marine demo progressing
- L&D 53 Ph I demo progressing

Next Steps

- Award Demo 53 Marine Ph II
- **Award remaining contracts**
- **Receive FY20 Work Plan funding - \$38M**

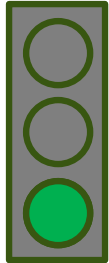


OLMSTED LOCKS AND DAMS, OHIO RIVER, IL & KY

Schedule of Remaining Work	Design Initiated	Contract Award	Construction Complete	Project Benefits	Capitalized Cost Closeout
Dam	26-Aug-96	28-Jan-04	30-Nov-19	6-Sep-18	31-Mar-20
Wicket Lifter	1-Jan-15	2-Sep-16	21-Dec-17	19-Feb-18	30-Dec-20
Building & Grounds	1-Dec-15	2-Feb-17	28-Sep-18	1-Oct-18	30-Jun-19
Demolition L&D 52	1-Feb-17	26-Sep-18	31-Dec-20	N/A	31-May-21
Demolition L&D 53 (Nav Lane)	15-Oct-16	1-Nov-17	31-Dec-19	N/A	31-Mar-20
River Dikes	12-Feb-15	12-Aug-16	1-Jul-20	1-Jul-20	1-Jul-20
NOTE: Green highlighted dates are actual dates.					
Red highlighted dates are changes.					
Wicket Lifter Keen placed in service 27 Apr 2018.					



OLMSTED PROJECT - TIME AND COST SCORECARD



Expenditures (thru Dec)

Planned	(BCWS)	\$2.596B
Earned	(BCWP)	\$2.998B
Actual	(ACWP)	\$2.707B

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 (thru Dec)

	(PACR)/(Current)
Project Complete	April 2026/Jun 2022
Dam Operational	Oct 2022/Oct 2018

Measures: Planned project completion and Dam contract operational dates

Target:

Green: Current = PACR-12 months
Yellow: Current = PACR-11 months to PACR-7 months
Red: Current = PACR-6 months to after PACR date



Safety

Green: 1.04 or less Amber: 1.05 – 1.39 Risk: 1.40 +

Hours/Rate	FY 17	FY 18	FY 19	FY20
Hours:	1,216,798	862,592	586,372	201,737
# DART:	5	1	1	0
Rate:	0.82	0.23	0.34	0.00

High Risk Activities
quarter

- Dive Operations
- Crane Operations

Focus areas for next

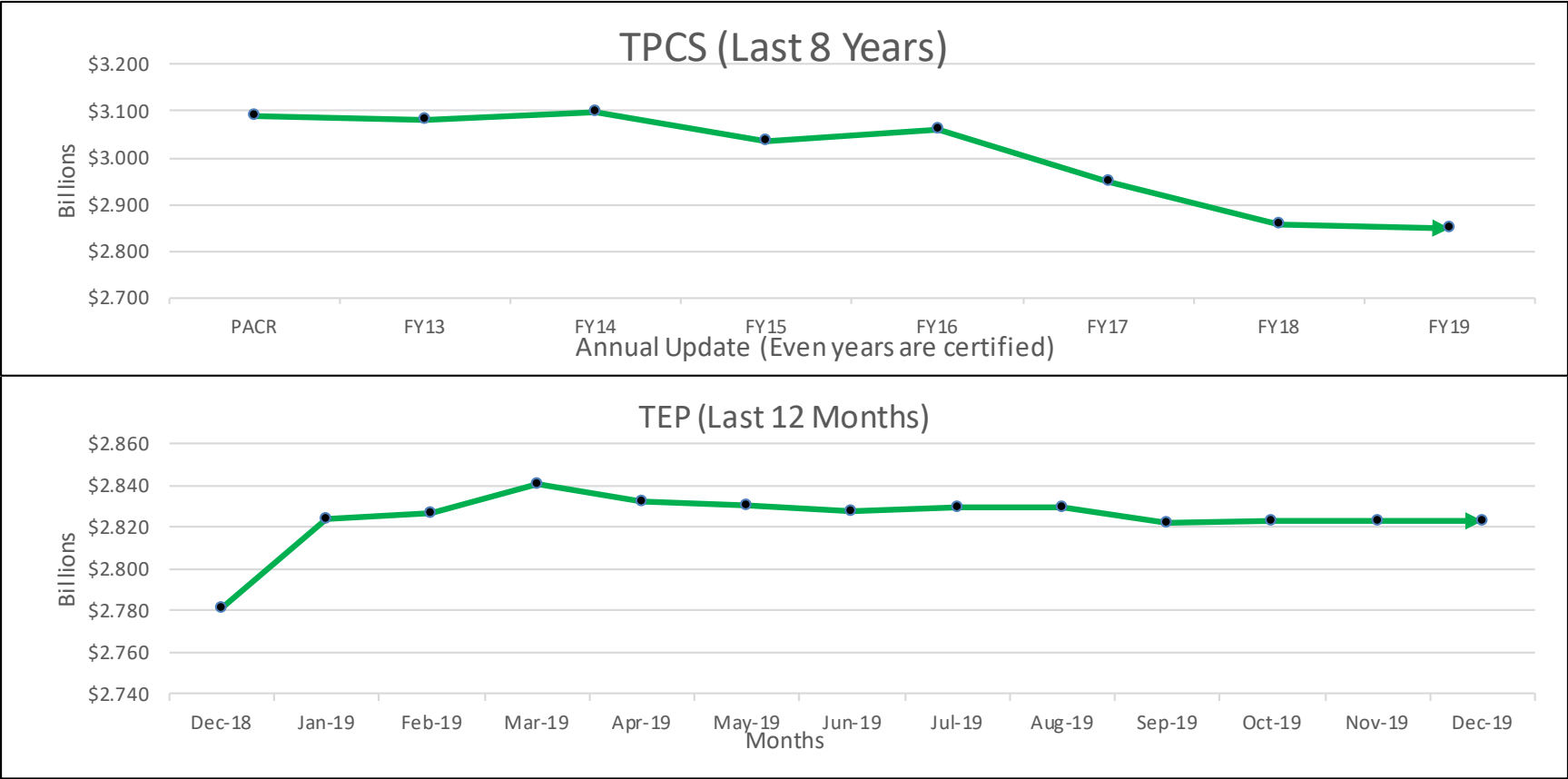
- L&D 52 and 53 Demo
- Equipment disposition
- Site restoration

Major Activity Schedule

Activity	Baseline	Current
Spall Repair	30 Sep 2019	03 Oct 2019 (A)
Isolation Joint Bracing	28 Sep 2019	25 Oct 2019 (A)
Grouting	30 Sep 2019	03 Nov 2019 (A)
LBA/Fixed Weir	30 Aug 2019	20 Sep 2019 (A)
Wicket #32 Repair	30 Aug 2019	24 May 2019(A)
L&D 53 Phase I Demo	30 Nov 2019	30 Nov 2019



12 MONTH TEP & 8 YEAR TPCS COST TRENDS





OLMSTED SUMMARY AND CHALLENGES



- Higher than normal river levels since Sept 2018 have impacted completion of work on the dam and demolition at L&D 53. This risk was identified and has now been recognized.
- Funding of \$63M from within current contingency balance of \$275M will be required for completion of the remaining requirements of the project.

FY20	FY21	Total
\$38.0M	\$25.0M	\$63.0M

- Project will complete within the Authorized Project amount.

QUESTIONS



Olmsted Locks and Dam November 2019