

Olmsted Locks & Dam

Inland Waterways Users Board

MR. DAVID DALE, PE, PMP, SES

DIRECTOR, Programs

Great Lakes & Ohio River Division

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US Army Corps of Engineers

BUILDING STRONG



Agenda

Status

- ► Financials
- ▶ Project Overview
- ▶ Dam Re-Baseline Plan
- ▶ 2014 LWS Milestone Update
- ► 2014 LWS Images
- ▶ 2015 LWS Milestone Identification
- ▶ Scorecard
- ▶ Deferred Demolition L&D Nos. 52/53
- ► Future Challenges

Discussion



Olmsted Locks and Dam, Ohio River, IL & KY

Total Project Cost: \$3,098,573,000*	CG	IWTF	Total
FY13 Allocation:	\$71,856,000	\$71,856,000	\$143,712,000
FY14 Allocation:	\$124,106,000	\$41,606,000	\$165,712,000
FY15 Allocation:	\$174,250,000	\$30,750,000	\$205,000,000
FY16 Budget:	\$153,000,000	\$27,000,000	\$180,000,000

Remaining Balance:	\$900,048,000 \$158,832,000	\$1,058,880,000
Remaining Balance Change From Last Meeting		\$ 45,000,000

Note *: Cost and Schedule data reflective of the latest Certified Cost Estimate (01 OCT 2013 price levels) completed in JUL 2014.

Changes

Adjustment to FY15 allocation; reprogramming of discretionary funds.

Funding Overview

Original Authorized Cost: \$775M

• 902 Limit: TBD **

ARRA Funding (FY09-11): \$ 29.5M

Engineering & Design Cost: \$157.4M

Supervision & Admin Cost: \$131.5M

Mitigation: \$16.0M

* 902 Limit will be based on latest Certified Cost Estimate

LWS – Low Water Season (contractually 15 Jun – 30 Nov)

NP – Navigable Pass

PB – Paving Block

RBA – Right Boat Abutment

Next Steps

- Set 7 shells in 2015 LWS NP 3-5 and PB 5-8
- Complete master and sheet pile through NP-9
 - Install Tainter Gate 2 in 2015 LWS

Current Status of the Project

- NP-2 set 29 Jan 2015
- Precast yard work on shells NP 3-6 and PB 5-8
- Pile driving activities as river conditions allow
 - CG / IWTF (85/15) beginning FY15



Olmsted Locks and Dam, Ohio River, IL & KY

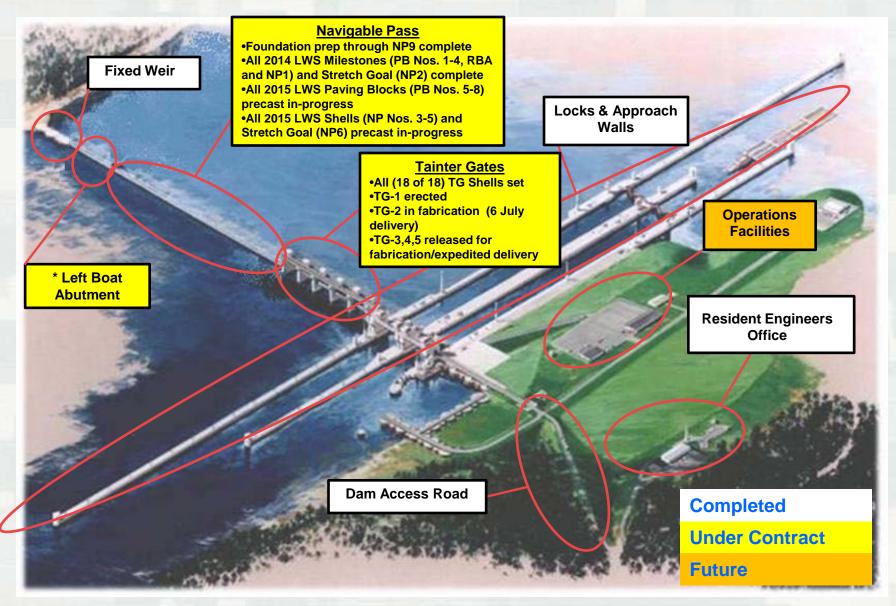
	Design	Contract	Construction	Project	Capitalized
Schedule of Remaining Work	Initiated	Award	Complete	Benefits	Cost Closeout
Dam	26-Aug-96	28-Jan-04	30-Jun-21	1-Jul-21	30-Dec-21
Wicket Lifter	1-Jan-15	9-Feb-16	13-Feb-18	14-Feb-18	30-Jun-18
Building & Grounds	1-Oct-18	18-Jun-19	30-Apr-21	1-May-21	30-Sep-21
Demolition L&D 52	1-Apr-19	18-Oct-21	16-Feb-24	N.A.	30-Jun-24
Demolition L&D 53	1-Apr-19	1-Dec-21	1-Oct-23	N.A.	1-Jan-24
River Dikes	1-Oct-20	6-Jun-22	7-Jun-24	30-Jun-24	30-Sep-24

NOTE: Green highlighted dates are actual dates.



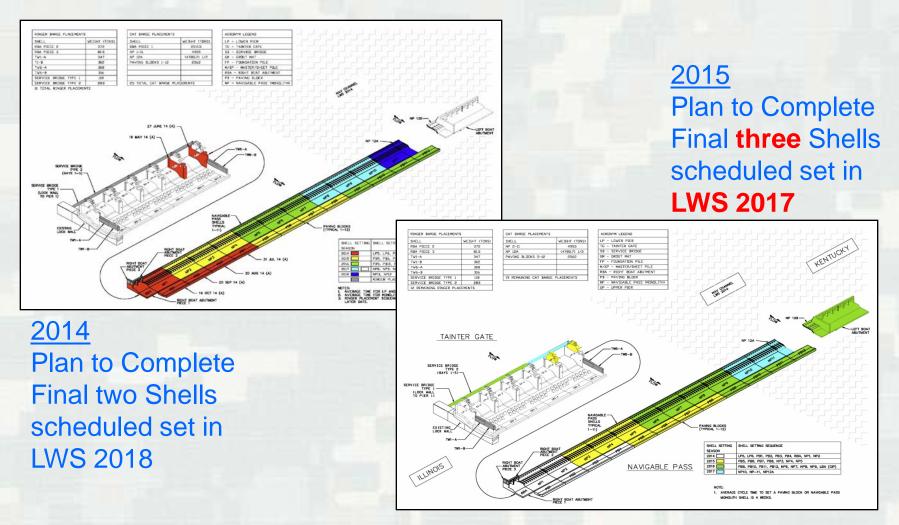


Olmsted Project Overview





Olmsted Dam - Plan





^{*} Nine shells set in LWS 2014 including two shells set outside historical LWS limits (15 Jun – 30 Nov)

2014 LWS Milestones

- Scheduled Milestones
 - Set LP-5 (complete)
 - Set LP-6 (complete)
 - Set PB # 1-4 (of 12) (complete)
 - Erect TG #1 (complete)
 - Set RBA (complete)
 - Set NP #1 (of 12) (complete)
- Preparatory Milestones
 - Install Grout Mat (complete thru NP #9)
 - Drive Foundation Pile (complete thru NP #2)
 - Drive M/S Pile (complete thru NP #2 U/S, NP #6 D/S)
- Stretch Goal Milestone
 - Set NP #2 (of 12) (complete)

Legend

LP – Lower Pier

TG – Tainter Gate

SB - Service Bridge

GM – Grout Mat

FP - Foundation Pile

M/S – Master/Sheet

RBA – Right Boat Abutment

LBA – Left Boat Abutment

PB – Paving Block

NP - Nav Pass Shell (Monolith)



2014 LWS Images













Upper Pier Build-out (Nos. 1-6)
 Dredging Boat Harbor
 Deploying Diver
 TG-1 resting on dogging beams
 NP-2 moving down skidway
 NP-2 Tremie Placement



2015 LWS Milestones

- Scheduled Milestones
 - Set NP #3-5 (of 12)
 - Set PB # 5-8 (of 12)
 - Erect TG #2 (of 5)
- Preparatory Milestones
 - Install Grout Mat (thru NP #12/LBA)
 - Drive Foundation Pile (thru NP #6)
 - Drive M/S Pile (thru NP #6 U/S, NP #8 D/S)
- Stretch Goal Milestone
 - Set NP #6 (of 12)
 - Drive Left Boat Abutment (LBA) Foundation Piling

Legend

LP – Lower Pier

TG - Tainter Gate

SB - Service Bridge

GM – Grout Mat

FP - Foundation Pile

M/S – Master/Sheet

RBA – Right Boat Abutment

LBA – Left Boat Abutment

PB – Paving Block

NP – Nav Pass Shell (Monolith)



Olmsted Project

Time and Cost Scorecard - Dec 2014

Expenditures

Planned (BCWS)

877B

Earned (BCWP)

ът.876В

Actual (ACWP)

\$1.863B

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

Target: Olmsted Project TEP Trend
Actuals as compared to Planner: (<1% = Green) (>1% and <3% =



Schedule

(PACR)/(Current)

Project Complete Dam Operational

Sep 2024/Mar 2022 Sep 2020/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

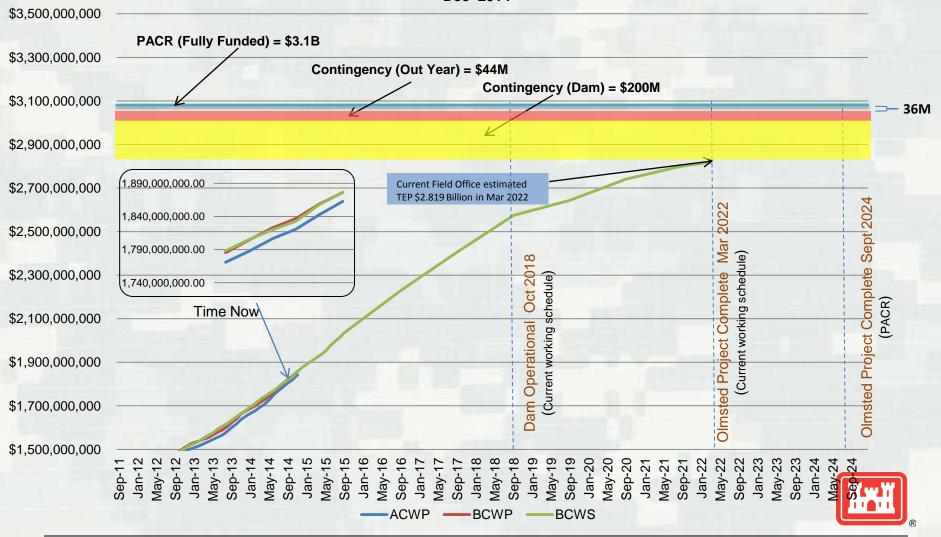
Olmsted Major Activity Schedule

Activity Name	Finish	2007			
		2015 Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb			
NP - 6 Inst M&S Piles, D/S 67-78 (34 Barge)	11-Feb-15	D NP - 6 Inst M&S Pites, D/S 67-78 (34 Barge)			
NP-2 Attach & pick NP-2 Lift Frame with Cat Barge	10-Feb-15	NR-2 Attach & pick NP-2 Lift Frame with Cat Barge			
NP - 3 Inst M&S Piles, U/S 31-42	23-Feb-15	■ NP - 3 that M&S Piles, U/S 31-42			
NP - 3 Drive NP Be aring Piles, Rows 32-41 (3) 188	14-Mar-15	NP - 3 Drive NP Bearing Piles, Roves 32-41 (3) 168			
NP - 3As-Build NP 3 Landing Pile, 1/4" acc. w/Sleeve	14-Mar-15	■ NR - 3 As-Build NR 3 Landing Pile, 1/4" acc: w/Sleeve			
NP - 3As-Build Field Pile NP 3, 2* relative with Multi-Beam	14-Mar-15	■ NP - 3 As-Build Field Pile NP 3, 2" relative with Multi-Beam			
NP-3 Install Wickt Gates-12 ea	84-Jun-15	NP-3 Install Wickt Gates-12 da			
NP-4 Install Wickt Gates-12 ea	08-Jun-15	■ NP-4 Install Wickt Gates-12 Ba			
NP-3 Te st Wickt Gates-12 ea	08-Jun-15	■ NP-3 Test Vylckt Gates 12 ea			
NP-3 Inst Lftng Frame	22-Jun-15	■ NP-3 Inst Liting Firame			
NP-4 Te st Wickt Gates-12 ea	16-Jun-15	I NP-4 Te st Wickt Gates 12 ea			
NP-4 Inst Liting Frame	27-Jun-15	■ NP-4 Inst Liting Frame			
NP - 4 Inst M&S Piles, U/S 43-54 (34 Barge)	05-Jul-15	■ NP - 4 Inst M&S Piles, U/S 43-54 (34 Barge)			
M-5 Inst M&S Piles, U/S 55-88 (34 Barge)	13-Jul-15	■ M-5 Inst M&S Piles, U/S 55-88 (34 Barge)			
NR-3 Clean NR-3 found site as required	13-Jul-15	■ NR-3 Clean NR-3 found ste as required			
M-6 Inst M&S Piles, U/S 67-78 (1st) (34 Barge)	21-Jul-15				
NP-3 Transfer vertici load of NP-3 shell from Cat Barge to Landing Pile	15-Jul-15	■ NP-3 Transfer vertid load of NP-3 shell from Cat Barge to			
NP-3 Pour NP-3 Tremie Concr,2,600 cy+/-	18-Jul-15	■ NP-3 Pour NP-3 Tremie Concr,2,800 cy +/-			
NP - 7 Inst M&S Piles, D/S 78-90 (34 Barge)	28-Jul-15	■ NP - 73nst M&B Piles, D/S 78-80 (34 Barge)			
NP-3 Attach & pick NP-3 Lift Frame with Cat Barge	23-Jul-15	I NP-3 Atfach & plok NP-3 Lift Frame with Cat Barge			
NP - 4 Drive NP 4 Bearing Pile, Rows 44-55 (6/day) (20 Barge)	25-Aug-15	;NP - 4 Drive NP,4 Bearing Pile, Rows 44-55 (8			
NP - 8 Inst M&S Piles, D/S 91-102 (34 Barge)	04-Aug-15	■ NP - 8 Inst M&S Piles, D/S 91-102 (34 Barge)			
Tainter Gate 1 Complete	30-Jul-15	◆ Tainter Gate 1:Complete			
M-9 Inst M&S Piles, D/S 103-108 (34 Barge)	07-Aug-15	M-9]nst M&S Piles, D/S 103-108 (34 Barge)			
M-9 Inst M&S Piles, U/S 103-108 (34 Barge)	11-Aug-15	M-9 Inst M&S Piles; U/S 103-108 (34 Barge)			
M-8 Inst M&S Piles, U/S 91-102 (34 Barge)	18-Aug-15	M-8 Inst M&S Piles, U/S 91-102 (\$4 Barge)			
NP - 4As-Build Field Pile, NP-4	25-Aug-15	■ NP - 4 As-Build Field Pile, NP-4			
M-7 Inst M&S Piles, U/S 79-90 (34 Barge)	25-Aug-15	■ M-7 Inst M&S Piles, U/S 79-90 (94 Barge)			
NP-4 Clean NP-4 found site as required	02-Sep-15	■ NP-4 Clean NP-4 found site as required			
NP-5 Install Wicket Gates-12 ea	02-Sep-15	■ NP-5 Install Wicket Gates 12 ea			

Olmsted L&D Project Earned Value Analysis

(Based on DOD Gold Card)

Dec 2014



L&Ds 52/53 Demolition Assessment

- Marine Demolition majority of demolition costs.
 - L&D 52 \$67.5M; L&D 53 \$47.7M
- US Coast Guard and Navigation Industry input Jan 2015
 - Prefer majority of dam removed at each site
 - Remove Lock 53 in Olmsted approach
 - Lock 52 removal to be determined
- Maintains Safety of industry and recreational traffic
- Environmental impacts documented in original NEPA



Future Challenges

- Efficient Funding Stream
 - Minimum of \$150M/year through 2020
 - Less than \$150M would have direct impact on the schedule
 - Capability Funding Level of \$205M (FY15)
- Passing Traffic as Work continues into the Navigable
 Pass Footprint

Default plan will be to continue providing a navigable channel past the project's construction footprint in 2015. Commercial traffic will be routed through locks by exception to address extreme low water elevation and short duration critical shell set down activities.



Discussion





