

# Olmsted Locks & Dam

## Inland Waterways Users Board

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**DIRECTOR, Programs**

**Great Lakes & Ohio River Division**

**14 May 2015**



®

**US Army Corps of Engineers**

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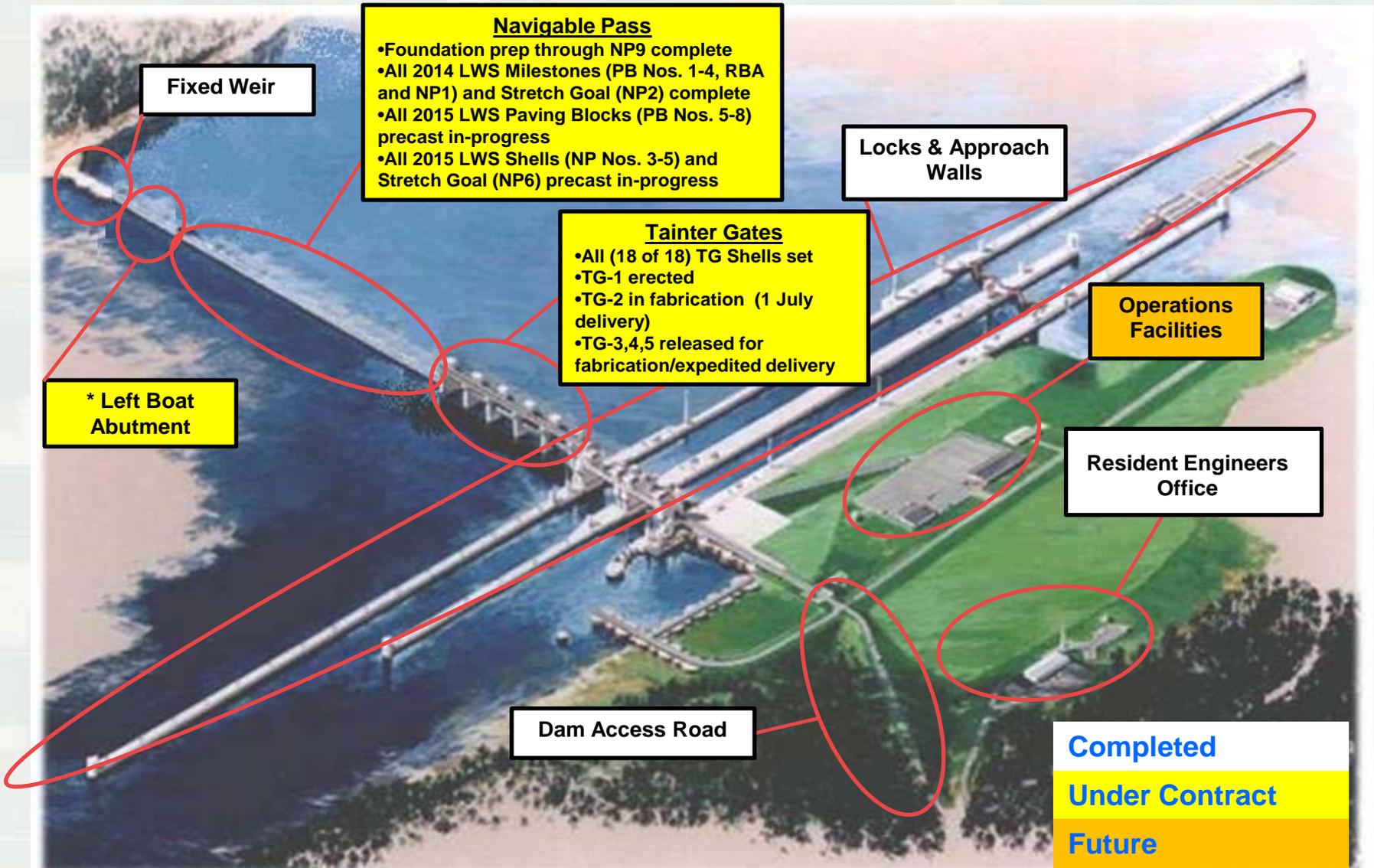


# Agenda

- Status
  - ▶ Project Overview
  - ▶ Dam 2015 Plan to Complete
  - ▶ Dam 2015 LWS Milestone Identification
  - ▶ Project Scorecard
  - ▶ Due-Outs
  - ▶ Future Challenges
  
- Discussion



# Olmsted Project Overview



# 2015 Plan to Complete

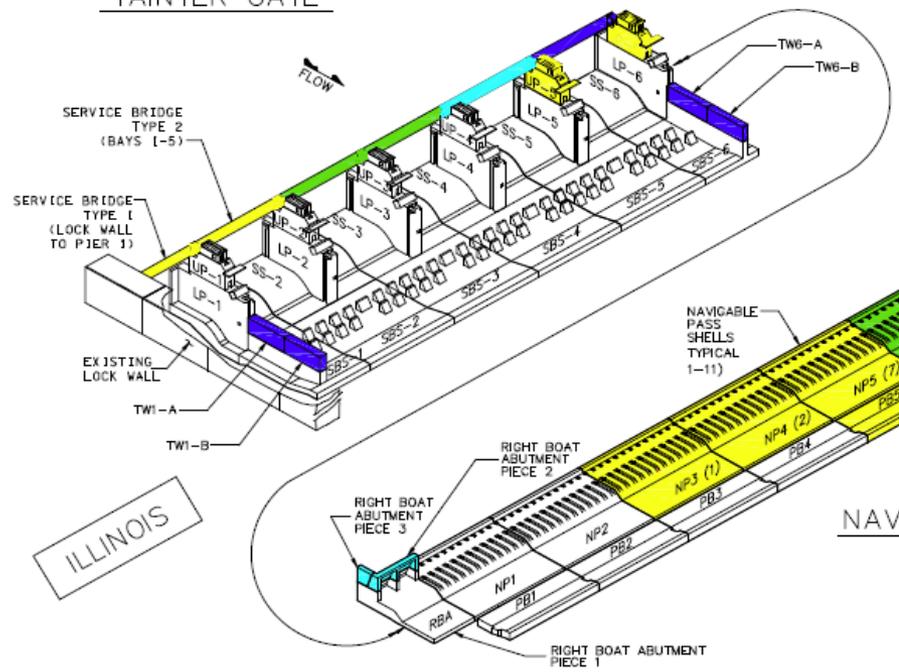
RINGER BARGE PLACEMENTS	
SHELL	WEIGHT (TONS)
RBA PIECE 2	372
RBA PIECE 3	81.5
TW1-A	347
TW1-B	302
TW6-A	308
TW6-B	316
SERVICE BRIDGE TYPE 1	118
SERVICE BRIDGE TYPE 2	283
12 REMAINING RINGER PLACEMENTS	

CAT BARGE PLACEMENTS	
SHELL	WEIGHT (TONS)
NP 2-11	4955
NP 12A	(4785.7) 1/2
PAVING BLOCKS 5-12	2562
18 REMAINING CAT BARGE PLACEMENTS	

ACRONYM LEGEND	
LP	- LOWER PIER
TG	- TANTER GATE
SB	- SERVICE BRIDGE
GM	- GROUT MAT
FP	- FOUNDATION PILE
M/SP	- MASTER/SHEET PILE
RBA	- RIGHT BOAT ABUTMENT
PB	- PAVING BLOCK
NP	- NAVIGABLE PASS (MONOLITH)
UP	- UPPER PIER

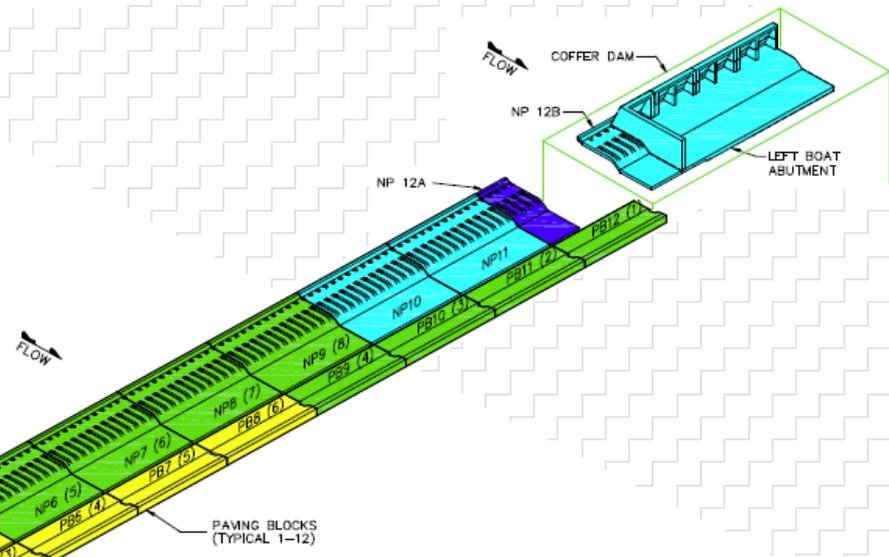
KENTUCKY

## TANTER GATE



ILLINOIS

## NAVIGABLE PASS



SETTING SEASON	SETTING SEQUENCE
2014	LP5, LP6, PB1, PB2, PB3, PB4, RBA, NP1, NP2
2015	PB5, PB6, PB7, PB8, NP3, NP4, NP5, B1, B2
2016	PB9, PB10, PB11, PB12, NP6, NP7, NP8, NP9, B3, B4
2017	NP10, NP11, NP12, LBA (CIP), RBA-1/2, B5
2018	NP12A, TW-1A/B, TW-6A/B, B6

NOTE:  
1. AVERAGE CYCLE TIME TO SET A PAVING BLOCK OR NAVIGABLE PASS MONOLITH SHELL IS 4 WEEKS.

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

# 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)  
or
- Set PB #11,12 (of 12)
- **Drive Left Boat Abutment (LBA) Foundation Piling**

## 2015 BASELINE

<b>PB-5</b>	<b>15 Jun</b>
<b>PB-6</b>	<b>29 Jun</b>
<b>PB-7</b>	<b>14 Jul</b>
<b>PB-8</b>	<b>28 Jul</b>
<b>NP-3</b>	<b>14 Sep</b>
<b>NP-4</b>	<b>08 Oct</b>
<b>NP-5</b>	<b>26 Nov</b>
<b>TG-2</b>	<b>11 Sep</b>

### 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 – Mar 2015

### Expenditures

Planned (BCWS)	\$1.914B
Earned (BCWP)	\$1.920B
Actual (ACWP)	\$1.916B

**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

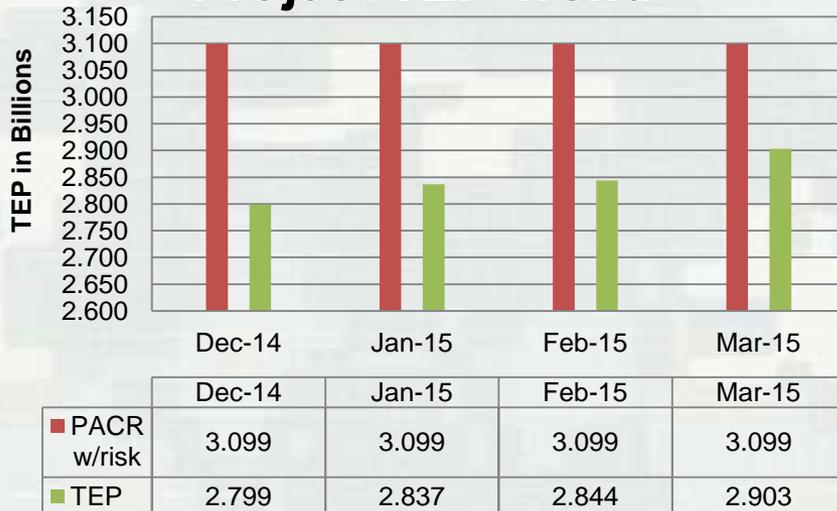
	<u>(PACR)/(Current)</u>
Project Complete	Sep 2024/Mar 2022
Dam Operational	Sep 2020/Oct 2018

**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

### Project TEP Trend

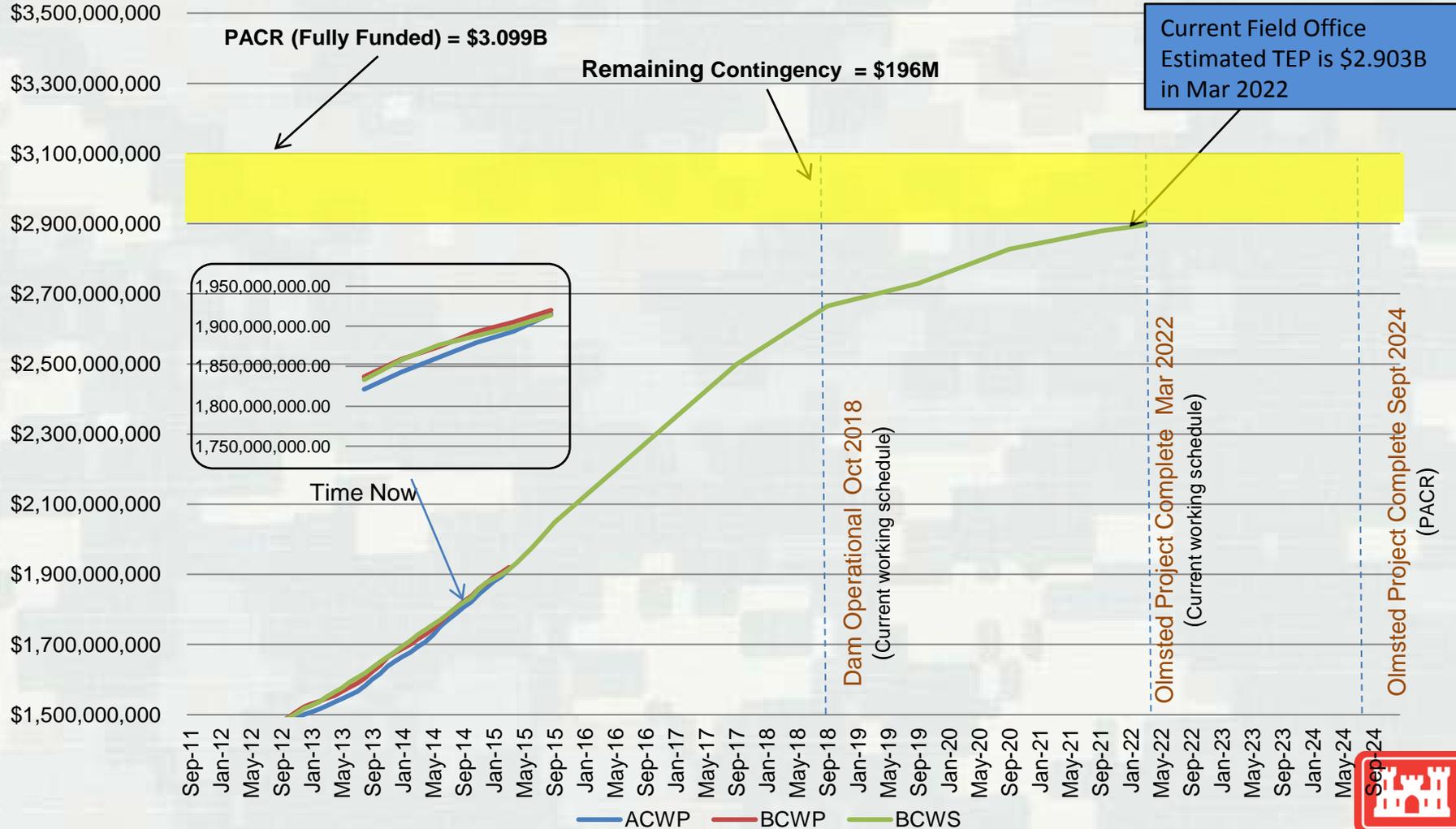


### Major Activity Schedule

ACTIVITY NAME	FINISH	2015		
		May	Jun	Jul
M-7 Inst M&S Piles, D/S (2nd) (34 Barge)	21-May-15	█		
PB-5 Inst Lftng Frame	27-May-15	█		
NP - 8 Inst M&S Piles, D/S 91-102 (34 Barge)	15-Jun-15		█	
NP - 3 Drive NP Bearing Piles, Rows 32-41 (3rd) (20 Barge)	10-Jun-15		█	
PB-5 Place & screed drain stone	11-Jun-15		█	
NP - 3 Drive NP Bearing Piles, Rows 32-41 (4th) (20 Barge)	12-Jun-15		█	
PB-5 Transfer vertid load from Cat Barge to Bedding Stone	15-Jun-15		█	
PB-5 Load Out/Set Paving Block Complete	15-Jun-15		◆	
CIP UP-5	01-Jan-16			█
PB-5 Disconnect Lift Frame from Set Pavers and translate off Pavers	16-Jun-15		█	
NP - 3 Inst M&S Piles, U/S 31-42 (34 Barge)	29-Jun-15		█	
NP-3 Install Wick Gates-12 ea	19-Jun-15		█	
PB-6 Place and Screed Drain Stone	22-Jun-15		█	
NP-4 Install Wick Gates-12 ea	23-Jun-15		█	
NP-3 Test Wick Gates-12 ea	23-Jun-15		█	
PB-6 Inst Lftng Frame	23-Jun-15		█	
NP-4 Test Wick Gates-12 ea	24-Jun-15		█	
NP-3 Inst Lftng Frame	28-Jul-15			█
NP - 3 As-Build NP 3 Landing Pile, 1/4" acc. w/Sleeve	29-Jun-15		█	
NP - 3 As-Build Field Pile NP 3, 2" relative with Multi-Beam	29-Jun-15		█	
PB-6 Transfer vertid load of PB-6 from Cat Barge to Bedding Stone	28-Jun-15		█	
PB-6 Load Out/Set Paving Block Complete	29-Jun-15		◆	
PB-6 Disconnect Lift Frame from Set Pavers and translate off Pavers	29-Jun-15		█	

# Olmsted L&D Project Earned Value Analysis (Based on DOD Gold Card)

Mar 2015



# Due Outs

- L&D Nos. 52/53 Demolition Scope: LRL analysis and recommendation complete. Vetting CG concurrence.
- Equipment Salvage Project Credit: Process white paper and vetting complete. Estimate an approx. **\$25M** return (credit) on Contractor Acquired Property (CAP) in the FY18 timeframe.
- Project Contingency: Regional Annual Project Cost Update complete. Forecast an approx. \$65M reduction in risk-based contingency which is being reflected in MSC spend plan.



# Future Challenges

- Efficient Funding Stream
  - Minimum of \$150M/year through 2020
  - Less than \$150M would have direct impact on the schedule
  - **Increased** Capability Funding Level to **\$235M (FY15)** and **\$250M (FY16)**
- 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. However commercial traffic will be routed through locks for scheduled short duration timeframes to address extreme low water elevation and critical shell set down activities.



# Discussion



Olmsted Locks and Dam  
Wicket Lifter Barge

