Olmsted Locks & Dam

Inland Waterways Users Board

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US Army Corps of Engineers

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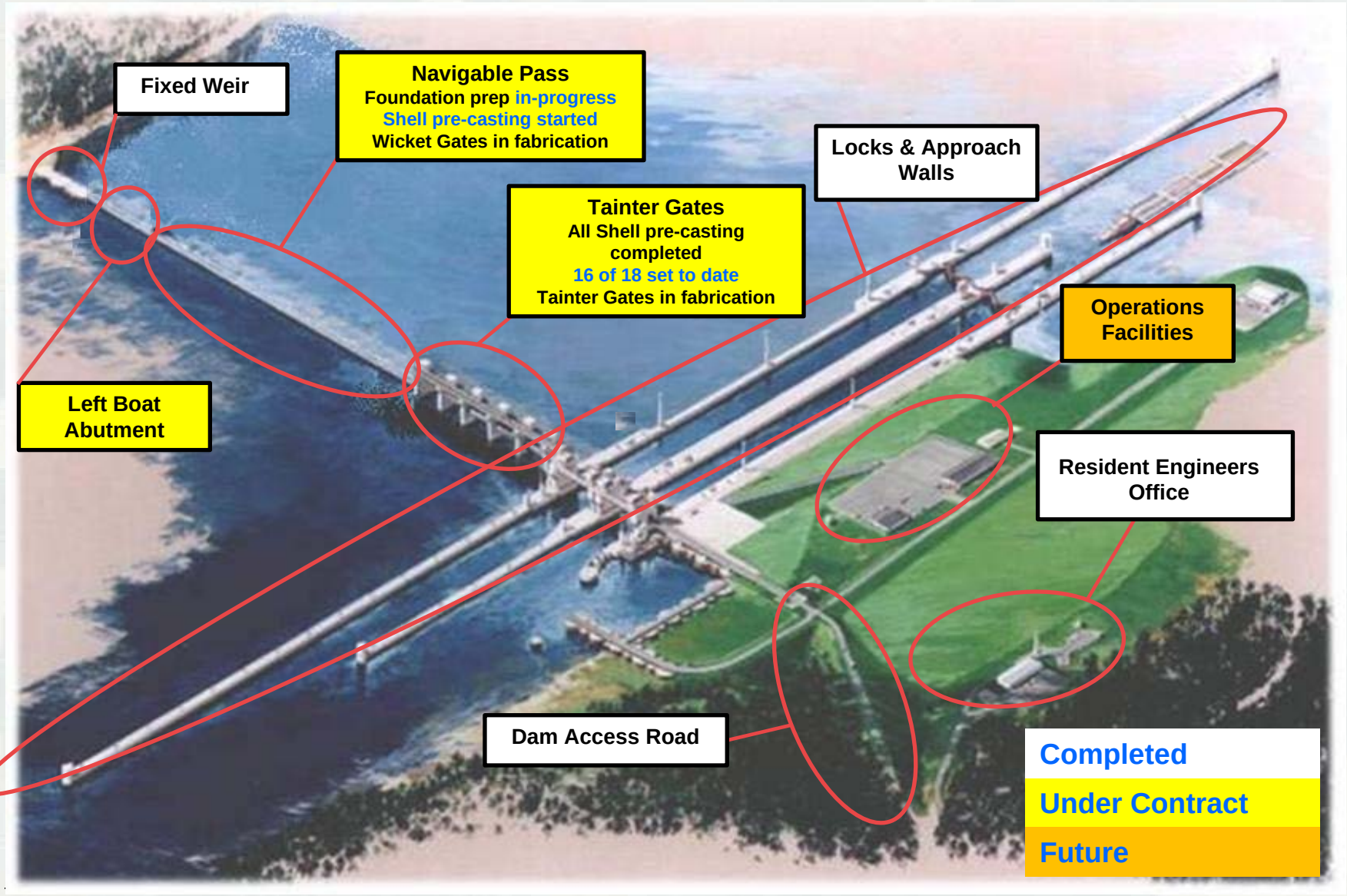
Agenda

- Status
  - Overview
  - Current Authorization Milestone
  - 2013 LWS (Low Water Season) Summary
  - 2014 LWS Forecast
  - Scorecard
  - Challenges
  - Realities
- Discussion

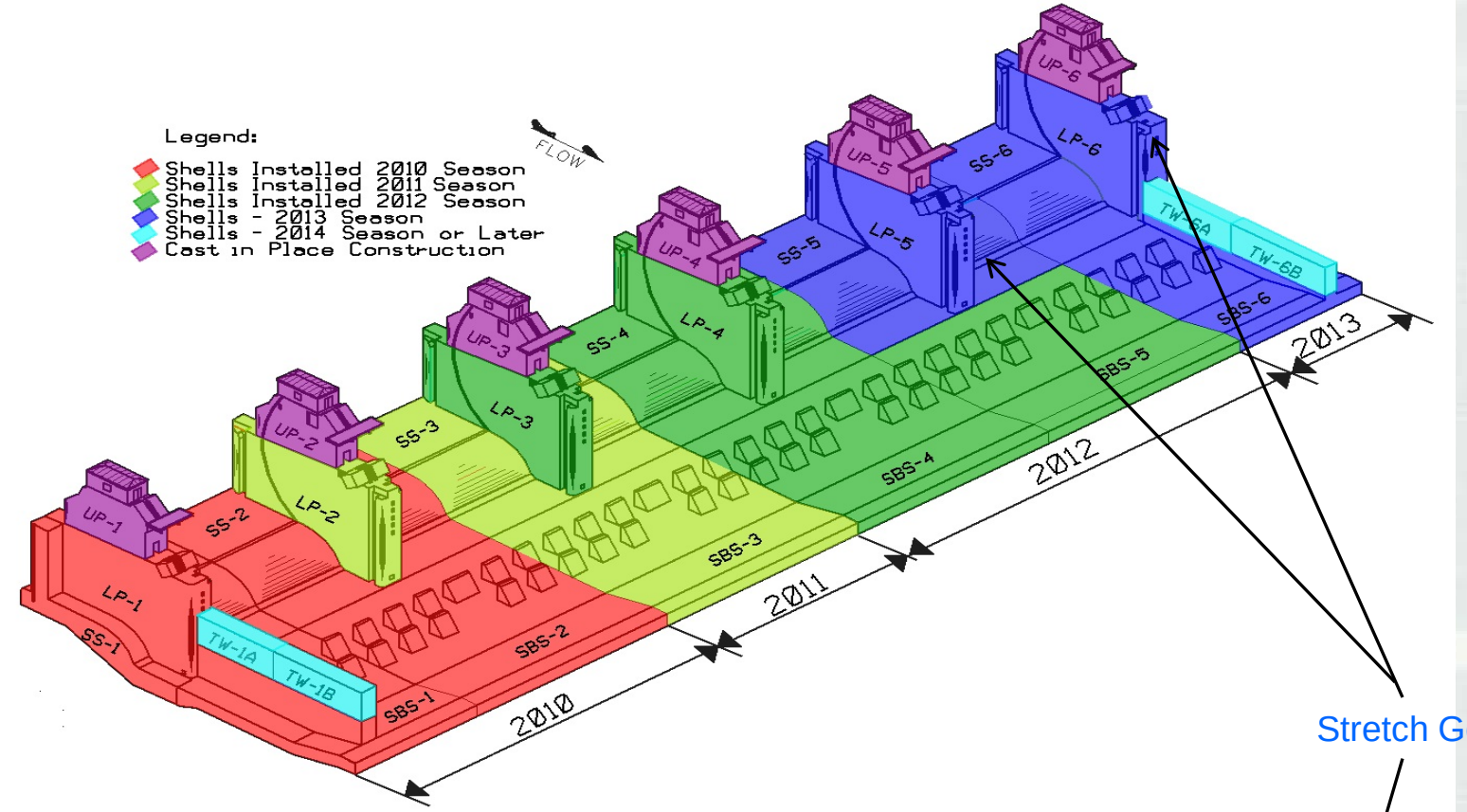
Olmsted Project Overview



Current Authorization Milestone

- Post Authorization Change Request (13 Apr 2012)
  - **$2.918B, Dam Operational 2020, Project Complete 2024**
- Construction Method Validation (31 May 2012)
  - Validated that In-The-Wet (ITW) is the most efficient method to complete the project
- Qualitative Risk Assessment (28 Aug 2012)
  - Validated that **Locks & Dam Nos. 52/53 are failing** and identified failure mode mitigation measures
- Continuing Resolution, signed into law 17 October 2013, increased Olmsted authorization avoiding significant slow/shutdown impacts of:
  - Cost ($80M - $208M)
  - Schedule (1 - 3 Years)
- WRDA/WRRDA legislation (in conference) may impact project IWTF cost share ratio going forward

Tainter Gate (TG) Footprint



Key:

2010 Season(Actual)
- SBS-1: September 22, 2010
- SS-1: October 15, 2010
- SBS-2: November 18, 2010
- SS-2: January 02, 2011
- LP-1: February 16, 2011

2011 Season(Actual)
- LP-2: July 22, 2011
- SBS-3: October, 09, 2011
- SS-3: November 16, 201

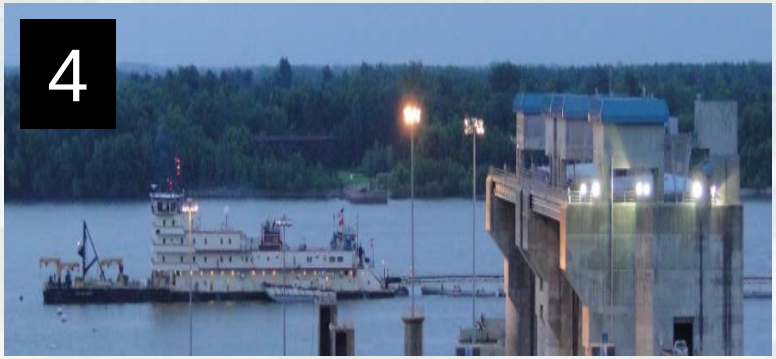
2012 Season (Actual)
- SBS-4: July 11, 2012
- SS-4: August 16, 2012
- LP-3: September 8, 2012
- LP-4: September 16, 2012
- SBS-5: November 17, 2012

2013 Season (Planned)
- SS-5: September 22, 2013 (A)
- SBS-6: November 09, 2013 (A)
- SS-6: November 28, 2013 (A)
- LP-5: January 18, 2014 (Stretch Goal)
- LP-6: January 28, 2014 (Stretch Goal)

2013 LWS Summary

- **Pre-cast Yard:** All TG (Tainter Gate) shells complete (18/18)
- **Heavy Lift:** All scheduled 2013 TG shells set (16/18)
- **Marine:**
  - All TG sheet pile complete
  - All TG foundation pile complete
  - TG/NP(Navigable Pass) transition piling complete
  - Silt/Sediment mitigation (Dredge Hurley) complete
  - Foundation/Drainage stone through Monolith 6 (50% of NP footprint) complete
  - Grout mat through Monolith 3 (25% of NP footprint) complete
- **TG Upper Pier:**
  - Upper Pier Nos. 1 and 2 all concrete work complete
- **Off Site Fabrication:**
  - Tainter Gate No. 1 (5) In progress
  - Wicket Gate Nos. 1- 28 (160) In progress

2013 LWS Images



1: Areal photo of Marine work, Nov. 13. **2**: Concrete Placement UP-1 **3**: Rebar and Forms on UP-1 **4**: Dredge Hurley **5**: Transition Pile **6**: SBS-6 being moved to Position 0.

2014 LWS Forecast

- **Pre-Cast Yard:**
  - Right Boat Abutment
  - First Navigable Pass Monoliths(shells) and Paving Blocks
- **Marine:**
  - NP sheet pile (start)
  - NP foundation pile (start)
  - Silt/Sediment mitigation (Dredge Hurley)
  - All NP Foundation/Drainage stone through Monolith 9
  - All NP Grout mat through Monolith 9
- **TG Upper Pier:**
  - Upper Pier Nos. 3 and 4 buildout
  - Set/install Tainter Gate No. 1
- **Off Site Fabrication:**
  - Tainter Gate No. 2 (5)
  - Wicket Gate Nos. 29 – 64 (160)

Balanced Scorecard – Jan 2013

Expenditures

Planned (BCWS)	$1.665B
Earned (BCWP)	$1.663B
Actual (ACWP)	$1.638B

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

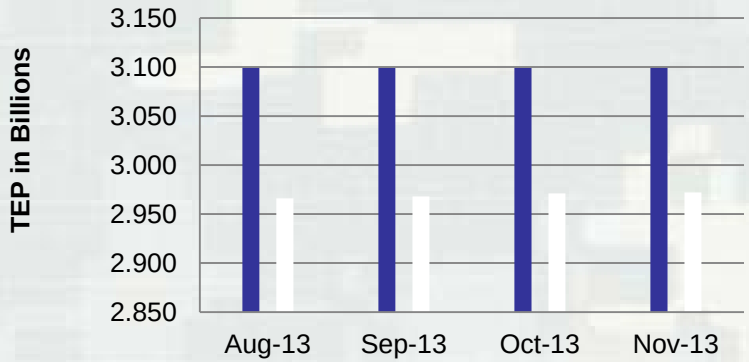
Rating (PACR)/(Current)

Project Compl.	Sep 2024/Mar 2023
Dam Operational	Sep 2020/Mar 2019

Measures: Planned project completion and Dam contract operational dates

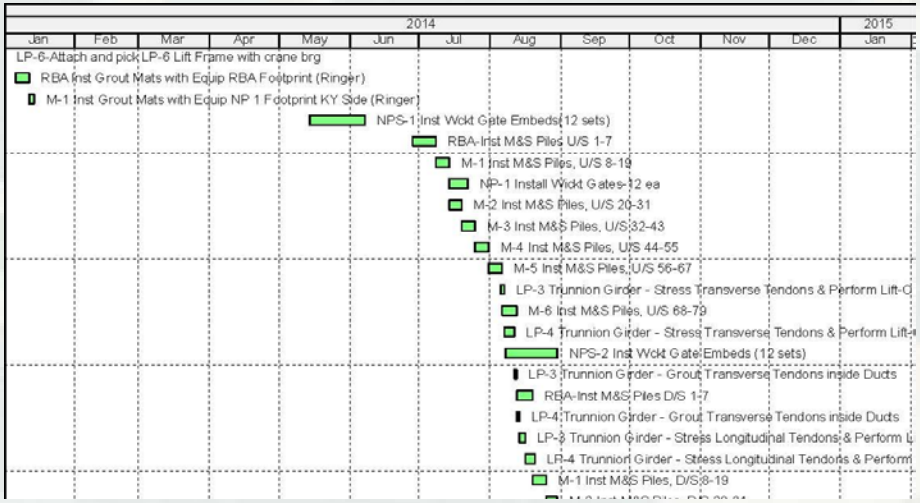
Target: Green; Current = PACR-12months,
Yellow; Current = PACR-11 month to PACR- 7 months
Red ; Current = PACR-6 months to after PACR date

Olmsted TEP Trend



	Aug-13	Sep-13	Oct-13	Nov-13
PACR w/ risk	3.099	3.099	3.099	3.099
Estimated	2.966	2.968	2.971	2.972

Critical Schedule Forecast



Challenges

- Efficient Funding Stream
  - Minimum of $150M/year through 2020 (PACR assumption)
  - Less than $150M would have direct impact on the cost/schedule
- Optimal Funding level under review
- Passing Traffic as work continues into the Navigable Pass footprint

Realities

1. Jobs. Olmsted directly supports approx. 550 engineers, foremen and craft workers.

2. Hub of the Inland Water Transportation System. Approx. 91M tons of commodities transit Locks and Dam Nos. 52/53 annually. (Busiest node in the system)

3. Locks and Dam Nos. 52/53 must be replaced in the near future to ensure reliable navigation of the lower Ohio.

4. Value to the nation. The estimated annual net benefit of the operational project is **$640 million**.

5. Olmsted is inland navigation's top priority. The Inland Waterways Users Board (IWUB) has adopted the Inland Marine Transportation System (IMTS) Capital Investment Strategy report that ranks Olmsted Locks and Dam as the **number one priority** for locks and dams construction projects.

6. Project oversight has increased. Olmsted is a USACE designated mega-project. All additional management controls are in place.

7. Execution. Using the existing cost-reimbursable contract and the in-the-wet construction method is the most efficient way to complete the project on schedule and within budget.

Discussion