Lower American River Task Force Briefing

American River Waterways
Folsom Dam Modifications / Dam Raise
Joint Federal Project

10 March 2009
The Partnership

• Partner Agencies
  – USACE
  – Reclamation
  – SAFCA
  – Central Valley Flood Protection Board

• Department Leadership
  – Interior
  – Department of the Army

• Congressional Delegation
Partnership Framework

- Management Oversight
  - USACE/Reclamation Executive Leadership
  - Oversight Management Group (OMG)
- Joint Teams
  - Value Engineering Teams (PASS 1, 2 and 2 Optimization)
  - Integrated Design & Construction Teams
  - Hill briefings
  - NEPA Team
  - Issue-specific Work Groups
    - Independent Tech Review
    - Work Distribution Package
Joint Federal Project Overview

Auxiliary Spillway – Control structure w/ 6 submerged tainter gates; 1,100 approach channel; 3,000 ft spillway chute and stilling basin

- Pass 200 event
- Address the dam safety hydrologic risk (safely pass Probable Maximum Flood)

Q_{\text{max}} = 312,000 \text{ cfs}
Estimated Cost: All Folsom Dam Improvements

<table>
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<tr>
<th>Project</th>
<th>USACE</th>
<th>Reclamation</th>
<th>Total</th>
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<tbody>
<tr>
<td>JFP (aux spillway)</td>
<td>$ 836 m</td>
<td>$ 90 m</td>
<td>$ 926 m</td>
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Current 902 limit adjusted through Oct 08
JFP Update - Phase 3

- Control Structure
- Approach Channel
- Spillway Chute Construction
- Stilling Basin Construction
- Site Restoration
JFP Update - Phase 3

Control Structure
JFP Update - Phase 3

Approach Channel
JFP Update - Phase 3

Spillway Chute & Stilling Basin Construction
JFP Update - Phase 3

• Site Restoration
  • Haul road plantings in collaboration with USBR and CA Parks.
JFP Update - Phase 3
JFP Status Update

USBR Work Packages:
- Phase I Excavation, Complete
- Phase II Excavation, Contract in Procurement

Corps Work Packages:
- Control Structure:
  - 35% Design, Completed
  - 65% Design, ITR, 16 Mar 09
JFP Update - Phase 3
Project Authorizations for the Modifications Project

• **Folsom Modification Project** – Section 101(a) (6) of the Water Resources Development Act (WRDA) of 1999, Public Law (PL) 106-53, provides authorization for the Folsom Modification Project.

• **Project Collaboration and Auxiliary Spillway** – Section 128 of the Energy and Water Development Appropriations Act of 2006 (PL 109-103) directed the Secretary of the Army and the Secretary of the Interior to collaborate on authorized activities to maximize flood damage reduction improvements and address dam safety needs at Folsom Dam.

• **Joint Federal Project** – Section 3029 of WRDA 2007 formally recognized the Joint Federal Project and identifies new authorized cost (total Corps cost) at $683 million.
Folsom Dam Re-Operation Study

Information Briefing

10 March 2009
Folsom Dam Re-Operation Study

- Folsom Permanent Re-Operations Study
- Completion by the time the JFP is finished in 2015
- Over the next year the Corps will work with Reclamation to put together a Comprehensive Plan of Action for the Folsom Dam Operations Study
- Initiate Stakeholder Development Process 2008
- Identify key technical issues, constraints, and tools for this study.
Folsom Dam Re-Operation Study

The authorization for the Folsom Permanent Operations Study is cited below:

WRDA 1999 - States "upon completion of the improvements to Folsom Dam authorized by subparagraph (A), the variable space allocated to flood control with the reservoir shall be reduced from the current operating range of 400,000-670,000 acre-feet to 400,000-600,000 acre feet". Subparagraph A authorized the Folsom Modifications Project - the functional equivalent is the Folsom Dam Joint Federal Project.

Additionally, the legislation stated that the Corps in cooperation with Reclamation "shall update the flood management plan for Folsom Dam to reflect the operational capabilities created by the modification authorized by subparagraph (A) and improved weather forecasts based on the Advanced Hydrologic Prediction System of the National Weather Service ". 
Folsom Dam Raise Project

Information Briefing

10 March 2009
Folsom Dam Raise Project
Watershed Map
Folsom Dam Raise Project

- **Folsom Dam Raise Project** – Section 128 of the Energy and Water Development Appropriations Act of 2004 (PL 108-137) directed the Secretary of the Army to carry out a project for:
  - Flood Damage Reduction
  - Ecosystem Restoration

- Described in a Corps *Chief of Engineers Report*, dated November 2002, at a total cost of $257.3 million.

- Included in the Folsom Dam Raise Project authority are provisions for the expedited design and construction of a new bridge at Folsom and ecosystem restoration.
Folsom Dam Raise Project

- Flood Damage Reduction
  With the construction of the JFP the projected need for the 7.5’ raise has been reduced in elevation by approximately 4’ to a 3.5’ raise currently being evaluated.

- Ecosystem Restoration
  Bushy Lake Restoration Project
  Woodlake Restoration Project
  Temperature Shutters
American River Watershed
Folsom Lake Crossing Bridge

10 March 2008
American River Watershed
Folsom Lake Crossing Bridge Project

History

- Department of Homeland Security and Bureau of Reclamation study
- Folsom Dam Road closes
- Impacted 18,000 vehicles per day
- Congress authorizes permanent bridge in 2003

Project Authorization

The Folsom Lake Crossing Bridge Project was Authorized under the Folsom Dam Raise Project – Section 128 of the Energy and Water Development Appropriations Act of 2004 (PL 108-137) directed the Secretary of the Army to construct a permanent bridge
American River Watershed
Folsom Lake Crossing Bridge Project

Site Layout Looking West

Corps Disposal Area

Corps Folsom Lake Crossing Bridge Road

Corps Roadway Excavation

Folsom Lake Crossing Bridge

USBR Phase I Excavation
American River Watershed
Folsom Lake Crossing Bridge Project

Folsom Lake Crossing Bridge

Corps Disposal Area

USBR Phase I Excavation

Folsom Lake Crossing Bridge
American River Watershed
Folsom Lake Crossing Bridge Project

Partners

- U.S. Bureau of Reclamation
- City of Folsom, California
- State of California
- Sacramento Area Flood Control Agency
American River Watershed
Folsom Lake Crossing Bridge Project

Fast Facts

- 1.1 million cy of excavation
- Two miles of paved roadway (4 lanes)
- One thousand foot bridge length
- Two new intersections
- Bike trail linkage

Current Project Status

- Construction Placement: 99%
- Current total project costs: $136 million
- Construction completion: 28 March 2009
- Public Ribbon Cutting Ceremony 28 March 2009, 10:00am
American River Watershed
Folsom Lake Crossing Bridge Project

1,000', 4 lane, Cast in Place Segmental Concrete Bridge
American River Watershed
Folsom Lake Crossing Bridge Project

West Bridge Pier

East Bridge Pier
American River Watershed
Folsom Lake Crossing Bridge Project

Point of Contact for the Project

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