







## **Information Meetings**

# Flood Damage Reduction and Dam Safety Improvement Projects

**Folsom Dam and Reservoir** 

April 4 - 5, 2007

## **Purpose of the Meeting**

- Information. Promote awareness among neighboring communities of the scope of flood control, dam safety and other projects planned or underway at Folsom Dam and Reservoir over the next 10 – 15 years
- Communication. Listen, understand and consider community interests as an essential element in completing these critical projects

## Flood Control and Dam Safety Evaluations

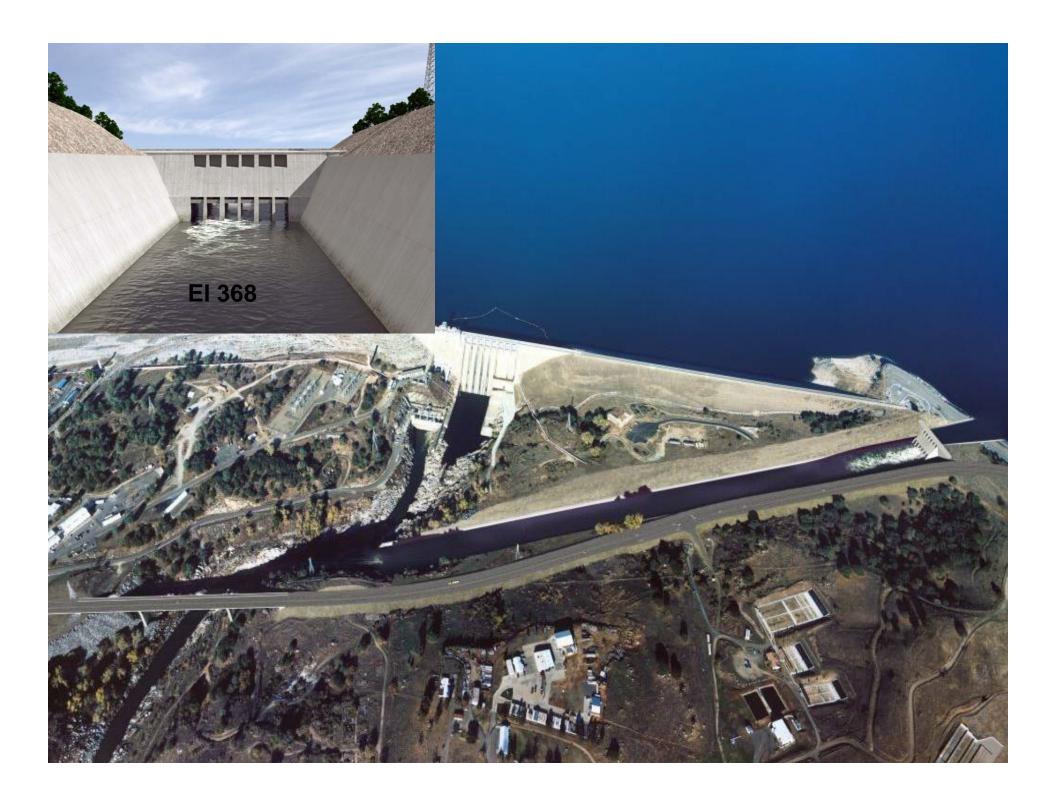
- Flood control. Data from actual storm events confirms that additional flood protection is necessary at Folsom Dam
- Dam safety. Comprehensive facility review in 2000 identified potential risks:
  - → Hydrologic: potential overtopping of dams and dikes during a major storm event
  - → Seismic: potential sliding and/or breaching in the event of an earthquake
  - → Static: potential seepage and piping

## **Joint Agency Objectives**

- Design and construct a Joint Federal Project for Folsom Dam that expedites action by Reclamation and Corps to:
  - → Provide 200-year or better flood protection
  - → Address the dam safety hydrologic risk (pass Probable Maximum Flood)
- Complete other Dam Safety (DS) improvements
- Complete other Flood Damage Reduction (FDR) improvements

## **Joint Federal Project**

- Auxiliary spillway comprised of:
  - → Concrete lined approach channel
  - → Control structure: six submerged tainter gates at invert elevation 368' MSL
  - → 2700' x 170' concrete lined spillway chute
  - → Concrete lined stilling basin
- Gate dimensions, invert elevation or spillway may be optimized during final design to maximize performance and/or reduce costs



### Additional FDR and DS Improvements

- Other Flood Damage Reduction-only projects (Corps)
  - → 3.5' raise of the embankments
  - → Modification or replacement of emergency spillway gates
- Other Dam Safety-only seismic projects (Reclamation)
  - → Mormon Island Auxiliary Dam (MIAD)
  - → Main concrete structure
- Other Dam Safety-only static projects (Reclamation)
  - $\rightarrow$  Dikes 4-6
  - → Left and Right Wing Dams
  - → MIAD

#### **NEPA/CEQA Processes**

- Define purpose / need for the Federal/State actions
- Public scoping
- Draft Environmental Impact Statement/ Environmental Impact Report (EIS/EIR)
  - → Public Meetings
  - → Formal comment period required
- Final EIS/EIR
  - → Minimum 30-day review period
  - → Agencies will accept and consider comments
- Records of Decision (ROD)

## Final EIS/EIR: Project Alternatives

#### **Alternatives Retained**

- → Gated auxiliary spillway/3.5' raise (preferred alt)
- → Fuseplug auxiliary spillway/no raise

#### **Alternatives Eliminated**

- → 17' raise alternative
- → 7' raise, 4' raise and tunnel options

## Final EIS/EIR: No Impacts

- Hydrology
- Water Supply, Hydropower
- Land Use, Planning, and Zoning
- Population and Housing
- Indian Trust Assets
- Environmental Justice
- Agricultural Resources

## **Recreation Impacts**

- No impacts to: Granite Bay, Brown's Ravine, Rattlesnake Bar, Peninsula Campground, Doton's Point, Beek's Bight recreation areas
- Some impacts to:
  - → Folsom Point recreation area and adjacent trails
  - → Beal's Point recreation area and adjacent trails
  - → Brown's Ravine trails

## **Recreation Mitigation Strategies**

- Construction planning will not <u>assume</u> closure of any recreation facility
- Nearly continuous access to all recreation areas throughout construction
- Exceptions may include:
  - Temporary closure to construct access features
  - Potential extended closures for unforeseen project circumstances
- To the extent practicable: Consolidate materials processing/batch operations at Overlook and Left Wing Dam areas

## **Recreation Mitigation Measures**

#### Folsom Point:

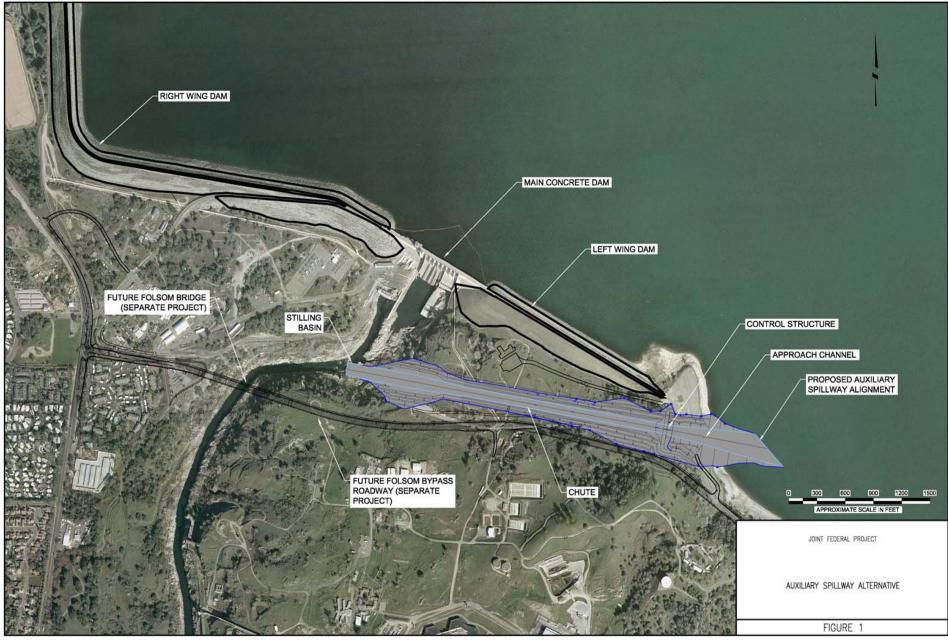
- → Grade separation at intersection of haul route/access road
- → Staging area moved off developed area
- → Eliminated batch or materials processing ops

#### Beal's Point:

- → Reconfigure access road
- → Staging area moved off developed area
- → Minimize traffic
- Trails.

## **Mitigated Impacts**

- Air quality, water quality, groundwater
- Aquatic Resources
- Terrestial Vegetation and Wildlife
- Soils, Minerals, and Geological Resources
- Visual Resources
- Traffic and Circulation
- Noise
- Cultural Resources
- Public Services and Utilities
- Public Health and Safety



## **Construction Sequence (FY)**

Feature	Lead	07	08	09	10	11	12	13	14	15	16	17	18
Dam Safety	Recl												
JFP Spillway Interim Excavation	Recl												
JFP Spillway Final Grade Excavation	Recl/ USACE												
Construct JFP Auxiliary Spillway	USACE												
FDR 3.5' Raise	USACE												
FDR Gate Mods	USACE												

#### **Public Involvement**

- NEPA Process
- Information Meetings
- Long-term dialogue