FOLSOM DAM

- Designed and built (1955) by USACE
- Operated and maintained by U.S. Bureau of Reclamation (USBR)
- Dam Safety is USBR’s Responsibility
- USACE Responsible for Flood Operations via Water Control Manual
USACE’S FOLSOM DAM PROGRAM

Folsom Dam Raise Project

Joint Federal Project (JFP)
USACE’S DAM RAISE PROJECT ELEMENTS

**Dam Raise**
Add top seals/strengthen eight Gates
Raise 5.1 miles of earthen structures 3.5 feet

**Ecosystem Elements**
Temperature Control Shutters Modernization
Downstream Ecosystem Restoration (not funded)

**Folsom Bridge**
Post 9/11 dam roadway replacement
Completed in 2009
SIGNIFICANCE OF FOLSOM DAM RAISE

Sacramento region is one of the highest flood risk areas in the nation.

Dam Raise and JFP work in conjunction with other projects that function as a system to meet Flood Risk Management objectives.

Provides Flood Risk Management for:
- 500,000 people
- 125,000 structures
- $58 billion in assets
DAM RAISE ELEMENT

- **Dikes 1, 2, & 3**
- **Dikes 4, 5, & 6**
- **Right Wing Dam**
- **Left Wing Dam**
- **Main Dam**
- **Mormon Island Auxiliary Dam (MIAD)**
- **Dikes 7 & 8**

### 3.5-foot Raise

<table>
<thead>
<tr>
<th>Features</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dike Raises (8 dikes)</td>
<td>2.4 miles</td>
</tr>
<tr>
<td>Wing Dam Raises (2 wing dams)</td>
<td>1.7 miles</td>
</tr>
<tr>
<td>Auxiliary Dam Raise (MIAD)</td>
<td>1 mile</td>
</tr>
<tr>
<td>Main Dam Gate Modifications</td>
<td>8 gates</td>
</tr>
</tbody>
</table>
Summary

• Implemented by USACE in cooperation with USBR and partners: Department of Water Resources (DWR), Sacramento Area Flood Control Agency (SAFCA), and Central Valley Flood Protection Board (CVFPB)

• Increases physical storage by 42,000 acre feet

Completed Work

• Dike 8 construction (2020)

• Main Dam/Wing Dam, Dikes 1-6, and MIAD designs (2022-2023)

Remaining Work

• Complete Dike 7 design (2023)

• Construct Dikes 1-6 (2023-2026)

• Construct Main Dam/Wing Dams (2023-2027)

• Construct MIAD (2023-2024)

• Construct Dike 7 (2024-2025)

• Update Surcharge Operations component of the Water Control Manual (2022-2026)

Schedule

• Target completion date: July 2027

Budget Summary

• Estimate at Completion: $474 million

• Funded through completion
DIKE 8 CONSTRUCTION COMPLETE
Currently TCS operated manually:
  • Requires a crew of three for 8–12 hours to adjust all shutter groups
  • Changes must be scheduled 2 weeks in advance; the current configuration is changed 3–4 times per year.

TCS project element:
  • Modernizes TCS to allow refined, flexible control of water discharge temperature to support downstream salmonid populations year-round
  • Is implemented by USACE in cooperation with USBR and SAFCA (project partner)
Summary
• Implemented by USACE in cooperation with USBR and project partner: Sacramento Area Flood Control Agency (SAFCA)

Remaining Work
• Complete design (2025)
• Construction (2025-2028)

Schedule
• Target completion date: 2028

Budget Summary
• Estimate at Completion: $63.6 million
• Currently funded through completion
Discussion/Questions