



Update on California Flood Management Accomplishments

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PUBLIC SAFETY

ENVIRONMENTAL STEWARDSHIP

ECONOMIC STABILITY

California Flood Basics

- ✓ **Mediterranean Climate:**
Dry Summers, Wet Winters
- ✓ **Various Flood Hazard Types:**
year-round exposure to hazards
- ✓ **\$575B** property value exposed
- ✓ **7M people** living in floodplains
- ✓ **1343+** agencies with flood management responsibilities
- ✓ **\$2B annual investment:**
mostly operations & maintenance
some capital improvement projects
- ✓ **Mature Regulatory Climate**

General Locations of Flood Hazards

- Alluvial Fan
- Riverine
- Coastal/Tidal Estuary

PUBLIC SAFETY

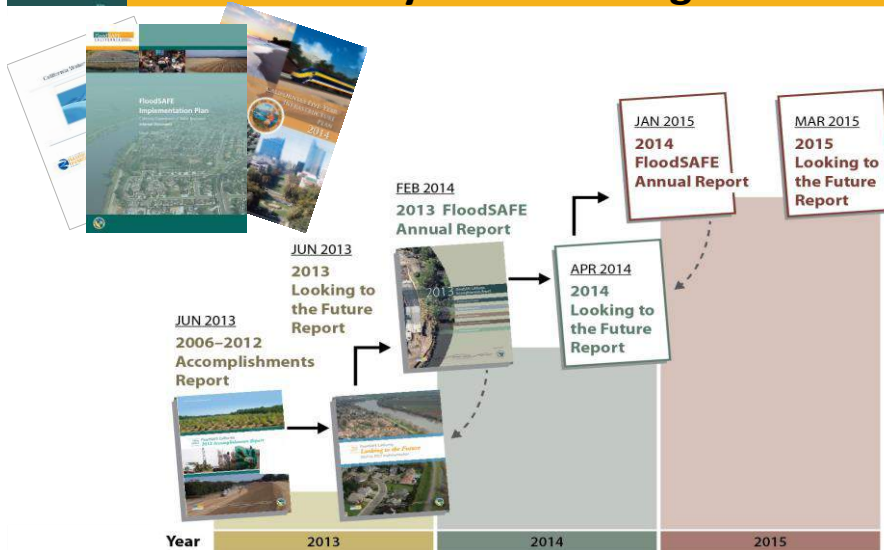
Map is representational only and does not include all floodplains in California.
(Source: California Department of Water Resources, 2013)

Presentation Outline

- Accountability and Planning
- Report At A Glance
- Mega Programs Accomplishments
- FloodSAFE Financing
- Year in Review
- Report Rollout



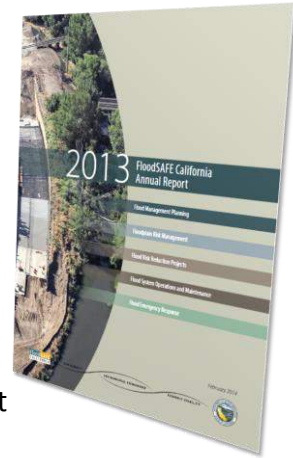
Accountability and Planning



Report At A Glance

Calendar Year 2013:

- **Audience:** Legislature and Layperson
- Highlighted **55** accomplishments
- **5** Mega Programs
- **Invested \$460 million** in actions that:
 - Provide multiple benefits
 - Are geographically diverse
 - Are at various scales of investment



Flood Management Planning

Statewide Flood Management Planning

- Released final *California's Flood Future*
- Created mapbooks to describe exposure to flood risk for every county.
- Catalogued history of flooding for reference by local and regional planning agencies and land use officials.



Flood Management Planning



Central Valley Flood Management Planning

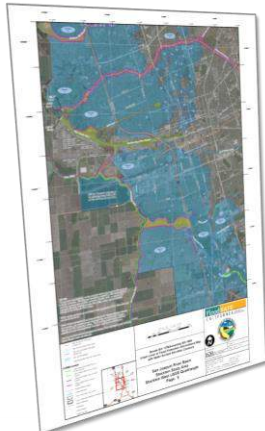
- Central Valley Flood Protection Board Coordinating Committee
- Completed Milestone 1 of the Basin-wide Feasibility Studies/ Oct. public workshop
- Provided technical support to regional agencies



Floodplain Risk Management



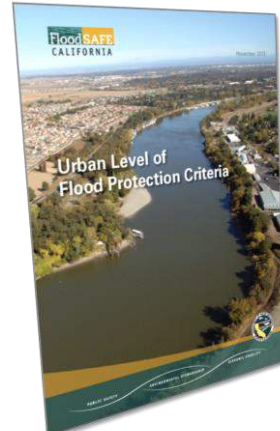
200-year Informational Maps



Flood Risk Notification



Urban Level of Flood Protection Criteria

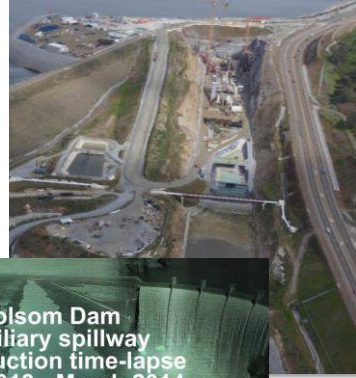


Flood Risk Reduction Projects



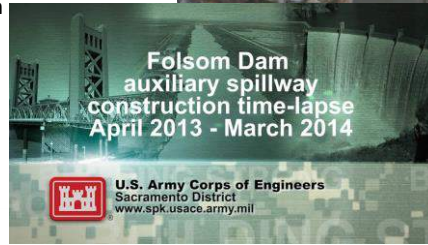
Folsom Joint Federal Project (JFP)

- Control structure construction approximately 70% complete.
- Temporary dam embankment construction for the approach channel is 50% complete.



American River Common Features

- Completed work on 2 of 8 remaining sites of American River Common Features project in 2013.



Flood Risk Reduction Projects



Delta Levees System Integrity

- Completed 19 projects in 2013, with a State cost-share of approximately \$47 million.

Urban Flood Risk Reduction

- Thirteen miles of SPFC urban levees were improved in 2013, providing increased flood protection to:
 - 60,000 residents near Yuba City
 - 80,000 residents in Sacramento.



Guadalupe River Project, Santa Clara County



Flood Risk Reduction Projects



Flood Corridor

- River Ranch Conservation Easement Acquisition Project: Acquired a 2,962-acre agricultural easement.
- Hamilton City Project: Acquired three properties for future construction of a 6.8-mile setback levee and reconnection of 1,450 acres of floodplain.

Local Levee Assistance

- Executed agreements with 11 agencies to fund 30 Local Levee Assistance projects.



Repair at San Juan Creek, Orange County



Santa Clara River Project, Ventura County



Flood Risk Reduction Projects



Yuba Feather Flood Protection

- Completed preliminary designs for an additional outlet on the New Bullards Bar Dam.

Fish Passage Improvement

- Improved anadromous salmonid passage and flood conveyance in the Calaveras River system by replacing the Caprini Low-flow Crossing, in Mormon Slough, upstream of the City of Stockton.



BEFORE construction

AFTER construction



Flood System Operations & Maintenance

Sutter Bypass Water Control Structure

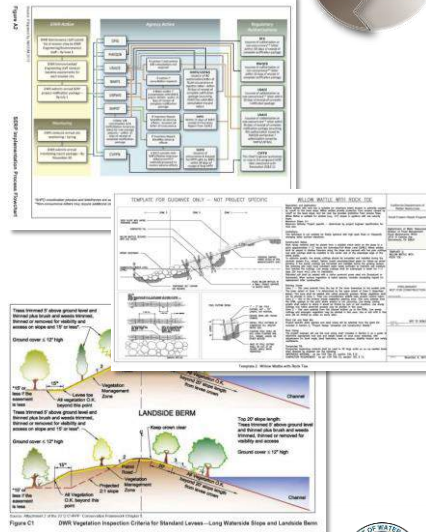
- Removed and replaced Weir No. 2 to improve water management and fish passage on the Sutter Bypass.

Small Erosion Repair Program

- Streamlined permitting process
 - Without SERP:** 1-2 erosion sites repaired annually
 - With SERP:** up to 15 erosion sites repaired annually

Flood Project Integrity

- Assessed more than 4,500 SPFC levee crossings

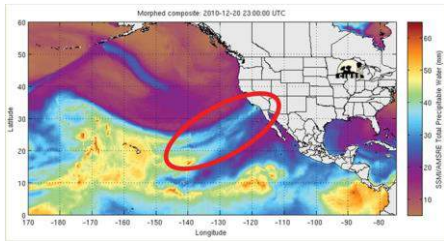


Flood Emergency Response



Flood Forecast and Warning: Improving Observations

- Installed an atmospheric river observatory at Bodega Bay Marine Laboratory.
- Developed a web-based dashboard with input from the Yuba Feather Forecast-Coordinated Operations program.
- Developed unique hydraulic models for 10 urban areas in the Sacramento-San Joaquin Valley protected by SPFC levees.



Local Flood Emergency Response Grants

- Awarded \$5 million for 14 projects across the state.

Atmospheric river
(Graphic: NOAA)

Flood Emergency Response



Flood Emergency Response Preparations

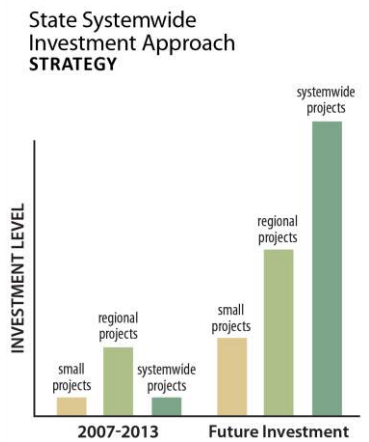
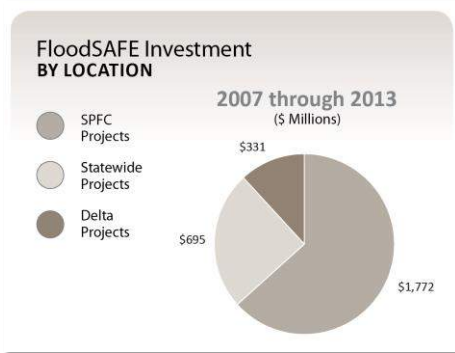
- Conducted the Twitchell Island functional exercise and Cal Expo flood fight training class

Delta Flood Emergency Preparedness and Response Project

- Conducted the Delta Emergency Response Project
- DWR acquired the Stockton West Weber Avenue site



FloodSAFE Financing



Year in Review

2013

- January:** Delta Emergency Lock and Transfer Facilities at Rio Vista
- February:** Atmospheric Observatories
- March:** San Joaquin Forecast-Coordinated Operations
- April:** Flood Center Program
- May/June:** Delta Levee System Integrity
- July:** 200-year Informational Maps Completed and Released
- August:** Morrison Creek Floodwall Completion
- September:** Flood Risk Notification
- October:** Delta Flood Emergency Transfer Facility in Stockton
- November:** Folsom Dam Auxiliary Spillway
Urban Level of Flood Protection Finalized
Flood Fight Training at Cal Expo
- December:** American River Common Features Project

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Key Points

- It is crucial to **demonstrate the value of investments** to the public
- Sustainable approaches to reducing flood risk require **concurrent efforts** around multiple “communities of practice” or **groupings of mega-programs**
- **Sharing planned & completed accomplishments** on annual basis can help **sustain public interest** in supporting actions to reduce flood risk

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