

FloodSAFE California



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What is FloodSAFE?

An initiative to improve integrated flood management in California through a system-wide approach while reducing flood risk at regional and local levels.



Improving Flood Management



Regional Projects

Designed to reduce flood risks through execution of United States Corps of Engineers (USACE) and other regional projects, including "Early Implementation Projects."

Improve Basic Flood Management

Including emergency response, operation and maintenance of the flood control facilities, and management of the flood plains; fixing erosion sites and carrying out local projects.

System Wide Approach

Develop a system-wide approach where broad flood system evaluations are conducted, rather than project-by-project basis.

System Wide Approach



Broad system evaluation

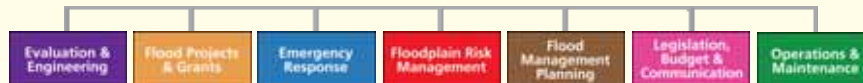
- Determine flood system deficiencies
- Define feasible projects/programs
- Fix deficiencies through comprehensive, integrated, system-wide Central Valley Flood Protection Plan

System Sustainability

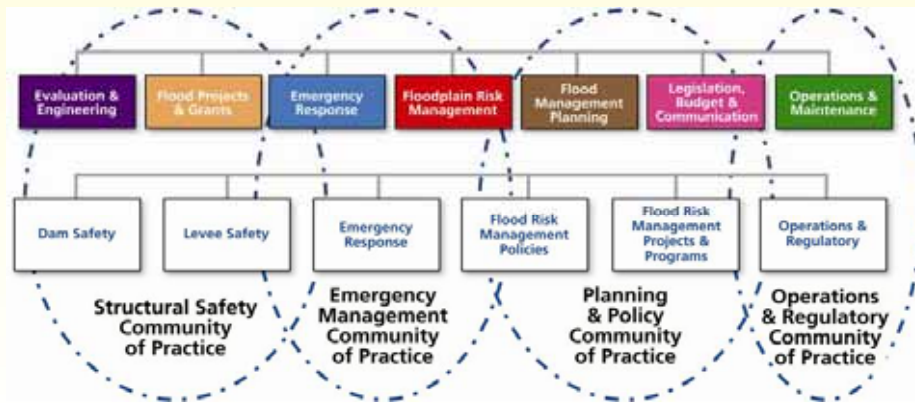


- Enhancement of sustainable environmental resources, creation of open space, and protection of agricultural lands
- Integration of multi-purpose projects & resources use
- Safe communities for sustainable economic growth
- Ease of operations and maintenance of flood facilities, with reasonable costs

FloodSAFE Initiative Functional Areas



FloodSAFE Initiative Functional Areas / USACE National Flood Risk Management Program



USACE – DWR Partnership



Cost Shared

Central Valley Integrated Flood Management Plan
Sacramento River Flood Control System Evaluation

Capital Construction Projects:

- Folsom Dam Modifications
- Folsom Dam Raise
- American River Common Features
- South Sacramento Streams
- Mid-Valley Area Levee Reconstruction
- Marysville Ring Levee
- CalFed Levee Stability
- Sacramento River Bank Protection
- General Reevaluation Reports
 - American River Common Features, West Sacramento, Yuba River Basin
- Feasibility Studies
 - Sutter Basin, Lower San Joaquin River, Delta Islands & Levees,
 - Lower Cache Creek, West Stanislaus
- Delta Long-Term Management Strategy
- Maintenance of California Debris Commission facilities



USACE – DWR Partnership



DWR-Funded Programs

Levee Evaluations for the Central Valley
Central Valley Floodplain Evaluation and Delineation
Central Valley Hydrology Study
Sacramento & San Joaquin River Basins Hydrology Study – Climate Change Impacts
Interagency Flood Management Collaborative Program

Cooperating Agency

Delta Emergency Plan
System Reoperation
Coordinated Reservoir Operation, Forecast-Based Reservoir Operations
Encroachment permitting
Project Modification approvals
Emergency Assistance Recovery Mechanism (PL 84-99)
Levee Maintenance in the State Plan of Flood Control; Vegetation Management Round Table
Shared vision planning for the California Water Plan

Achievements

Emergency
Response

Emergency Response

- Deployment of rock material in the Delta
- Levee inspection process and reporting modernization
- Completed San Joaquin River system erosion survey and mapping
- Enhanced capability of Incident Command Teams
- Web-cast weather/flood briefings to flood control agencies

Achievements

Operations &
Maintenance

Operations and Maintenance

- 116 Critical levee repairs completed
- 121 Proactive repairs completed
- Removed 2.5 M cubic yards of sediment from Bypasses
- Resurfaced 50 miles of levee crown roads
- Refurbished pumps, motors: Sutter Bypass pump plants
- Colusa State Recreation Area riparian habitat completed
- Federal Levee Stability Program – 16 projects recommended for local assistance funding

Achievements

Floodplain Risk
Management

Floodplain Risk Management

- Awareness Floodplain Mapping program available on-line
- DWR Regional Coordination Program implemented
- Levee flood protection zone (LFPZ) maps generated
- Establishment of alluvial fan flood mapping priorities

Achievements

Flood Projects
& Grants

Flood Projects and Grants

- Five early implementation projects prior to comprehensive Central Valley plan

Natomas Levee Improvement Project

(NLIP) – estimated total cost \$618M, State's Cost Share: 70% of \$345M

Natomas Cross Canal (NCC) – To be completed Fall, 2009

Sacramento River East Levee (SREL)*, and remaining NLIP work- target 2012

*USACE resources required for completion

Bear River North Levee Rehabilitation Project (Bear River)

(RD-2103) – estimated total cost \$18.2M, State's Cost Share: 60%

To be completed November, 2009

Three Rivers Levee Improvement Authority (Feather River)

(TRLIA) – estimated total cost \$191.4M, State's Cost Share: 71%

Final Completion date: June, 2010

Star Bend Project

(LD1) – estimated total cost \$20.78M, State's Cost Share: 80%

Completion target date: November, 2009

Achievements

Flood Projects
& Grants

Flood Projects and Grants, cont.

- Delta Levees Flood Protection Program
- Flood Protection Corridor Program – 12,000 acres protected from urban development
- Sacramento River Flood Control System improvement
 - Folsom Dam Auxiliary Spillway design, construction
 - South Sacramento County Streams
 - West Sacramento Project GRR
 - Yuba River Basin Project GRR

Achievements

Evaluation &
Engineering

Evaluation and Engineering

- \$19M (Prop 1E), \$25M (Prop 84) authorized for Central Valley Floodplain Evaluation & Delineation Program
- GIS database developed for nearly 14,000 miles of levees and flood control structures
- Structural evaluation of 2,100 miles of levees in Central Valley is underway
- Website, document and meeting coordination

Achievements

Flood
Management
Planning

Flood Management Planning

- Statewide flood planning included in California Water Plan 2009
- Increased emphasis on Flood Management in Integrated Regional Water Management plans
- Five Central Valley regional forums conducted
- Numerous topic and regional workgroups underway

Legislation, Budget and Communication

Legislation,
Budget &
Communication

- Legislation requiring new standards for flood protection and risk reduction
- Secured bond funding for flood control projects
- Established flexible bond investment strategy
- Website, document and meeting coordination

1E & 84 Update

Expended or Committed
through June, 2009:
\$965,000* (*in thousands)

**Planned Bond Expenditures
2007-2010
\$2,302,621***



- Construction
- Evaluation/Preconstruction
- Planning
- Emergency/Other

Central Valley Flood Protection Plan

- State Plan of Flood Control Draft is under review
- Regional Conditions Summary Report Draft due by end 2009
-will define the problems to be addressed in the CVFPP.



Upcoming Projects: Next 2 Years



- Levee Repairs **\$40**
- Sediment Removal **\$2**
- AR Common Features
and South Sacramento Co. Streams **\$25**
- Yuba River Basin Project, including
Marysville Ring Levee Improvement **\$10**
- Additional Early Implementation Projects **\$300**
- Delta Emergency Response **\$80**

In Millions

Final Remarks

