

Central Valley Flood Protection

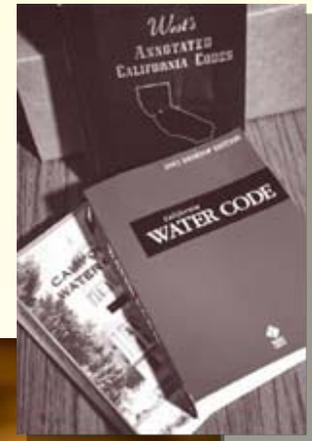
Implementing SB 5
(Machado, Florez, Wolk, Steinberg, and Laird)

Purpose of Presentation

- Introduce key portions of SB 5
- Introduce key portions of Central Valley Flood Protection Act of 2008 (CVFPA) (*commencing with Water Code § 9600*)
- Describe how DWR plans to satisfy requirements of CVFPA, including creation of Central Valley Flood Protection Plan

SB 5 Overview

- Added Sections to
 - Government Code
 - Health and Safety Code
 - Water Code



Glossary

- **CVFPB**
 - Central Valley Flood Protection Board
- **CVFPP**
 - Central Valley Flood Protection Plan
- **SFSCV**
 - State Flood System in the Central Valley
- **SPFC**
 - State Plan of Flood Control

Definitions

- **Central Valley Flood Protection Plan**
 - An integrated flood management plan for the Sacramento-San Joaquin River Flood Management System
- **The Sacramento-San Joaquin River Flood Management System comprises all of the following (WC § 9611):**
 - (a) The facilities of the State Plan of Flood Control as that plan may be amended pursuant to this part.

Definitions (2)

- § 9611 (cont.)

(b) Any existing dam, levee, or other flood management facility that is not part of the State Plan of Flood Control if the board determines, upon recommendation of the department, that the facility does one or more of the following:

- (1) Provides significant systemwide benefits for managing flood risks within the Sacramento-San Joaquin Valley.

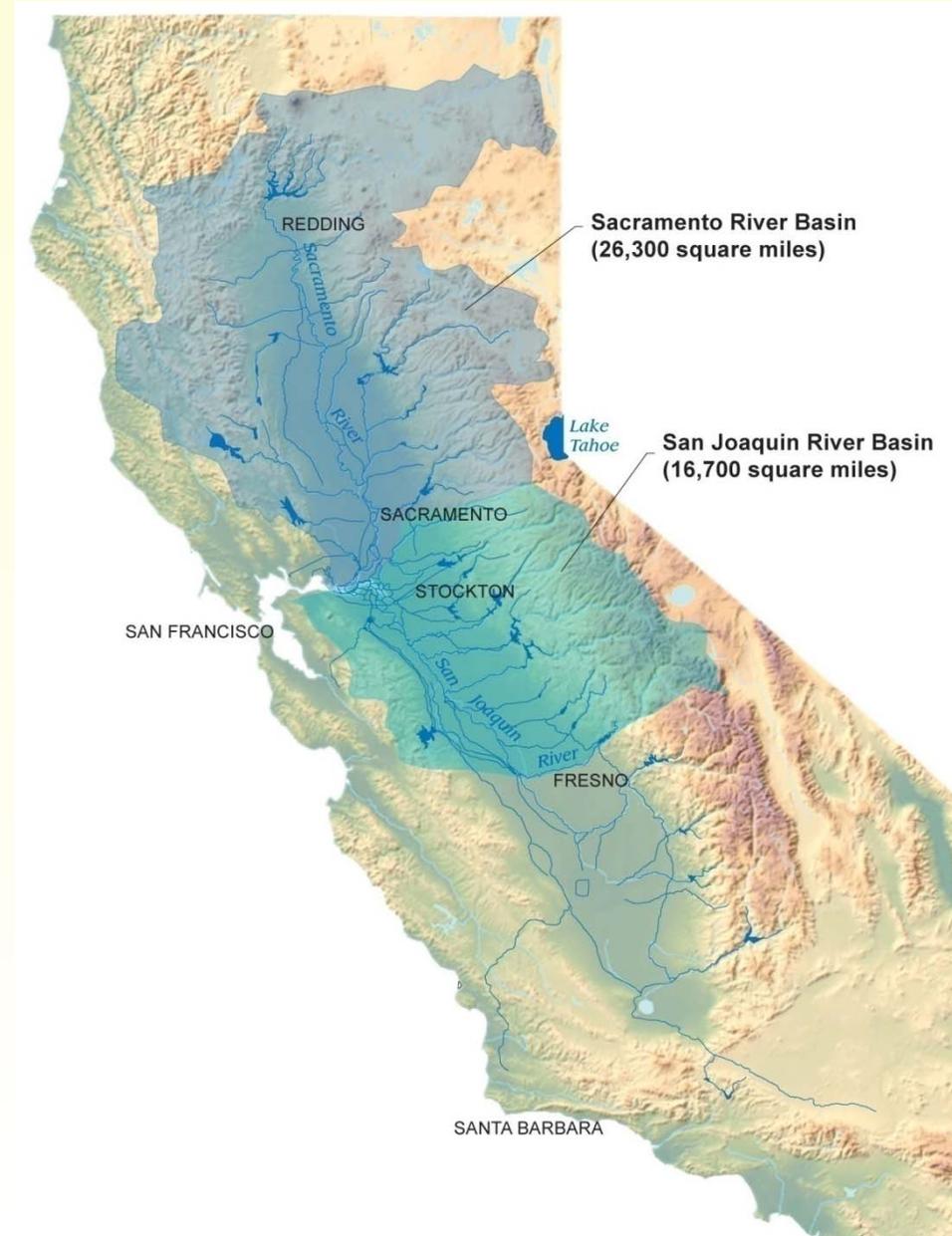
- (2) Protects urban areas within the Sacramento-San Joaquin Valley.

Definitions (3)

- **Sacramento-San Joaquin Valley**

“Any lands in the bed or along or near the banks of the Sacramento River or San Joaquin River, or any of their tributaries or connected therewith, or upon any land adjacent thereto, or within any of the overflow basins thereof, or upon any land susceptible to overflow therefrom. The Sacramento-San Joaquin Valley does not include lands lying within the Tulare Lake basin, including the Kings River.” *Water Code § 9602.(e)*

Sacramento – San Joaquin Valley



Definitions (4)

- State Plan of Flood Control

“The state and federal flood control works, lands, programs, plans, conditions, and mode of maintenance and operations of the Sacramento River Flood Control Project described in Section 8350 of the Water Code, and of flood control projects in the Sacramento River and San Joaquin River watersheds authorized pursuant to ... for which the board or the department has provided the assurances of nonfederal cooperation to the United States...” *Public Resources Code §5096.805(j)*

Definitions (5)

- **State Flood System in the Central Valley**
 - Refers to state/federal flood protection system in Central Valley and Delta
 - Also known as State Plan of Flood Control facilities
- **Project Levees**
 - Any levee that is part of the facilities of the State Plan of Flood Control (*WC § 9602. (c)*)

General Plan and Zoning

- Requires each city and county within Sacramento-San Joaquin Valley to amend its
 - General plan to include information in CVFPP within 24 months of adoption of CVFPP
 - Zoning ordinance to be consistent with revised general plan within 36 months of adopting CVFPP (or within 12 months after general plan amendment)

Requirements for Development



Once amendments are effective, cities and counties within Sacramento-San Joaquin Valley cannot enter development agreements for areas located within a flood hazard zone unless city or county makes certain findings, based on significant data

Requirements for Development (2)

- In order to enter into development agreement, or issue permit to construct residence, or approve parcel map within a flood hazard zone, city or county must
 - find existing facilities protect urban and urbanizing areas to a 1-in-200 chance of flooding (or lower) in any given year, or the FEMA standard of flood protection in nonurbanized areas, or
 - impose conditions on the development agreement that will provide required level of protection, or
 - find local flood management agency has made adequate progress on construction of flood protection system to provide required level of protection

State Planning Required per SB 5

- DWR must prepare a plan called the Central Valley Flood Protection Plan by Jan. 1, 2012 (and every 5 years after)
 - DWR must prepare a status report on development of CVFPP by Dec. 31, 2010
- CVFPB must adopt CVFPP by July 1, 2012

State Planning Required per AB 156

- DWR prepare and CVFPB adopt a status report for State Plan of Flood Control that includes (WC §9120)
 - Identification and description of each facility
 - Estimate of the risk of levee failure
 - Discussion of inspection and review undertaken to discover evident deficiencies
 - Future work activities

State Planning Required per AB 156 (2)



- CVFPB advise Legislature in writing of schedule of implementation for status report by Dec 31, 2008

Building Standards



By Jan. 1, 2009 DWR must propose for adoption and approval updated requirements for CA Building Standards Code for construction in areas protected by facilities of the Central Valley Flood Protection Plan where levels are anticipated to exceed 3 feet for the 200-year flood event



Local Flood Protection Planning Act

- A local agency may prepare a local plan of flood protection in accordance with this chapter
- Each county shall collaborate with cities within its jurisdiction to develop flood emergency plans within 24 months of adoption of the CVFPP



Local Flood Protection Planning Act (2)

- Local plan of flood protection shall include all of the following
 - Strategy to meet urban level of flood protection, including planning for residual flood risk and system resiliency
 - Identification of all types of flood hazards

Local Flood Protection Planning Act (3)

- Identification and risk assessment of facilities that provide flood protection for flood hazard areas
- Identification of current and future flood corridors
- Identification of needed improvements and costs of those improvements to meet flood protection standards
- An emergency response and evacuation plan for flood-prone areas

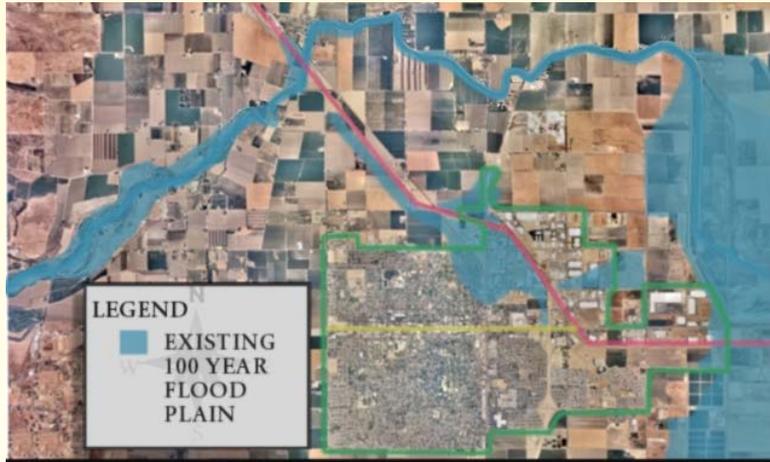
Local Flood Protection Planning Act (4)

- A strategy to achieve multiple benefits
- A long-term funding strategy for improvement and ongoing maintenance and operation of flood protection facilities
- A local agency that is not a city or county that prepares a plan must consult with cities and counties to insure consistent with general plans
- Plans prepared shall be consistent with the Central Valley Flood Protection Plan

CV Flood Protection Act of 2008

- Starts in Water Code § 9600 and recognizes
 - rapid development has occurred in Central Valley floodplains historically used for agriculture
 - no levee can offer complete protection from flooding, but can decrease frequency of flooding
 - levees and other flood protection facilities built for agricultural areas may not provide sufficient protection for urban development
 - better flood risk information needed to help people make informed choices

CVFPP Development



- DWR shall develop preliminary maps for the 100 and 200 year floodplains protected by project levees by July 1, 2008
- DWR shall give notice to cities in the Sacramento-San Joaquin Valley outside areas protected by project levees regarding maps and other information available to them that describe their flood risks

CVFPP Development (2)

- DWR shall prepare a status report on the progress and development of the Central Valley Flood Protection Plan by Dec. 31, 2010
- CVFPB shall hold at least two hearings to receive comments on the proposed plan
- DWR or the CVFPB may appoint one or more advisory committees to assist in preparation of the plan
- DWR shall collaborate with the Corps and the owners and operators of flood management facilities

CVFPP Content

- The plan shall include all of the following
 - (a) A description of the Sacramento-San Joaquin River Flood Management System and the cities and counties included in the system
 - (b) A description of the performance of the system and the challenges to modifying the system to provide appropriate levels of flood protection using available information

CVFPP Content (2)



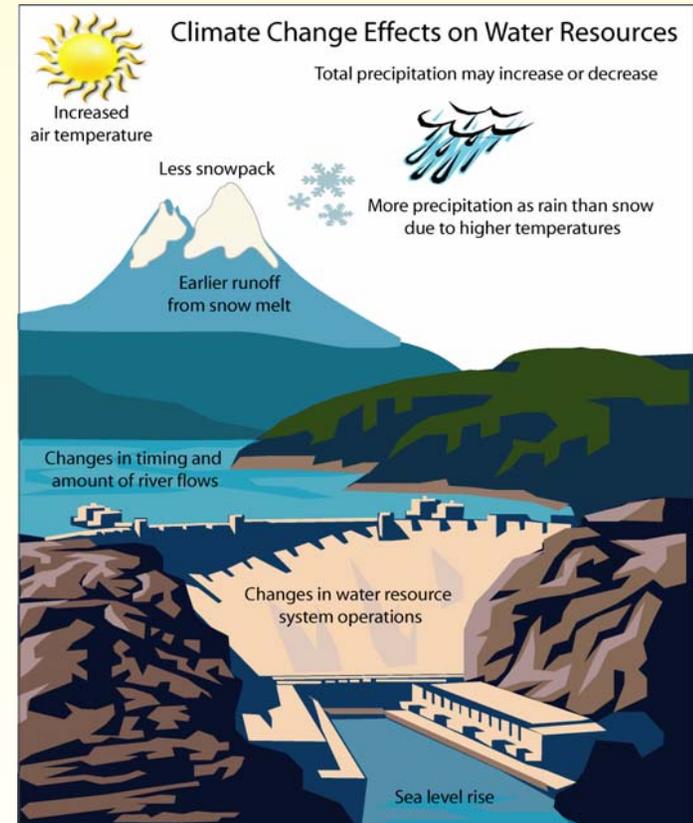
- (c) A description of the facilities included in the SPFC
- (d) A description of each existing dam that is not part of the SPFC that provides either significant systemwide benefits for managing flood risks within the study area or protects urban areas within the study area

CVFPP Content (3)

(e) A description of each existing levee and other flood management facility not described in (d) that is not part of the SPFC that provides either significant systemwide benefits for managing flood risks within the study area or protects an urban area within the study area

CVFPP Content (4)

(f) A description of the probable impacts of projected climate change, projected land use patterns, and other potential flood management challenges on the ability of the system to provide adequate levels of flood protection



CVFPP Content (5)



- (g) An evaluation of the structural improvements and repairs necessary to bring each of the facilities of the SPFC to within its design standard – the evaluation shall include a prioritized list of recommended actions necessary to bring each facility not identified in (h) to within its design standard

CVFPP Content (6)

- (h) The evaluation shall include a list of facilities recommended to be removed from the SPFC
- (i) A description of both structural and nonstructural methods for providing an urban level of flood protection to current urban areas – the description shall also include a list of recommended next steps to improve urban flood protection

CVFPP Content (7)

- (j) A description of structural and nonstructural means for enabling or improving systemwide riverine ecosystem function, including, but not limited to, establishment of riparian habitat and seasonal inundation of available flood plains where feasible



CVFPP Content (8)

- The plan shall include a description of both structural and nonstructural means for improving the performance and elimination of deficiencies of levees, weirs, bypasses, and facilities, including facilities of the SPFC, and wherever feasible, meet multiple objectives, including each of the following

CVFPP Objectives

1. Reduce the risk to human life, health, and safety from flooding, including protection of public safety infrastructure
2. Expand the capacity of the flood protection system in the Sacramento-San Joaquin Valley to either reduce flood flows or convey floodwaters away from urban areas
3. Link the flood protection system with the water supply system

CVFPP Objectives (2)

4. Reduce flood risks in currently nonurbanized areas
5. Increase the engagement of local agencies willing to participate in improving flood protection, ensuring a better connection between state flood protection decisions and local land use decisions
6. Improve flood protection for urban areas to the urban level of flood protection

CVFPP Objectives (3)



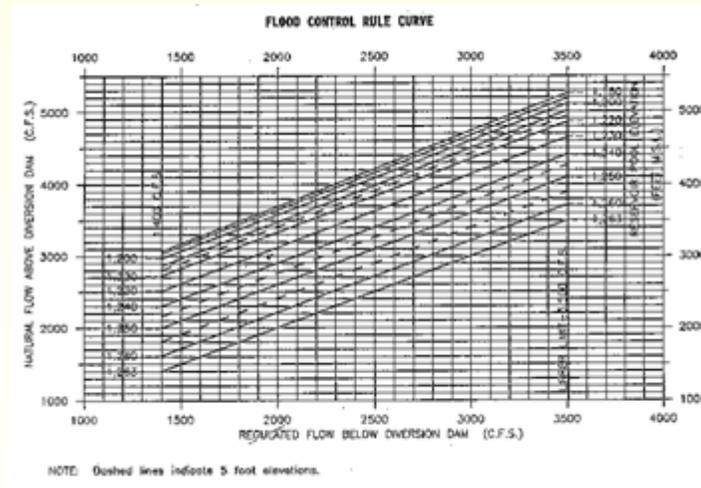
7. Promote natural dynamic hydrologic and geomorphic processes
8. Reduce damage from flooding
9. Increase and improve the quantity, diversity, and connectivity of riparian, wetland, floodplain, and shaded riverine aquatic habitats, including the agricultural and ecological values of these lands

CVFPP Objectives (4)

10. Minimize the flood management system operation and maintenance requirements
11. Promote the recovery and stability of native species populations and overall biotic community diversity
12. Identify opportunities and incentives for expanding or increasing use of floodway corridors

CVFPP Objectives (5)

13. Provide a feasible, comprehensive, and long-term financing plan for implementing the plan
14. Identify opportunities for reservoir reoperation in conjunction with groundwater flood storage



Approach

- Interact extensively with partners and stakeholders
- Inventory local and system problems
- Describe potential solutions
- Evaluate potential solutions against multiple objectives
- Identify most promising solutions
- Prioritize actions to improve system

Technical Efforts

Central Valley Flood Protection Plan

Evaluation

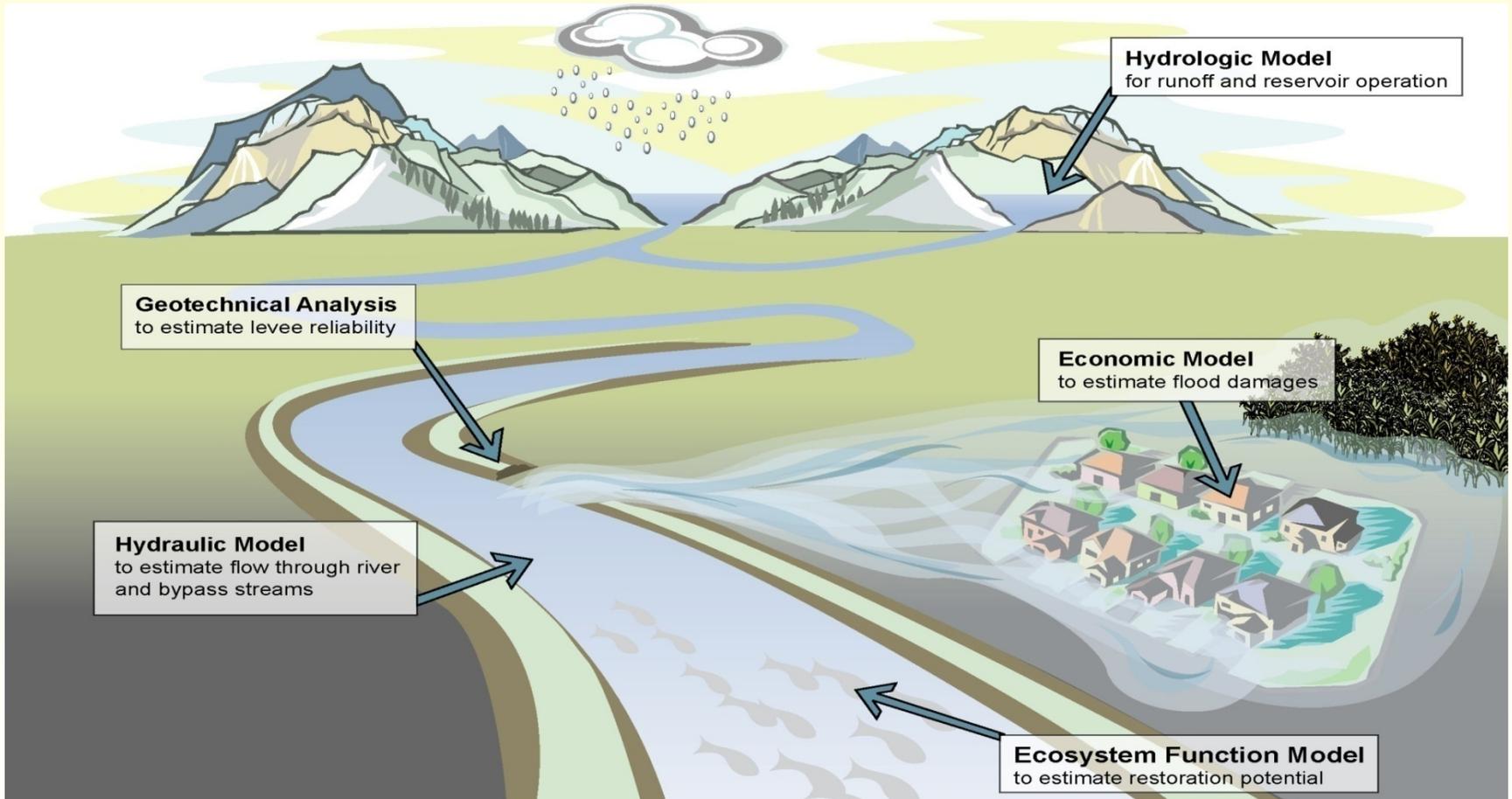
Delineation

Risk
Characterization

Potential
Improvements

FEMA & 200 yr.

Evaluation Components



Next Steps

- Design and implement stakeholder interaction process (June - August 2008)
- Begin inventorying local and system problems (July - August 2008)