Preliminary 100- and 200-Year Floodplains Based Upon Best Available Data

State of California
Central Valley Flood Protection Board
Department of Water Resources
Floodplain Management Branch
Floodplain Mapping Section

California Senate Bill Number 5-Best Available Mapping
SACRAMENTO-SAN JOAQUIN VALLEY FLOODPLAIN MAPPING
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The maps contained herein meets the mapping requirements set forth by California Senate Bill No. 5, Section 9 which adds Part 6 to Division 5 of the California Water Code.

California Senate Bill No. 5, Section 9 requires the following:

> BILL NUMBER: SB 5 CHAPTERED
> CHAPTER 364
> FILED WITH SECRETARY OF STATE OCTOBER 10, 2007
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> 9610. (a) By July 1, 2008, the department[1] shall develop preliminary maps for the 100 and 200 year floodplains protected by project levees. The 100 year floodplain maps shall be prepared using criteria developed or accepted by the Federal Emergency Management Agency (FEMA).
>
> (1) The department shall use available information from the 2002 Sacramento-San Joaquin River Basin Comprehensive Study[2], preliminary and regulatory FEMA flood insurance rate maps, recent floodplain studies and other sources to compile preliminary maps.
>
> (2) The department shall provide the preliminary maps to cities and counties within the Sacramento-San Joaquin Valley for use as best available information relating to flood protection.
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> (3) The department shall post this information on the board's[3] Internet Web site and may periodically update the maps as necessary.
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> (b) By July 1, 2008, the department shall give notice to cities in the Sacramento-San Joaquin Valley outside areas protected by project levees regarding maps and other information as to flood risks available from the Federal Emergency Management Agency or other federal, state or local agency.
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> (c) On or before December 31, 2010, the department shall prepare a status report on the progress and development of the Central Valley Flood Protection Plan pursuant to Section 9612. The department shall post this information on the board's Internet Web site, and make it available to the public.

Pursuant to the legislation, the preliminary maps for the 100- and 200-Year floodplains for regions located within the Sacramento–San Joaquin (SAC-SJ) Valley must be developed based on the best available data. These maps do not replace existing Federal Emergency Management Agency (FEMA) regulatory floodplain maps or Central Valley Flood Protection Board (CVFPB) regulatory floodway maps. For more information on the FEMA or CVFPB regulatory maps, please contact those agencies directly. The intent of the attached maps is to identify potential flood hazards that may warrant further study and consideration in land use decision making. The floodplains shown represent areas likely to experience flooding for two different storm events: one with storm flows that have a 1% chance of occurring in any year and one with storm flows that have a 0.5% chance of occurring in any year. These flows and resulting flooded areas are based on the best available floodplain information and may not identify all areas subject to flooding. Agencies should use these maps for planning purposes including updating the land use element, housing element, conservation element and safety element of city and county general plans. Assembly Bill 162 requires that flood hazards be incorporated into these elements of the community's general plan when a general plan is updated.

Preliminary floodplain maps were developed for each county showing Composite floodplains for 100-Year (1% chance of occurring in any year) and 200-Year (0.5% chance of occurring in any year) storm events. The 100-Year Composite Floodplain is defined based on information from the 100-Year floodplains developed during the 2002 SAC-SJ River Basins Comprehensive Study, FEMA Effective Digital Flood Insurance Rate Maps (DFIRM), FEMA Effective Q3 Flood Data[4], FEMA Preliminary DFIRM, DWR Awareness Mapping, 2005 DWR/USACE Lower Feather River Study, and engineering analyses from DWR's Urban Levees Evaluation Program. The 200-Year Composite Floodplain is defined using the 200-Year floodplains developed during the 2002 SAC-SJ River Basins Comprehensive Study.

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[1] California Department of Water Resources (DWR)
[2] United States Army Corps of Engineers (USACE)
[3] California Central Valley Flood Protection Board (CVFPB)
[4] FEMA Effective Q3 Flood Data was updated to reflect Effective Flood Insurance Rate Maps dated 04/17/1996 to 05/05/2003. These updates do not consider Letters of Map Changes.

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While the 200-Year floodplains developed during the 2002 SAC-SJ River Basins Comprehensive Study were not developed for all urban areas in the SAC-SJ Valley, this preliminary information may help some communities begin early planning to meet requirements in SB 5 to provide a minimum of 200-Year protection for new development in urban and urbanizing areas. The floodplain maps are subject to change and may be updated periodically. As information is updated, the latest floodplain maps will be posted on the following website: http://www.water.ca.gov/floodmgmt/lrafmo/fmb/fes/best_available_maps/

The definition for each element of the maps is provided below:

Project Levee Centerline – Project levee is defined by the Government Code as any levee that is a part of the facilities of the State Plan of Flood Control, as defined in Section 5096.805 of the Public Resources Code. The location of the project levees shown were developed from the following sources: Sacramento River Flood Control Project, San Joaquin River Flood Control Project, Map of Levee Districts, Map of Reclamation Districts, and State Maintenance Areas.

Non-Project Levee Centerline – Non-Project levees are levees that are not a part of the facilities of the State Plan of Flood Control. These facilities are any man-made facility that alters the direction of the natural flow path. The locations of the facilities shown were developed from various sources of information that included digital orthophoto maps and United States Geological Service (USGS) 1:24,000 quadrangle maps.

River / Stream Centerline – This data was obtained from the current USGS National Hydrography Dataset

Sacramento–San Joaquin Valley Boundary – The boundary is defined by the Government Code Section 65007 (g) as 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 SAC-SJ Valley does not include lands lying within the Tulare Lake Basin, including the Kings River. This boundary was derived from the current USGS National Hydrography Dataset.

County Boundary – The county boundaries were acquired from the California Spatial Information Library. County boundaries for areas outside of the SAC-SJ Valley Boundary are not shown because these areas are not part of this mapping effort.

100–Year Composite Floodplains – These floodplains represent the combination of the "FEMA Effective Floodplains" and the "Other Available Floodplain Data."

FEMA Effective Floodplains – This data is comprised of the FEMA effective 100–Year floodplain maps and effective FEMA Q3 flood data. These maps illustrate regulatory floodplains that are administrated by FEMA for flood insurance purposes.

Other Available Floodplain Data – This data consists of the 100–Year floodplains from the 2002 SAC-SJ River Basins Comprehensive Study, FEMA Preliminary DFIRM, DWR Awareness Mapping, 2005 DWR/USACE Lower Feather River Study, and engineering analyses from DWR's Urban Levees Evaluation Program.

200–Year Composite Floodplains – These floodplains represent the flood hazard associated with the 200-Year event. In every case, the 200-Year Composite Floodplains incorporate the areas of the 100-Year Composite Floodplains.

Available Floodplain Data – The "200-Year Composite Floodplains" are defined using the 200-Year floodplains developed during the 2002 SAC-SJ River Basins Comprehensive Study.

Preliminary 100- and 200-Year Floodplains Based Upon Best Available Data

The best available floodplain maps for the SAC-SJ Valley were developed utilizing the best available floodplain data per the SB 5 requirements. There are 32 counties within the SAC-SJ Valley and tributary areas. Floodplain maps were developed for each county illustrating 100-Year Composite and 200-Year Composite Floodplains. The 100- and 200-Year floodplains were overlaid on USGS 100K quadrangle maps obtained from the California Spatial Information Library. The USGS 100K quadrangle maps were created on the National Geodetic Vertical Datum of 1929. The 100- and 200-Year floodplains were created from various geographic coordinates. However, some floodplains were re-aligned to match the USGS 100K quadrangle maps. The sources of best available floodplain data corresponding to each county is identified in the Sacramento-San Joaquin Valley Floodplain Matrix Table.

Sacramento-San Joaquin Valley Floodplain Matrix Table

County	200-Year Floodplains USACE Sacramento-San Joaquin River Basins Comprehensive Study	100-Year Floodplains USACE Sacramento-San Joaquin River Basins Comprehensive Study	100-Year Floodplains FEMA Effective DFIRM	100-Year Floodplains FEMA Preliminary DFIRM	100-Year Floodplains FEMA Q3	100-Year Floodplains DWR Awareness Mapping	100-Year Floodplains DWR/USACE Lower Feather River
Alpine						X	
Amador					X	X	
Butte	X	X	X		X	X	
Calaveras					X	X	
Colusa	X	X	X		X		
Contra Costa	X	X		X	X		
El Dorado					X		
Fresno	X	X		X	X	X	
Glenn	X	X			X		
Lake			X				
Lassen					X	X	
Madera	X	X	X	X	X	X	
Mariposa					X	X	
Merced	X	X	X			X	
Modoc					X	X	
Napa					X	X	
Nevada					X	X	
Placer	X	X			X	X	X
Plumas			X			X	
Sacramento	X	X		X	X	X	X
San Benito					X	X	
San Joaquin	X	X		X	X	X	
Shasta		X	X		X	X	
Sierra					X	X	
Siskiyou					X	X	
Solano	X	X		X	X	X	
Stanislaus	X	X		X	X	X	
Sutter	X	X		X	X		X
Tehama	X	X			X	X	
Tuolumne				X	X	X	
Yolo	X	X	X		X	X	X
Yuba	X	X		X	X	X	X