

8.0 Glossary

100-year flood event A flood having a 1-percent chance of being equaled or exceeded in any given year. A structure located within a special flood hazard area shown on a National Flood Insurance Program map has a 26-percent chance of suffering flood damage during the term of a 30-year mortgage.

(Federal Emergency Management Agency, <http://www.fema.gov/>, accessed June 2009)

200-year floodplain An area that has a 1-in-200 (0.5 percent) chance of flooding in any given year, based on hydrological modeling and other engineering criteria accepted by the California Department of Water Resources.

California Government Code Section 65300.2(a)

200-year flood event A flood event with a 1-in-200 (0.5 percent) chance of occurring in any given year.

500-year floodplain An area that has a 1-in-500 (0.2 percent) chance of flooding in any given year.

anadromous Refers to fish that, while born in fresh water, live in the ocean mostly and breed in fresh water.

assurances The assurances (satisfactory to the Secretary of War) are that the State will provide, without cost to the United States, all lands, easements, and rights-of-way necessary for the completion of the project; bear the expense of necessary highway, railroad, and bridge alterations; hold and save the United States free from claims for damages resulting from construction of the works; and maintain and operate all works after completion.

basin That portion of the combined watersheds of the Sacramento and San Joaquin rivers lying below the lowermost flood control dam on each tributary.

Bay Area San Francisco Bay Area.

Bay-Delta San Francisco Bay/Sacramento San Joaquin River Delta.

benthic	Living on the bottom of a water body.
Board	Central Valley Flood Protection Board (formerly known as The Reclamation Board). See below.
bypass	An engineered wide and shallow channel or confined floodplain, usually flanked by levees, that receives flood waters to reduce the amount of flow in a river or stream.

Central Valley Flood Management Planning Program (CVFMP) The CVFMP is one program within FloodSAFE California, a multi-year initiative led and managed by the California Department of Water Resources. Primary products of the CVFMP Program are the State Plan of Flood Control Descriptive Document, the Flood Control System Status Report, and the Central Valley Flood Protection Plan.

Central Valley Flood Protection Board (Board) The Board (formerly The Reclamation Board) was created by the California Legislature in 1911 to carry out a comprehensive flood control plan for the Sacramento and San Joaquin rivers. The Board has jurisdiction throughout the Sacramento and San Joaquin river basins, which is synonymous with the drainage basins of the Central Valley and includes the Sacramento-San Joaquin Drainage District.

Central Valley Flood Protection Plan (CVFPP) The CVFPP is a State plan that will describe the challenges, opportunities, and a vision for improving integrated flood management in the Central Valley. The CVFPP will document the current and future risks associated with flooding and recommend improvements to the State-federal flood protection system to reduce the occurrence of major flooding and the consequence of flood damage that could result. The plan will be submitted to the Central Valley Flood Protection Board (Board) by January 1, 2012, for adoption by the following July, and will be updated every 5 years.

Comprehensive Study Sacramento and San Joaquin River Basin, California, Comprehensive Study.

Conservancy The Nature Conservancy.

conveyance capacity The maximum rate of flowing water, usually expressed in cubic feet per second (cfs), that a river, canal, or bypass can receive without exceeding a threshold value such as flood stage, or the freeboard distance from the top of a levee.

CVFPP Work Group Place-based (e.g., regional) and subject-based (e.g., topic) work groups chartered to develop content and content recommendations for the CVFPP. Work groups assist the development team in developing plan content and producing milestone documents. Work groups are a critical element for developing a CVFPP that includes and accurately reflects the State, federal, tribal, local, and regional perspectives, and subject-matter expertise necessary to achieve broad public support.

Delta Sacramento-San Joaquin Delta.

design discharge (flow) The rate of flowing water, usually measured in cubic feet per second (cfs) associated with the water surface profile or water level for which a flood management project was designed.

design standard Minimum acceptable design requirements for construction of flood management facilities (levees, control structures, etc.). Design standards can change over time as updated information becomes available and methods are refined. In some cases, design standards today are different from when much of the SPFC was constructed.

designated floodways Designated floodways are defined as follows: (1) the channel of the stream and that portion of the adjoining floodplain reasonably required to provide for the passage of a design flood, as indicated by floodway encroachment lines on an adopted map, or (2) the floodway between existing levees as adopted by the Board or the Legislature (23 California Code of Regulations (CCR) Section 4i).

developed area An area of a community that is:

- A. A primarily urbanized, built-up area that is a minimum of 20 contiguous acres, has basic urban infrastructure, including roads, utilities, communications, and public facilities, to sustain industrial, residential, and commercial activities, and:

1. Within which 75 percent or more of the parcels, tracts, or lots contain commercial, industrial, or residential structures or uses; or
2. Is a single parcel, tract, or lot in which 75 percent of the area contains existing commercial or industrial structures or uses; or
3. Is a subdivision developed at a density of at least two residential structures per acre within which 75 percent or more of the lots contain existing residential structures at the time the designation is adopted.
 - i. Undeveloped parcels, tracts, or lots, the combination of which is less than 20 acres and contiguous on at least three sides to areas meeting the criteria of paragraph (a) at the time the designation is adopted.
 - ii. A subdivision that is a minimum of 20 contiguous acres that has obtained all necessary government approvals, provided that the actual “start of construction” of structures has occurred on at least 10 percent of the lots or remaining lots of a subdivision or 10 percent of the maximum building coverage or remaining building coverage allowed for a single lot subdivision at the time the designation is adopted and construction of structures is underway. Residential subdivisions must meet the density criteria in paragraph (a)(3). (Section 59.1 of Title 44 of the Code of Federal Regulations).

California Government Code Section 65007 (c)

ecosystem

An ecosystem is a natural unit consisting of all the plants, animals, and microorganisms (biological components) in an area functioning together with all of the physical processes of the environment. The biotic and physical components in an ecosystem are interdependent, frequently with complex feedback loops. The physical components that sustain the

biota of an ecosystem include but may not be limited to the soil or substrate, topographic relief and aspect, the atmosphere, weather and climate, hydrology, geomorphic processes, the nutrient regime, and the salinity regime.

ecosystem restoration A practice where an ecosystem, that has been degraded or disturbed by a specific human action, is restored to mimic, as closely as possible, conditions that would occur in an area in the absence of human changes to the landscape and hydrology.

ecosystem services Ecosystem services emanate from a functioning ecosystem and are the beneficial outcomes for the natural environment or for people that result from ecosystem functions. Some examples of ecosystem services are support of the food chain, harvesting of animals or plants, clean water, or scenic views. For an ecosystem to provide services to humans, some interaction with, or at least some appreciation by, humans is required.

DFG, California Wildlife Action Plan, 2004

encroachment The installation of any tower, pole, pipe, fence, building, structure, object, or improvement of any kind or character that is placed in, on, under, or over any portion of the State Water Resources Development System or other use of the department's right-of-way, including the alteration of the ground surface elevation by more than 1 foot, or the planting of trees, vines, or other vegetation on the department's right-of-way that may pose a threat to the physical integrity of any facility of the State Water Resources Development System or that could interfere with the department's rights with regard to access, inspection, repair, or the operation and maintenance of any State Water Resources Development System facility.

California Water Code Section 12899(b)

environmental stewardship A commitment to responsibly manage and protect natural resources (water, air, land, plants and animals) and ecosystems in a functional and sustainable manner that ensures they are available for future generations.

*California Department of Water Resources Policy Paper:
Environmental Stewardship DRAFT 2000-03-25*

euryhaline	Able to tolerate a wide range of salinity.
feasible	Capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.

California Water Code Section 8307

FloodSAFE California DWR's multifaceted initiative launched in 2006 to improve public safety through integrated flood management and reduce potential flood damages in the state's highest risk areas. Although led at the State level and initially funded by Propositions 1E and 84 bond money, FloodSAFE implementation relies on the cooperation and assistance of federal partners, tribal entities, local sponsors, and other stakeholders. The FloodSAFE vision is a sustainable integrated flood management and emergency response system throughout California that improves public safety, protects and enhances environmental and cultural resources, and supports economic growth by reducing the probability of destructive floods, promoting beneficial floodplain processes, and lowering the damages caused by flooding.

DWR, Draft FloodSAFE Strategic Plan, June 2008

flood basin	A bowl-shaped, natural landform that historically or presently receives and retains floodwaters, or an engineered floodwater detention basin, excavated below grade or surrounded by levees.
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Flood Control System Status Report A report that will provide an assessment of the status of the facilities included in the State Plan of Flood Control (SPFC) Descriptive Document, identify deficiencies, and make recommendations for improvement. This report will be revised, as needed.

flood corridor	A passageway for flood flows including but not limited to bypass systems, channels, levee systems, floodplain easements, culverts, floodwalls, or a combination thereof.
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flood damages	All damages caused by a flood including physical damage, loss of life, and economic damage.
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DWR, Draft FloodSAFE Strategic Plan, June 2008

flood hazard zone An area subject to flooding that is delineated as either a special hazard area or an area of moderate hazard on an official flood insurance rate map issued by the Federal Emergency Management Agency. The identification of flood hazard zones does not imply that areas outside the flood hazard zones, or uses permitted within flood hazard zones, will be free from flooding or flood damage.

California Government Code Section 65007(d)

flood management The use of comprehensive methods to manage flood flows, providing multiple benefits in addition to protecting people and property.

DWR, Draft FloodSAFE Strategic Plan, June 2008

flood management system Refers to the structural elements to employed to convey flood flows within the CVFPP Planning Area, including facilities of the State Plan of Flood Control, flood control reservoirs, and non-project levees.

floodplain An area adjacent to a stream or river that experiences occasional or periodic flooding.

DWR, Draft FloodSAFE Strategic Plan, June 2008

floodplain management A decision-making process whose goal is to achieve appropriate use of the nation's floodplains. Appropriate use is any activity or set of activities that is compatible with the risk to natural and human resources. The operation of an overall program of corrective and preventive measures for reducing flood damage, including but not limited to, watershed management, emergency preparedness plans, flood control works, and floodplain management regulations.

A Blueprint for Change, Sharing the Challenge: Floodplain Management Into the 21st Century, Report of the Interagency Floodplain Management Review Committee to the Administration Floodplain Management Task Force, Washington, D.C., June 1994

flood-prone areas Areas are subject to flooding.

flood protection Methods or structural measures used to mitigate flooding or reduce flooding hazards and risks.

Delta Protection Commission, Management Plan Update Compiled Draft Management Plan Glossary November 2009

- flood risk** The probability of flooding combined with negative outcomes that could result when flooding occurs.
- floodway, state-designated** The channel of a stream and that portion of the adjoining floodplain required to reasonably provide for the construction of a project for passage of the design flood including the lands necessary for construction of project levee that are regulated by the Central Valley Flood Protection Board.
- geomorphology** Geomorphology is the study of the characteristics, origins, and development of landforms.
- Historic American Period** 1848 to present.
- Historic Mexican Period** 1822 to 1848.
- Historic Spanish Period** 1769 to 1822.
- Hyatt-Thermalito** Combined 900-megawatt Hyatt Pumping-Generating Plant and Thermalito Pumping-Generating Plant.
- hydraulics** The branch of physics having to do with the mechanical properties of water and other liquids in motion and with the application of these properties in engineering.
- hydrology** The science dealing with the waters of the earth, their distribution on the surface and underground, and the cycle involving evaporation, precipitation, flow to the seas, etc.
- integrated flood management** An approach to dealing with flood risk that recognizes the interconnection of flood management actions within broader water resources management and land use planning; the value of coordinating across geographic and agency boundaries; the need to evaluate opportunities and potential impacts from a system perspective; and the importance of environmental stewardship and sustainability.
- DWR, Draft FloodSAFE Strategic Plan, June 2008*
- legacy community** A rural community that is registered as a Historic District by either a State or federal entity.

Levee Flood Protection Zone An area that is protected, as determined by the Central Valley Flood Protection Board or the California Department of Water Resources, by a levee that is part of the facilities of the State Plan of Flood Control, as defined under Section 5096.805 of the Public Resources Code.

California Government Code Section 65300.2(b)

local jurisdiction Means a city, city and county, or county.

management actions Management actions include all structural and non-structural activities or projects that could be taken to improve flood management within the designated planning area.

natural floodplain processes Processes in a floodplain existing in or produced by nature (rather than by the intent of human beings) e.g., periodic flooding and accompanying deposition of sediment in a floodplain.

natural processes Processes existing in or produced by nature (rather than by the intent of human beings) e.g., dynamic hydrologic, geomorphic, and biological processes.

non-project levee Any levee that is not part of the State-federal flood protection system (CWC 9602(c)). Non-project levees are typically privately owned or under the authority of a local levee district.

non-urbanized area A developed area or an area outside a developed area in which there are fewer than 10,000 residents.

California Government Code Section 65007(e)

operations and maintenance Refers to the effort that must be expended to keep project facilities in good working condition so they continue to operate as designed – wear and tear on facilities that are not adequately maintained can reduce their capacity or make them more vulnerable to failure.

California Water Code Section 9602(c)

partner Individuals, organizations, and/or agencies with direct responsibilities for activities and actions anticipated by the CVFPP.

pelagic Living in open seas or the ocean.

project levee	Any levee that is part of the State-federal flood protection system.
Proposition 1E	Disaster Preparedness and Flood Prevention Bond Act.
Proposition 84	Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act.
proto-historic	Proto-historic is defined as the study of a culture just before the time of its earliest recorded history.
public safety	Involves the prevention of and protection from events that could endanger the safety of the general public from significant danger, injury/harm, or damage, such as natural and man-made disasters.
public safety infrastructure	Infrastructure necessary to respond to a flood emergency, including, but not limited to, street and highway evacuation routes, public utilities necessary for public health and safety, including drinking water and wastewater treatment facilities, and hospitals.
	<i>California Water Code Section 9602</i>
Q3	Q3 Flood Data is a digital representation of certain features of FEMA's Flood Insurance Rate Maps, intended for use with desktop mapping and Geographic Information Systems technology.
Reclamation	U.S Department of the Interior, Bureau of Reclamation.
rehabilitation	To restore a facility or system (either natural or man-made) to its former good condition.
repair	Activities necessary to maintain the functionality of flood management systems that have deteriorated over time and/or do not meet current design standards (DWR, Levee Repair Web Site).
restore/restoration	The implementation of an action(s) to reestablish or put back something that once existed, but is no longer there, to its original condition.
riparian area	Areas that are transitional between terrestrial and aquatic ecosystems and are distinguished by

gradients in biophysical conditions, ecological processes, and biota. They are areas through which surface and subsurface hydrology connect water bodies with their adjacent uplands. They include those portions of terrestrial ecosystems that significantly influence exchanges of energy and matter with aquatic ecosystems (i.e., a zone of influence). Riparian areas are adjacent to perennial, intermittent, and ephemeral streams, lakes, and estuarine-marine shorelines.

riprap Large boulders.

rural community A city, town, or settlement outside of urban and urbanizing areas with an expected population less than 10,000 within the next 10 years.

Sacramento-San Joaquin River Flood Management System The Sacramento-San Joaquin River Flood Management System comprises all of the following: (a) The facilities of the State Plan of Flood Control as that plan may be amended by the Central Valley Flood Protection Board; (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 and San Joaquin river basins, and (2) includes project levees that protect a contiguous urban area of 10,000 or more residents within the Sacramento and San Joaquin river basins.

California Water Code Sections 9602 and 9611

Sacramento and San Joaquin river basins Lands in the bed or along or near the banks of the Sacramento River or San Joaquin River, or their tributaries or connected therewith, or upon any land adjacent thereto, or within the overflow basins thereof, or upon land susceptible to overflow there from. The Sacramento and San Joaquin river basins do not include lands lying within the Tulare Lake Basin, including the Kings River.

California Government Code Section 65007(g)

Section 215 water Section 215 water refers to temporary water supply made available via Section 215 of the Reclamation Reform Act of October 12, 1982 (Public Law 97-293, Title II), as amended (43 United States Code Section 39000).

Settlement San Joaquin River Stipulation of Settlement.

Special Flood Hazard Area (SFHA) Flood hazard area identified on the Flood Insurance Rate Map (FIRM) defined as the area that will be inundated by the flood event having a 1-percent chance of being equaled or exceeded in any given year. The 1-percent annual chance flood is also referred to as the base flood or 100-year flood. SFHAs are labeled as Zone A, Zone AO, Zone AH, Zones A1-A30, Zone AE, Zone A99, Zone AR, Zone AR/AE, Zone AR/AO, Zone AR/A1-A30, Zone AR/A, Zone V, Zone VE, and Zones V1-V30.

*Federal Emergency Management Agency,
<http://www.fema.gov/>, accessed June 2009*

Stafford Act Stafford Disaster Relief and Emergency Assistance Act (Public Law 93-288, as amended).

State State of California.

State Plan of Flood Control The State and federal flood control works, lands, programs, plans, policies, conditions, and mode of maintenance and operations of the Sacramento River Flood Control Project, in specific flood control projects in the Sacramento and San Joaquin river basins, and in other areas that the state has provided assurances to the federal government to operate and maintain flood project facilities. These facilities include approximately 1,600 miles of levees in the Central Valley. The SPFC Descriptive Document will inventory and describe this system and its operation.

*CVFMP Program Fact Sheet and California
Public Resources Code Section 5096.805*

stationarity Stationarity is an assumption that the mean and variance of historical data do not change over time.

Stockton Channel San Francisco Bay to Stockton Deep Water Ship Channel.

structural improvements Are projects intended to modify flood patterns and rely primarily on constructed components and include such measures as levees, floodwalls, and improved channels.

California Water Code Section 79068(b)

sustainability A project is “sustainable” when it is socially, environmentally, and financially feasible for an enduring period.

System Refers to the Sacramento-San Joaquin River Flood Management System, as described in Section 9611 of the California Water Code.

systemwide Refers to a grouping of facilities that encompass an entire system, e.g., the flood management system within Sacramento-San Joaquin River Flood management System (CVFPP planning area).

urban area²³ A developed area in which there are 10,000 residents or more.

California Government Code Section 65007 (i)

urban level of flood protection Level of protection necessary to withstand flooding that has a 1-in-200 chance of occurring in any given year using criteria consistent with, or developed by, the California Department of Water Resources.

*California Government Code Section 65007(k)
and California Water Code Section 9602(i)*

urbanizing area A developed area or an area outside a developed area that is planned or anticipated to have 10,000 residents or more within the next 10 years.

California Government Code Section 65007 (j)

²³ “Urban area” is also defined in the California Public Resources Code Section 5096.805 (k) as “any contiguous area in which more than 10,000 residents are protected by project levees.”

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Poncelet, Eric – Kearns & West
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