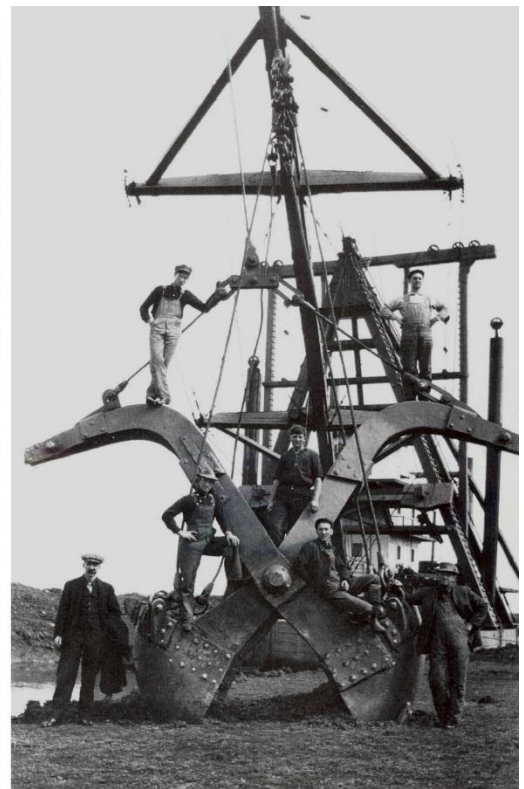


# Glossary



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# Glossary

The first section of this glossary provides definitions that appear in 23 California Code of Regulations section 5001. The second section provides definitions and explanations of key terms, acronyms, and abbreviations used in the Delta Plan.

## Definitions in 23 California Code of Regulations Section 5001

As used in this division, the terms listed below shall have the meanings noted:

- (a) *“Adaptive management” means a framework and flexible decision-making process for ongoing knowledge acquisition, monitoring, and evaluation leading to continuous improvement in management planning and implementation of a project to achieve specified objectives.*
- (b) *“Agricultural water management plan” means a plan prepared, adopted, and updated by an agricultural water supplier pursuant to the Agricultural Water Management Planning Act, Water Code section 10800 et seq.*
- (c) *“Agricultural water supplier” under the Water Code refers to both agricultural retail water suppliers and agricultural wholesale water suppliers, but not the California Department of Water Resources or the United States Bureau of Reclamation, and includes both of the following:*
  - (1) *A water supplier, either publicly or privately owned, providing water to 10,000 or more irrigated acres, excluding recycled water; and*
  - (2) *A water supplier or contractor for water, regardless of the basis of the water right, that distributes or sells water for ultimate resale to customers.*
- (d) *“Base Flood” means the flood that has a 1-percent probability of being equaled or exceeded in any given year (also referred to as the 100-year flood).*
- (e) *“Base Flood Elevation” (BFE) means the water surface elevation associated with the base flood.*
- (f) *“Best available science” means the best scientific information and data for informing management and policy decisions. Best available science shall be consistent with the guidelines and criteria found in Appendix 1A.*
- (g) *“Central Valley Flood Protection Board” or “Board” means the Central Valley Flood Protection Board (formerly The Reclamation Board) of the Resources Agency of the State of California as provided in Water Code section 8521.*
- (h) *“Coequal goals” means the two goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem. The coequal goals shall be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place. In addition, “achievement” for the purpose of determining whether a plan, program, or project meets the definition of a “covered action” under section 5001(j) is further defined as follows:*
  - (1) *“Achieving the coequal goal of providing a more reliable water supply for California” means all of the following:*
    - (A) *Better matching the state’s demands for reasonable and beneficial uses of water to the available water supply. This will be done by promoting, improving, investing in, and implementing projects and programs that improve the resiliency of the state’s water systems, increase water efficiency and conservation, increase water recycling and use of advanced water technologies, improve groundwater management, expand storage, and improve Delta conveyance and operations. The evaluation of progress toward improving reliability will take into account the inherent variability in water demands and supplies across California;*

- (B) *Regions that use water from the Delta watershed will reduce their reliance on this water for reasonable and beneficial uses, and improve regional self-reliance, consistent with existing water rights and the State's area-of-origin statutes and Reasonable Use and Public Trust Doctrines. This will be done by improving, investing in, and implementing local and regional projects and programs that increase water conservation and efficiency, increase water recycling and use of advanced water technologies, expand storage, improve groundwater management, and enhance regional coordination of local and regional water supply development efforts; and*
- (C) *Water exported from the Delta will more closely match water supplies available to be exported, based on water year type and consistent with the coequal goal of protecting, restoring, and enhancing the Delta ecosystem. This will be done by improving conveyance in the Delta and expanding groundwater and surface storage both north and south of the Delta to optimize diversions in wet years when more water is available and conflicts with the ecosystem are less likely, and limit diversions in dry years when conflicts with the ecosystem are more likely. Delta water that is stored in wet years will be available for water users during dry years, when the limited amount of available water must remain in the Delta, making water deliveries more predictable and reliable. In addition, these improvements will decrease the vulnerability of Delta water supplies to disruption by natural disasters, such as, earthquakes, floods, and levee failures.*
- (2) *"Achieving the coequal goal of protecting, restoring, and enhancing the Delta ecosystem" means successfully establishing a resilient, functioning estuary and surrounding terrestrial landscape capable of supporting viable populations of native resident and migratory species with diverse and biologically appropriate habitats, functional corridors, and ecosystem processes.*
- (3) *"Achieving the coequal goals in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place" means accepting that change, including change associated with achieving the coequal goals, will not cease, but that the fundamental characteristics and values that contribute to the Delta's special qualities and that distinguish it from other places can be preserved and enhanced while accommodating these changes. In this regard, the following are core strategies for protecting and enhancing the unique values that distinguish the Delta and make it a special region:*
- (A) *Designate the Delta as a special place worthy of national and state attention;*
- (B) *Plan to protect the Delta's lands and communities;*
- (C) *Maintain Delta agriculture as a primary land use, a food source, a key economic sector, and a way of life;*
- (D) *Encourage recreation and tourism that allow visitors to enjoy and appreciate the Delta and that contribute to its economy;*
- (E) *Sustain a vital Delta economy that includes a mix of agriculture, tourism, recreation, related industries and business, and vital components of state and regional infrastructure; and*
- (F) *Reduce flood and other risks to people, property, and other interests in the Delta.*
- (i) *"Commercial recreational visitor-serving uses" means a land use designation that describes visitor-serving uses, accommodations, restaurants, and shops, that respect the rural character and natural environmental setting. These uses also include campgrounds and commercial recreational facilities.*
- (j)(1) *"Covered action" means a plan, program, or project that meets all of the following criteria (which are collectively referred to as covered action screening criteria):*
- (A) *Is a "project," as defined pursuant to section 21065 of the Public Resources Code;*
- (B) *Will occur, in whole or in part, within the boundaries of the Delta or Suisun Marsh;*
- (C) *Will be carried out, approved, or funded by the State or a local public agency;*
- (D) *Will have a significant impact on achievement of one or both of the coequal goals or the implementation of government-sponsored flood control programs to reduce risks to people, property, and State interests in the Delta; and*
- (E) *Is covered by one or more provisions of the Delta Plan, which for these purposes, means one or more of the regulatory policies contained in Article 3.*

- (2) *“Covered action” does not include any plan, program, or project that is exempted pursuant to Water Code section 85057.5(b).*
- (3) *A State or local public agency that proposes to carry out, approve, or fund a plan, program, or project that may be subject to this Chapter must determine whether that proposed plan, program, or project is a covered action. That determination, which is subject to judicial review, must be reasonable, made in good faith, and consistent with the Delta Reform Act and this Chapter.*
- (4) *Nothing in the application of the definition of a “covered action” shall be interpreted to authorize the abrogation of any vested right whether created by statute or by common law.*
- (k) *“Delta” means the Sacramento-San Joaquin Delta as defined in section 12220 of the Water Code and the Suisun Marsh, as defined in section 29101 of the Public Resources Code.*
- (l) *“Delta Plan” means the comprehensive, long-term management plan for the Delta to further the achievement of the coequal goals, as adopted by the Delta Stewardship Council in accordance with the Sacramento-San Joaquin Delta Reform Act of 2009.*
- (m) *“Designated Floodway” means those floodways, as defined in California Code of Regulations, Title 23, section 4(i), under the jurisdiction of the Central Valley Flood Protection Board.*
- (n) *“Encroachment” means any obstruction or physical intrusion by construction of works or devices, planting or removal of vegetation, or by any means for any purpose, into or otherwise affecting a floodway or floodplain.*
- (o) *“Enhancement” or “enhancing,” for purposes of section 5001(h)(2), means improving existing desirable habitat and natural processes. Enhancement may include, by way of example, flooding the Yolo Bypass more often to support native species or to expand or better connect existing habitat areas. Enhancement includes many fish and wildlife management practices, such as managing wetlands for waterfowl production or shorebird habitat, installing fish screens to reduce entrainment of fish at water diversions, or removing barriers that block migration of fish to upstream spawning habitats.*
- (p) *“Feasible” means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.*
- (q) *“Floodplain” means any land area susceptible to being inundated by flood waters from any source.*
- (r) *“Floodplain values and functions” has the same meaning as set forth in 33 Code of Federal Regulations section 320.4(l)(1).*
- (s) *“Floodproofing” means any combination of structural and nonstructural additions, changes, or adjustments appropriate for residential structures, which reduce or eliminate risk of flood damage to real estate, improved real property, or structures with their contents.*
- (t) *“Floodway” means the portion of the floodplain that is effective in carrying flow (that is, the channel of a river or other watercourse and the adjacent land areas that convey flood waters).*
- (u) *“Government-sponsored flood control program to reduce risks to people, property, and State interests in the Delta” means any State or federal strategy, project, approval, funding, or other effort that is intended to reduce the likelihood and/or consequences of flooding of real property and/or improvements, including risks to people, property, and State interests in the Delta, that is carried out pursuant to applicable law, including, but not limited to the following:*
- (1) *State Water Resources Law of 1945, Water Code section 12570 et seq.;*
  - (2) *Sacramento-San Joaquin River Flood Control Projects (Flood Control Act of 1941, P.L. 77-228);*
  - (3) *Local Plans of Flood Protection prepared pursuant to the Local Flood Protection Planning Act (Water Code section 8200 et seq.), that are consistent with the Central Valley Flood Protection Plan pursuant to Water Code section 9612;*
  - (4) *Central Valley Flood Protection Plan (Water Code section 9600 et seq.);*
  - (5) *Subventions Program, Special Projects Program (Water Code section 12300 et seq.);*
  - (6) *Way Bill 1973-Subventions Program, Special Projects Program (Water Code section 12980 et seq.);*
  - (7) *Central Valley Flood Protection Board Authority (California Code of Regulations, Title 23, Division 1); and*

- (8) *National Flood Insurance Program (National Flood Insurance Act of 1968, 42 U.S.C. 4001 et seq., P.L. 90-448).*
- (v) *“Nonnative invasive species,” for purposes of section 5009, means species that establish and reproduce rapidly outside of their native range and may threaten the diversity or abundance of native species through competition for resources, predation, parasitism, hybridization with native populations, introduction of pathogens, or physical or chemical alteration of the invaded habitat.*
- (w) *“Nonproject levee” means a local levee owned or maintained by a local agency or private owner that is not a project facility under the State Water Resources Law of 1945, Chapter 1 (commencing with Water Code section 12570) and Chapter 2 (commencing with section 12639 of Part 6 of the Water Code).*
- (x) *“Project levee” means a federal flood control levee that is a project facility under the State Water Resources Law of 1945, Chapter 1 (commencing with Water Code section 12570) and Chapter 2 (commencing with section 12639 of Part 6 of the Water Code).*
- (y) *“Proposed action” means a plan, program, or project that meets the covered action screening criteria listed in section 5001(j)(1)(A) through (D). Proposed action is also a “covered action,” and therefore subject to compliance with the regulatory policies contained in Articles 2 and 3—if the proposed action meets the covered action screening criterion listed in section 5001(j)(1)(E).*
- (z) *“Protection” or “protecting,” for purposes of section 5001(h)(2), means preventing harm to the ecosystem, which could include preventing the conversion of existing habitat, the degradation of water quality, irretrievable conversion of lands suitable for restoration, or the spread of invasive nonnative species.*
- (aa) *“Regulated stream” means those streams identified in Table 8.1 of California Code of Regulations, Title 23, section 112, under the jurisdiction of the Board.*
- (bb) *“Restoration” or “restoring,” for purposes of section 5001(h)(2), has the same meaning as in Water Code section 85066. Restoration actions may include restoring interconnected habitats within the Delta and its watershed, restoring more natural Delta flows, or improving ecosystem water quality.*
- (cc) *“Setback levee” means a new levee constructed behind an existing levee which allows for removal of a portion of the existing levee and creation of additional floodplain connected to the stream. In the Delta, a “setback levee” may not necessarily result in removal of the existing levee.*
- (dd) *“Significant impact” for the purpose of determining whether a project meets the definition of a “covered action” under section 5001(j)(1)(D) means a substantial positive or negative impact on the achievement of one or both of the coequal goals or the implementation of a government-sponsored flood control program to reduce risks to people, property, and State interests in the Delta, that is directly or indirectly caused by a project on its own or when the project’s incremental effect is considered together with the impacts of other closely related past, present, or reasonably foreseeable future projects. The following categories of projects will not have a significant impact for this purpose:*
- (1) *“Ministerial” projects exempted from CEQA, pursuant to Public Resources Code section 21080(b)(1);*
  - (2) *“Emergency” projects exempted from CEQA, pursuant to Public Resources Code section 21080(b)(2) through (4);*
  - (3) *Temporary water transfers of up to one year in duration. This provision shall remain in effect only through December 31, 2016, and as of January 1, 2017, is repealed, unless the Council acts to extend the provision prior to that date. The Council contemplates that any extension would be based upon the California Department of Water Resources’ and the State Water Resources Control Board’s participation with stakeholders to recommend measures to reduce procedural and administrative impediments to water transfers and protect water rights and environmental resources by December 31, 2016. These recommendations should include measures to address potential issues with recurring transfers of up to 1 year in duration and improved public notification for proposed water transfers;*
  - (4) *Other projects exempted from CEQA, unless there are unusual circumstances indicating a reasonable possibility that the project will have a significant impact under Water Code section 85057.5(a)(4), as further defined by this section. Examples of unusual circumstances could arise in connection with, among other things:*
    - (A) *Local government general plan amendments for the purpose of achieving consistency with the Delta Protection Commission’s Land Use and Resource Management Plan; and,*

- (B) *Small-scale habitat restoration projects, as referred to in CEQA Guidelines, section 15333 of Title 14 of the California Code of Regulations, proposed in important restoration areas, but which are inconsistent with the Delta Plan's policy related to appropriate habitat restoration for a given land elevation (section 5006 of this Chapter).*
- (ee) *"Urban area" means a developed area in which there are 10,000 residents or more.*
- (ff) *"Urbanizing area" means a developed area or an area outside of a developed area that is planned or anticipated to have 10,000 residents or more within the next 10 years.*
- (gg) *"Urban water management plan" means a plan prepared, adopted, and updated by an urban water supplier pursuant to the Urban Water Management Planning Act, Water Code section 10610 et seq.*
- (hh) *"Urban water supplier" refers to both "urban retail water suppliers" and "urban wholesale water suppliers":*
- (1) *"Urban retail water supplier" means a water supplier, either publicly or privately owned, that directly provides potable municipal water to more than 3,000 end users or that supplies more than 3,000 acre-feet of potable water annually at retail for municipal purposes.*
  - (2) *"Urban wholesale water supplier" means a water supplier, either publicly or privately owned, that provides more than 3,000 acre-feet of potable water annually at wholesale for municipal purposes.*
- (ii) *"Water supplier" refers to both "urban water suppliers" and "agricultural water suppliers," but for purposes of section 5003, does not include agricultural water suppliers during the time that they may be exempted by section 10853 of the Water Code from the requirements of Parts 2.55 and 2.8 of Division 6 of the Water Code.*

23 CCR Section 5001

**NOTE:** Authority cited: Section 85210(i), Water Code.

**Reference:** Sections 85057.5, 85059, 85058, 85066, 85020, 85054, 85052, 85302(g), 85308, 85300, 10608.12, and 10853, Water Code.

## Key Terms, Acronyms, and Abbreviations Used in the Delta Plan

Term	Definition
100-year flood	A flood event having a 1-in-100 chance of being equaled or exceeded in any given year.
200-year flood	A flood event having a 1-in-200 chance of being equaled or exceeded in any given year.
AB	Assembly Bill
acre-foot	The volume of water that would cover 1 acre of land to a depth of 1 foot; equal to 43,560 cubic feet or 325,851 gallons.
accommodation space	The space in the Delta that lies below sea level and is filled with neither sediment nor water.
Act	See Sacramento-San Joaquin Delta Reform Act of 2009
ACWA	Association of California Water Agencies
administrative procedure	Procedures adopted by the Delta Stewardship Council (Council), in accordance with Water Code section 85225.30, that govern how the Council considers appeals with respect to the following:  (1) Adequacy of certifications of consistency with the Delta Plan submitted to the Council by a State or local agency pursuant to Water Code section 85225.10, and  (2) Determinations by the California Department of Fish and Wildlife that the Bay Delta Conservation Plan has met the requirements of Water Code section 85320 for inclusion in the Delta Plan.
advanced treatment	Any treatment of sewage that goes beyond the secondary or biological water treatment stage and includes the removal of nutrients, including phosphorus, nitrogen, and a high percentage of suspended solids.
Aeration Facility	Demonstration Dissolved Oxygen Aeration Facility
agricultural water use	Water used for farming, horticulture, or ranching including irrigation, stock watering, or support of vegetation for range grazing.  This includes water used for irrigation and nonirrigation purposes. Irrigation water use includes the artificial application of water on land to promote the growth of crops and pasture, or to maintain vegetative growth in recreational lands, parks, and golf courses. Nonirrigation water use includes water used for livestock, which includes water for stock watering, feedlots, and dairy operations, and fish farming and other farm requirements.
agricultural water use efficiency	Defined by California Department of Water Resources as the ratio of applied water to the amount of water required to sustain agricultural productivity. Efficiency is increased through the application of less water to achieve the same beneficial productivity or by achieving more productivity while applying the same amount of water.
AGWA	Association of Groundwater Agencies
anadromous fish	Fish that are born in fresh water, migrate to the ocean to mature, and then return to fresh water to spawn.



Term	Definition
anticipated future stressors	Stressors that require preparation and planning for mitigation in advance of their onset (for example, future land subsidence, urban expansion, and new invasions by nonnative species).
artesian water	A groundwater aquifer under positive pressure. In some cases, the hydrostatic equilibrium elevation of the groundwater is higher than the elevation of the surrounding ground surface. When an artesian aquifer is penetrated by a well, the water level will rise above the top of the aquifer, and even flow out of the ground.
AWWA	American Water Works Association
BAFF	bio-acoustic fish fence
base camp	A park, resort, or town that provides services (for example, park rangers, interpretation, and boat rentals) and facilities (for example, parking, restrooms, picnic sites, boat ramps, and campgrounds). The mix of facilities is determined by adjacent recreation opportunities and nearby public and private facilities.
basin plan	A water quality control plan for a specific basin or region in California. It includes a comprehensive program of actions designed to preserve, enhance, and restore water quality in that basin. The basin plan is the master water quality control planning document for the regional boards. It describes beneficial uses of surface water and groundwater, and establishes water quality objectives to protect those uses.
Bay Plan	San Francisco Bay Plan
Bay-Delta Plan	Bay-Delta Water Quality Control Plan
BCDC	San Francisco Bay Conservation and Development Commission
BDCP	Bay Delta Conservation Plan
beneficial uses	Uses of the waters of the state that include domestic, municipal, agricultural, and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves.
beneficiaries	Entities that benefit from using the resources of the Delta, including water supply, conveyance, and recreation.
benthic	The collection of organisms living on or in sea, lake, or river bottoms.
best management practices (BMPs)	Methods or techniques found to be the most effective and practical means of achieving an objective, such as water conservations. BMPs include, but are not limited to, structural and nonstructural controls, and operation and maintenance procedures. Examples of water conservation BMPs include tiered rate structures and water-efficient plumbing and irrigation systems.
bioaccumulation	The process by which a chemical is taken up by an aquatic organism, both from direct exposure to water and through the consumption of food containing the chemical.
biological opinion	A document stating the opinion of the U.S. Fish and Wildlife Service or the National Marine Fisheries Service as to whether or not federal action is likely to jeopardize the continued existence of a threatened or endangered species, or result in the destruction or adverse modification of critical habitat.

Term	Definition
biomagnify, biomagnification	The sequence of processes in an ecosystem by which higher concentrations of a particular chemical, a pesticide for example, are reached in organisms higher up the food chain, generally through a series of prey-predator relationships.
BMP	See best management practices
bypass	An area of land or a large, constructed structure designed to convey excess floodwaters from a river or stream in order to reduce the risk of flooding on the natural river or stream near a city or other population center.
Cal EMA	California Emergency Management Agency
Caltrans	California Department of Transportation
CARB	California Air Resources Board
carbon sequestration	The process of removing carbon from the atmosphere and storing it. Trees and plants, for example, absorb carbon dioxide, release the oxygen, and store the carbon in their biomass. The stored biomass may eventually turn to peat, other soil-borne organic matter, and fossil fuels such as coal or petroleum that will continue to store the carbon until the fuels are burned.
CASGEM	California Statewide Groundwater Elevation Monitoring Program
CCR	<i>California Code of Regulations</i>
CDFA	California Department of Food and Agriculture
centrarchids	Small, carnivorous, freshwater, spiny-finned fishes of North America usually having a laterally compressed body and metallic luster (for example, largemouth bass, smallmouth bass, spotted bass, bluegill, warmouth, redear sunfish, green sunfish, white crappie, and black crappie).
certification of consistency	The written certification to the Delta Stewardship Council, with detailed findings, that a covered action is consistent with the Delta Plan. Certifications of consistency are submitted to the Delta Stewardship Council by the State or local agency that is proposing to carry out, fund, or approve a covered action under the California Environmental Quality Act (Water Code section 85225 et seq.).
CEQA	California Environmental Quality Act
cfs	cubic feet per second
channelization	(1) Natural or intentional straightening and deepening of streams through dredging or construction of levees.  (2) A marsh-drainage tactic that can disturb fish and wildlife habitats, aggravate flooding, and decrease the capacity to absorb pollution without suffering damage.
climate change	Any significant change in measures of climate (such as temperature, precipitation, or wind) lasting for an extended period (decades or longer). Climate change may result from (1) natural factors, including changes in the sun's intensity or changes in the Earth's orbit around the sun, (2) natural processes within the climate system (such as changes in ocean circulation), or (3) human activities that change the composition of the atmosphere (for example, through burning fossil fuels) and land surfaces (for example, deforestation, reforestation, urbanization, and desertification).

Term	Definition
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CNRA	California Natural Resources Agency
CO <sub>2</sub>	carbon dioxide
COA	Coordinated Operating Agreement
conceptual model	An explicit description of mental models, knowledge, and hypotheses about the structure and function of a system or process.
conjunctive management	The coordinated and planned management of both surface water and groundwater resources to maximize efficient water use. Water is stored in groundwater basins for future use by intentionally recharging the basin during years of above-average surface water supply. Surface water and groundwater resources typically differ significantly in their availability, quality, management requirements, and development and use costs. Managing both resources together, rather than in isolation from one another, allows water managers to use the advantages of both resources for maximum benefit.
conveyance	The movement of water from one place to another. Conveyance infrastructure includes natural watercourses as well as canals, pipelines, and control structures including weirs. Examples of natural watercourses include streams, rivers, and groundwater aquifers. Conveyance facilities range in size from small, local, end-user distribution systems to large systems that deliver water to or drain areas covering multiple hydrologic regions. Conveyance facilities require associated infrastructure including pumping plants, power supply, diversion structures, fish ladders, and fish screens.
Council	Delta Stewardship Council
critical habitat	Specific areas, both occupied and unoccupied, that are essential to the conservation of a listed species and that may require special management considerations or protection (as defined in Section 3 of the federal Endangered Species Act).
current stressors	Stressors that result from ongoing human activities that can, in some cases, be eliminated (for example, fish entrainment at water diversions).
CVFPB	Central Valley Flood Protection Board
CVFPP	Central Valley Flood Protection Plan
CVP	Central Valley Project
CVPIA	Central Valley Project Improvement Act
CV-SALTS	Central Valley Salinity Alternatives for Long-Term Sustainability Program
CWA	Clean Water Act
CZMA	Coastal Zone Management Act of 1972
DBW	California Department of Boating and Waterways
DDT	dichlorodiphenyltrichloroethane

Term	Definition
dedicated (or developed) water	Defined by California Department of Water Resources (DWR) as water distributed among urban and agricultural uses, used for protecting and restoring the environment, or storage in surface water and groundwater reservoirs. In any year, some of the dedicated supply includes water that is used multiple times (reuse) and water that is held in storage from previous years. DWR identifies California's average annual dedicated water supply as 85 million acre-feet. <i>See also: total water use.</i>
Delta	Sacramento-San Joaquin Delta
Delta Conservancy	Sacramento–San Joaquin Delta Conservancy
Delta Ecological Management Zone	The Delta conservation strategy adopted by the Department of Fish and Wildlife as the <i>Ecosystem Restoration Program Conservation Strategy for Restoration of the Sacramento-San Joaquin Delta Ecological Management Zone and the Sacramento and San Joaquin Valley Regions.</i>
Delta exports	Describes, in general terms, any water diverted from the Delta for use outside the Delta, including water pumped by the State Water Project and Central Valley Project pumping plants, Contra Costa Water District, and other agencies. The term must be precisely defined when applied to specific studies or analyses.
Delta Flood Risk Management Assessment District	As proposed in the Delta Plan, an assessment district authorized to set fees on State and local infrastructure to generate funds for levee maintenance and surveys; adequate flood control protection; and emergency response for the benefit of landowners, infrastructure owners, and other entities that benefit from the maintenance and improvement of Delta levees, including water users who rely on the levees to protect water quality.
Delta Independent Science Board (Delta ISB)	Established by the Sacramento-San Joaquin Delta Reform Act of 2009, the Delta ISB is a standing board of nationally and internationally prominent scientists with appropriate expertise to evaluate the broad range of scientific programs that support adaptive management of the Delta. The Delta ISB will provide oversight of the scientific research, and monitoring and assessment programs that support adaptive management of the Delta through periodic reviews of each of those programs. The overall objective of Delta ISB oversight is to help make the science underlying Bay-Delta programs, the application of that science, and the technical aspects of those programs the best they can be (Water Code section 85280 et seq.).
Delta ISB	See Delta Independent Science Board
Delta Levee Special Flood Control Projects	A California Department of Water Resources program, authorized in Water Code sections 12300 through 12314, that provides financial assistance to local levee-maintaining agencies for rehabilitating levees in the Delta.
Delta Multi-Hazard Coordination Task Force	A task force established to address emergency preparedness and response issues in the Delta by enabling the development and implementation of multi-hazard preparedness and response strategies for the Delta. Led by the California Emergency Management Agency (Cal EMA), the task force consisted of representatives from the Delta Protection Commission, California Department of Water Resources, and representatives of the five Delta counties. The passage of Senate Bill 27 in 2008 required Cal EMA, formerly the Office of Emergency Services, to establish the task force.

Term	Definition
Delta Primary Zone	The Sacramento-San Joaquin River Delta land and water area of primary State concern and statewide significance that does not encompass either the urban limit line or sphere of influence line of any local government general plan or study existing as of January 1, 1992. The precise boundary lines of the Primary Zone include the land and water areas as shown on the map titled "Delta Protection Zones" on file with the California State Lands Commission. Where the boundary between the Primary Zone and Secondary Zone is a river, stream, channel, or waterway, the boundary line is the middle of that river, stream, channel, or waterway. The Primary Zone consists of approximately 500,000 acres (Public Resources Code section 29728).
Delta Reform Act	See Sacramento-San Joaquin Delta Reform Act of 2009
Delta Secondary Zone	All the Delta land and water area within the boundaries of the Delta not included within the Primary Zone, subject to the land use authority of local government, and that includes the land and water areas as shown on the map titled "Delta Protection Zones" on file with the State Lands Commission. The Secondary Zone consists of approximately 238,000 acres (Public Resources Code section 29731).
Delta Vision	Delta Vision Blue Ribbon Task Force
Delta watershed	The watershed of the Sacramento River Hydrologic Region and the San Joaquin River Hydrologic Region as described in the California Water Plan Update 2005, Bulletin 160-05 (Water Code section 85060).
demand management measures	Water conservation measures, programs, and incentives that prevent the waste of water and promote the reasonable use and reuse of available supplies.
desalination	A water treatment process for the removal of salt from water for beneficial use. Source water can be brackish (low salinity) or sea water.
DFG	California Department of Fish and Game
DFW	California Department of Fish and Wildlife (formerly the California Department of Fish and Game)
diversion	A process which, having return flow and consumptive use elements, turns water from a given path. Removal of water from its natural channel for human use. Use of part of a streamflow as a water supply. Channel constructed across the slope for the purpose of intercepting surface runoff, changing the accustomed course of all or part of a stream. A structural conveyance (or ditch) constructed across a slope to intercept runoff flowing down a hillside and divert it to some convenient discharge point.
DO	dissolved oxygen
DOC	California Department of Conservation
DPC	Delta Protection Commission
DPH	California Department of Public Health
DRERIP	Delta Regional Ecosystem Restoration Implementation Plan
drinking water quality	Drinking water quality standards are adopted by the California Department of Public Health (DPH) Drinking Water Program pursuant to the California Safe Drinking Water Act. The standards apply to public drinking water systems and to water delivered to customers, and are enforceable by DPH and local health departments.

Term	Definition
drought	Hydrologic conditions during a defined period, greater than 1 dry year, when precipitation and runoff are much less than average.
DWR	California Department of Water Resources
DWR 200 Year	DWR 200-year Urban Levee Protection
EAD	See expected annual damage
ecosystem	A biotic community and its physical environment, considered as an integrated unit. Implied within this definition is the concept of a structural and functional whole unified through life processes. An ecosystem may be characterized as a viable unit of community and interactive habitat. Ecosystems are hierarchical and can be viewed as nested sets of open systems in which physical, chemical, and biological processes form interactive subsystems. Some ecosystems are microscopic, and the largest comprises the biosphere. Ecosystem restoration can be directed at different-sized ecosystems within the nested set, and many encompass multiple states, more localized watersheds, or a smaller complex of aquatic habitat.
ecosystem enhancement	The improvement of existing desirable habitat and natural processes. Enhancement might include flooding the Yolo Bypass more often, at times, to support native species, or expand or better connect existing habitat areas. Enhancement also includes many fish and wildlife management practices, including managing wetlands for waterfowl production or shorebird habitat, installing fish screens to reduce entrainment of fish at water diversions, or removing barriers that block migration of fish to upstream spawning habitats.
ecosystem protection	Preventing harm to an ecosystem, which could include preventing the conversion of existing habitat, the degradation of water quality, irretrievable conversion of lands suitable for restoration, or the spread of invasive nonnative species.
ecosystem restoration	The application of ecological principles to restore a degraded or fragmented ecosystem and return it to a condition in which its biological and structural components achieve a close approximation of its natural potential, taking into consideration the physical changes that have occurred in the past and the future impact of climate change and sea level rise (Water Code section 85066).
Ecosystem Restoration Program Conservation Strategy	Describes the Ecosystem Restoration Program (ERP) priorities and actions for Stage 2 of the CALFED Bay-Delta Program (summarized in Appendix B). It identifies biologically promising ecosystem restoration opportunities in the Sacramento-San Joaquin Delta Ecological Management Zone and the Sacramento Valley and San Joaquin Valley regions, and it provides the rationale for restoration actions specific to each of these regions. It further provides the conceptual framework and process to guide the refinement, evaluation, prioritization, implementation, monitoring, and review of ERP actions.
ecosystem water quality	The Delta ecosystem is affected by a variety of pollutants discharged into Delta and tributary waters. Pollutants of concern affecting Delta biological species and ecosystem processes include nutrients, pesticides, mercury, selenium, and other persistent bioaccumulative toxic substances. Newly identified pollutants of potential concern (often referred to as emerging contaminants) also should be investigated.
EIR	environmental impact report

Term	Definition
endangered species	As defined by the California Endangered Species Act, an endangered species is a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease. Any species determined by the Fish and Game Commission as endangered on or before January 1, 1985, is an endangered species (Fish and Game Code section 2062).
entrainment	Defined by the National Marine Fisheries Service as “the incidental trapping of any life stage of fish within waterways or structures that carry water being diverted for anthropogenic use.”
environmental water	Minimum flow levels of a specific quality that are needed in order to assure the continued viability of fish and wildlife resources for a particular water body. This water is used to maintain and enhance the beneficial uses related to the preservation and enhancement of fish, wildlife, and other aquatic resources or preserves as specified in the Porter-Cologne Water Quality Control Act.
environmental water use	Water dedicated to instream environmental needs.
EPRRP	Emergency Preparedness Response and Recovery Program
ERP	Ecosystem Restoration Program
ESA	Endangered Species Act
ESP	The Delta Protection Commission’s <i>Economic Sustainability Plan for the Sacramento-San Joaquin Delta</i>
estuary	A place where fresh and salt water mix, such as a bay, salt marsh, or where a river enters an ocean.
expanded water supply reliability element	<p>Additional information water suppliers should include in their water supply reliability element, starting in 2015, as part of the update of any urban water management plan, agricultural water management plan, integrated water management plan, or other plan that provides equivalent information on the supplier's planned investments in water conservation and water supply development. This expanded water supply reliability element must detail how water suppliers are improving regional self-reliance and reducing reliance on the Delta through investments in local and regional programs and projects, and must document actual and projected reductions in reliance on Delta exports. At a minimum, the water reliability element must include the following:</p> <ol style="list-style-type: none"> <li>(1) A plan for possible interruption of Delta water supply due to catastrophic events.</li> <li>(2) A plan for implementation of anticipated investments in water conservation, water efficiency, and water supply development.</li> <li>(3) Evaluation of regional water balance.</li> <li>(4) Conservation-oriented water rate structure.</li> </ol>
expected annual damage (EAD)	A metric for analyzing flood risk that integrates the likelihood and consequences of flooding. Generally defined as the average annual flood damages (in dollars) weighted by the probability that a flood will occur in any given year. The U.S. Army Corps of Engineers describes EAD mathematically in <i>Manual No. 1110-2-1619, Risk-Based Analysis for Flood Damage Reduction Studies</i> , August 1, 1996.
FEMA	Federal Emergency Management Agency
FEMA 100 Year	FEMA 100-year (Base Flood) Protection

Term	Definition
flood risk	The likelihood and consequence of inundation by floodwaters. Consequences may include direct or indirect economic costs, loss of life, environmental impacts, or other specified measures of flood effect. Flood risk is a function of (1) loading, which is the frequency and magnitude of flood discharge or stage; (2) limits to exposure to the loading due to flood defense measures; and (3) consequence. Therefore, flood management actions may reduce risk by changing loading, exposure, or consequence. For clarity, flood risk is commonly quantified within an identified area for a specified climate condition, land use condition, and with a flood management system (existing or planned) in place.
flow criteria	The development of specific criteria by the State Water Resources Control Board for flows for the Delta ecosystem, including the volume, quality, and timing of water necessary for the Delta ecosystem under different conditions (Water Code section 85086(c)(1)).
flow objectives	Where protection of beneficial uses requires specific flow volumes at certain times, regional water quality control boards may establish flow objectives in water quality control plans. They differ from typical water quality objectives in that they are implemented by the State Water Resources Control Board through modifications and limitations of existing or future water rights to make sure these flows are met.
flow regime	The regulation of ecological processes in river ecosystems: the magnitude, frequency, duration, timing, and rate of change of hydrologic conditions (Poff and Ward 1989, Richter et al. 1996, Walker 1995). These components can be used to characterize the entire range of flows and specific hydrologic phenomena, including floods or low flows, that are critical to the integrity of river ecosystems. Furthermore, by defining flow regimes in these terms, the ecological consequences of particular human activities that modify one or more components of the flow regime can be considered explicitly.
flow requirements	The amount of water required for instream use by agreement, water rights permit, or State/federal law.
freeboard	The height of the physical top of a levee or floodwall above the median design water surface elevation.
gateway	A community, landmark, or signage on the edge of the Delta or Suisun Marsh that serves as a gateway providing information to visitors about recreation opportunities available in the area and equipping them with supplies.
general obligation bond	A bond issued by the State where the principal and interest is paid out of the General Fund. This is different than a revenue bond, where the principal and interest is paid out of a specific dedicated revenue source.
globally determined stressors	Stressors that result from large-scale human activities or natural processes that cannot be eliminated or mitigated within a limited purview and require larger-scale planning and adaptation (such as global climate change and human population growth).
GPCD	gallons per capita daily
groundwater basin	An alluvial aquifer or a stacked series of alluvial aquifers with reasonably well-defined boundaries in a lateral direction and having a definable bottom.
groundwater management plan	A comprehensive written document developed for the purpose of groundwater management and adopted by an agency having appropriate legal or statutory authority.



Term	Definition
groundwater overdraft	The condition of a groundwater basin in which the amount of water withdrawn by pumping exceeds the amount of water that recharges the basin over a period of years during which water supply conditions approximate average conditions.
groundwater remediation	The extraction of contaminated groundwater from an aquifer followed by treatment and (1) replacement in the aquifer or (2) use for agricultural or municipal purposes.
groundwater storage	Defined three ways depending on the context: (1) the quantity of water beneath the land surface that fills the pore spaces of the alluvium, soil, or rock formation; (2) the volume of usable physical space available to store water in the pore spaces of the alluvium, soil, or rock formation beneath the land surface; or (3) the act of storing water in the pore spaces of the alluvium, soil, or rock formation beneath the land surface.
HAB	harmful algal bloom
habitat	The location and the living and nonliving surroundings where a particular plant or animal lives. Habitat includes the presence of a group of particular environmental conditions surrounding an organism including air, water, soil, mineral elements, moisture, temperature, and topography.
Habitat Conservation Plan (HCP)	A plan prepared under the Endangered Species Act by nonfederal parties in order to obtain permits for incidental taking of threatened and endangered species. The HCP describes ways to maintain, enhance, and protect a given habitat type needed to protect species. The plan usually includes measures to minimize impacts, and might include provisions for permanently protecting land, restoring habitat, and relocating plants or animals to another area.
habitat restoration	The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning the majority of natural functions to the lost or degraded native habitat.
Hazard Mitigation Plan (HMP)	Refers to levee guidance negotiated between various federal, State, and local agencies to assist in reducing the likelihood of repetitive flood damage to Delta levees and islands. This guidance provides geometric levee design criteria that, if maintained, make a Delta levee-maintaining agency eligible for federal disaster assistance funds in the event of a flood emergency.
HCP	See Habitat Conservation Plan
HGMP	Hatchery and Genetic Management Plans
HMP	See Hazard Mitigation Plan
hydraulic mining	The use of high-pressure jets of water to dislodge rock material or move sediment.
hydrodynamics	The description of the change in flow or motion of a liquid.
hydrologic region	A geographical division of the state based on local hydrologic basins. The California Department of Water Resources divides California into 10 hydrologic regions, corresponding to the state's major water drainage basins: North Coast, San Francisco Bay, Central Coast, South Coast, Sacramento River, San Joaquin River, Tulare Lake, North Lahontan, South Lahontan, and Colorado River.
IEP	Interagency Ecological Program
incidental take permit	A permit issued by federal fisheries agencies that authorizes take of listed species incidental to otherwise lawful projects.

Term	Definition
instream flow	The use of water within its natural watercourse as specified in a contract, a water rights permit, a court order, a Federal Energy Regulatory Commission license, or other documentation. Instream flows support natural ecosystems, create habitat for plants and animals, and may provide additional benefits including recreation. <i>See also: flow requirements.</i>
integrated regional water management	A collaborative effort to manage all aspects of water resources in a specified region. Integrated regional water management crosses jurisdictional, watershed, and political boundaries; involves multiple agencies, stakeholders, individuals, and groups; and attempts to address the issues and differing perspectives of all entities involved through mutually beneficial solutions.
integrated regional water management plan (IRWMP)	At a minimum, an integrated regional water management plan describes the major water-related objectives and conflicts within a region; considers a broad variety of water management strategies; identifies an appropriate mix of water demand and supply management alternatives; provides water quality protections and environmental stewardship actions to provide a long-term, reliable, and high-quality water supply; protects the environment; and identifies disadvantaged communities in the region taking into account the water-related requirements of those communities.
invasive species	An alien species whose introduction does or is likely to cause economic or environmental harm or harm to human health (Executive Order 13112, 1999).
land reclamation	The process to recover land through channelization and levee construction of what was previously marsh land.
IRWMP	See integrated regional water management plan.
LADWP	Los Angeles Department of Water and Power
LAEDC	Los Angeles Economic Development Corporation
LAO	California Legislative Analyst's Office
legacy community	A rural community registered as a Historic District by either a State or federal entity. Delta legacy communities include Bethel Island, Clarksburg, Courtland, Freeport, Hood, Isleton, Knightsen, Rio Vista, Ryde, Locke, and Walnut Grove (Public Resources Code section 32301(f)).
legacy stressors	Stressors that result from past actions that cannot be undone, but whose impact can sometimes be reduced or mitigated (for example, mercury pollution from historical gold mining).
Legislature	California Legislature
levee-maintaining agencies	Local special districts, typically reclamation districts, that are public agencies formed for the purpose of levee maintenance and improvement, among other duties, and are funded by local assessments.
levee standards	Standards designed to either establish minimum criteria that would make levees and the properties protected eligible for Federal Emergency Management Agency (FEMA) grants or U.S. Army Corps of Engineers (USACE) rehabilitation funds both in case of catastrophic emergency, or set minimum criteria that would allow development behind the levees. The four main applicable levee standards and guidance for the Delta are (1) FEMA Hazard Mitigation Plan Guidance, (2) USACE Public Law 84-99, (3) FEMA 100-year (Base Flood) Protection, and (4) DWR 200-year Urban Levee Protection.
LHC	Little Hoover Commission

Term	Definition
low salinity zone (LSZ)	Generally, the region in an estuary with salinity ranging from fresh water up to about 5 parts per thousand (ppt), about one-seventh the salinity of sea water. The part of the salinity gradient centered on 2 ppt is considered to be of particular importance because it is hypothesized to be an area where suspended particulate matter and organisms accumulate. The location in the Bay-Delta where the tidally averaged salinity at 1 meter from the bottom is 2 ppt is known as X2 (measured as distance in kilometers from the Golden Gate Bridge) and serves as a water quality objective regulating Delta outflow.
LPP	Suisun Marsh Local Protection Program
LSZ	See low salinity zone
LTMS	Delta Dredged Sediment Long-Term Management Strategy
µS/cm	microsiemens per centimeter
MAF	million acre-feet
managed wetland	Perched wetlands that receive human-induced seasonal flooding for marshland development.
MCL	maximum contaminant level
mg/L	milligram(s) per liter
MWD	Metropolitan Water District of Southern California
NAS	National Academy of Sciences
National Heritage Area (NHA)	Places designated by the United States Congress where natural, cultural, historic, and recreational resources combine to form a cohesive, nationally distinctive landscape arising from patterns of human activity shaped by geography. These areas tell important stories about the nation and are representative of the national experience through both the physical features that remain and the traditions that have evolved within them.
National Pollutant Discharge Elimination System (NPDES)	A permitting program required for all point sources discharging pollutants into waters of the United States. The purpose of the NPDES program is to protect human health and the environment (Clean Water Act of 1977, 33 United States Code section 1311).
Natural Community Conservation Plan (NCCP)	A conservation plan created to meet the requirements of the Natural Community Conservation Planning Act, which identifies and provides for the regional or areawide protection of plants, animals, and their habitats, while allowing compatible and appropriate economic activity. The primary objective of the NCCP program is to conserve natural communities at the ecosystem level while accommodating compatible land use (Fish and Game Code section 2800 et seq.).
NCCP	See Natural Community Conservation Plan
new water	Defined in part by California Department of Water Resources as water that is legally and empirically available for a beneficial use. New water can be developed through many strategies such as capturing surplus water, desalinating ocean water, and improving water efficiency.
NHA	See National Heritage Area
NMFS	National Marine Fisheries Service

Term	Definition
nonpoint source pollution	Diffused sources that do not have a single point of origin or are not introduced into a receiving stream from a specific outlet. The pollutants are generally carried off the land by stormwater runoff. Common categories of nonpoint sources are agriculture, forestry, mining, construction, land disposal, and salt intrusion.
NPDES	See National Pollutant Discharge Elimination System
NRC	National Research Council
NWR	National Wildlife Refuge
OP	organophosphorus
OPC	California Ocean Protection Council
<i>Paterno v. State of California</i>	In <i>Paterno v. State of California</i> , the appellate court found the State liable for flood-related damages caused by the failure of a Yuba River levee incorporated into the State system of flood control, even though the State did not design, build, or even directly maintain it ( <i>Paterno v. State</i> [2003] 113 Cal. App.4th 998 [6 Cal.Rptr.3d 854]).
PCB	polychlorinated biphenyl
peak flow	Maximum instantaneous flow in a specified period.
pelagic fish	A fish species that spends most of its life swimming in the water column with little contact with or dependency on the bottom. Adult spawning usually occurs in open water, often near the surface.
pelagic organism decline (POD)	A steep decline leading to near-record low populations of four pelagic species in the San Francisco Estuary—delta smelt, young striped bass, longfin smelt, and threadfin shad—widely recognized as a serious issue by 2004.
performance measures	<p>A quantitative or qualitative tool to assess progress toward an outcome or goal. The Delta Plan must include performance measurements that will enable the Delta Stewardship Council to track progress in meeting the objectives of the Plan. Performance measurements must include, but need not be limited to, quantitative or otherwise measurable assessments of the status and trends in all of the following:</p> <p>(1) The health of the Delta estuary and wetland ecosystem for supporting viable populations of aquatic and terrestrial species, habitats, and processes including viable populations of Delta fisheries and other aquatic organisms.</p> <p>(2) The reliability of California water supply imported from the Sacramento River or the San Joaquin River watershed.</p>
PL 84-99	See Public Law 84-99
Plan	Delta Plan
POD	See pelagic organism decline

Term	Definition
point source	Any discernible, confined, and discrete conveyance including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel, or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigation agriculture or agricultural stormwater runoff (40 <i>Code of Federal Regulations</i> 122.2).
pollutant	Defined as “dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water” (Clean Water Act of 1977, 33 United States Code section 1362(6)).
pollution	<p>Defined as the human-made or human-induced alteration of the chemical, physical, biological, and radiological integrity of water (Clean Water Act section 502(19); 33 United States Code section 1362(19)).</p> <p>Pollution is also defined in California law as an alternation of the quality of the waters of the state by waste to a degree that unreasonably affects either the waters for beneficial uses or the facilities that serve these beneficial uses (Water Code section 13050(k)(1)).</p>
ppb	parts per billion
PPIC	Public Policy Institute of California
ppm	parts per million
ppt	parts per thousand
PRBO CalPIF	Point Reyes Bird Observatory California Partners in Flight
Public Law 84-99 (PL 84-99)	A federal levee standard developed by the U.S. Army Corps of Engineers (USACE). Meeting this standard allows the Delta island or tract to be eligible for USACE funding for levee rehabilitation, island restoration after levee failures, and island inundation, provided that the reclamation district applies for and is accepted into the USACE’s Rehabilitation and Inspection Program.
Public Trust Doctrine	This doctrine protects the right of the public to use State sovereign lands and waters for commerce, navigation, hunting, fishing, bathing, swimming, boating, and general recreational purposes, and also protects trust lands and waters in their natural state, so that they may serve as ecological units for scientific study, as open space, and as environments that provide food and habitat for birds and marine life, and which favorably affect the scenery and climate of the area. There is also a separate branch of the Public Trust Doctrine that protects the fishery resources in all State waters, including those in nonnavigable waterways, as public trust resources in and of themselves.

Term	Definition
Reasonable and Beneficial Use Doctrine	This doctrine states that a water right does not include the right to waste water and mandates that the water resources of the state be put to beneficial use. “It is hereby declared that because of the conditions prevailing in this State the general welfare requires that the water resources of the State be put to beneficial use to the fullest extent of which they are capable, and that the waste or unreasonable use or unreasonable method of use of water be prevented, and that the conservation of such waters is to be exercised with a view to the reasonable and beneficial use thereof in the interest of the people and for the public welfare. The right to water or to the use or flow of water in or from any natural stream or water course in this State is and shall be limited to such water as shall be reasonably required for the beneficial use to be served, and such right does not and shall not extend to the waste or unreasonable use or unreasonable method of use or unreasonable method of diversion of water. Riparian rights in a stream or water course attach to, but to no more than so much of the flow thereof as may be required or used consistently with this section, for the purposes for which such lands are, or may be made adaptable, in view of such reasonable and beneficial uses; provided, however, that nothing herein contained shall be construed as depriving any riparian owner of the reasonable use of water of the stream to which the owner’s land is riparian under reasonable methods of diversion and use, or as depriving any appropriator of water to which the appropriator is lawfully entitled. This section shall be self-executing, and the Legislature may also enact laws in the furtherance of the policy in this section contained” (California Constitution Article X section 2).
reasonable and prudent alternative	The regulations implementing Section 7 of the Endangered Species Act define reasonable and prudent alternatives as alternative actions, identified during formal consultation, that (1) can be implemented in a manner consistent with the intended purpose of the action, (2) can be implemented consistent with the scope of the action agency's legal authority, (3) are economically and technologically feasible, and (4) would, according to the National Marine Fisheries Service, avoid the likelihood of jeopardizing the continued existence of listed species and avert the destruction or adverse modification of critical habitat (Endangered Species Act of 1973, 16 United States Code section 1536).
Reclamation	Bureau of Reclamation
Recreation Proposal	<i>Recreation Proposal for the Sacramento-San Joaquin Delta and Suisun Marsh</i>
regional self-reliance	The degree to which a region implements water management options so that it can provide for all of its needs for water from within its own borders.
regional water supplies	Water supplies that are found or developed within a region to be used within its own borders.
reservoir reoperation	Changes to existing operations and management procedures for existing reservoirs and conveyance facilities to increase water-related benefits from these facilities.
resource management strategy	A project, program, or policy that helps federal, State, or local agencies manage water and related resources. Resource management strategies in the California Water Plan are grouped by intended outcomes: reduce water demand, improve operational efficiency and transfers, increase water supply, improve water quality, practice resource stewardship, and improve flood management. Although most of the resource management strategies have multiple potential benefits, any individual site-specific project or program within a resource management strategy may contribute only one, or a few, of the benefits.
riparian area	The land adjacent to a natural watercourse such as a river or a stream. Riparian areas support vegetation that provides important wildlife habitat and important fish habitat when shading the watercourse bank.

Term	Definition
RWCF	Stockton Regional Wastewater Control Facility
RWQCB	Regional Water Quality Control Board
SACOG	Sacramento Area Council of Governments
Sacramento-San Joaquin Delta Reform Act of 2009 (Delta Reform Act or Act)	Included in Senate Bill X71, established a new governance approach for the Sacramento-San Joaquin Delta that is focused on achieving the coequal goals and is fundamentally different from past approaches. The Delta Reform Act created the Delta Stewardship Council and gave it the direction and authority to serve two primary governance roles: (1) set a comprehensive, legally enforceable direction for how the State manages important water and environmental resources in the Delta through the adoption of a Delta Plan, and (2) ensure coherent and integrated implementation of that direction through coordination and oversight of State and local agencies proposing to fund, carry out, and approve Delta-related activities.
Safe Harbor Agreement	A voluntary agreement made between wildlife agencies and landowners in order to recover a listed species.
SAV	submerged aquatic vegetation
SB	Senate Bill
SBX7 1	Senate Bill X7 1
SBX7 7	Senate Bill X7 7
SDWSC	Stockton Deep Water Ship Channel
sea level rise	A change in average global sea level caused by a change in ocean volume. Often discussed in relation to climate change.
seepage	Percolation of water through the soil from unlined canals, ditches, laterals, watercourses, or water storage facilities.
SEMS	See Standardized Emergency Management System
sensitive species	Species not yet officially listed but undergoing status review for listing on the U.S. Fish and Wildlife Service's official threatened and endangered list; species whose populations are small and widely dispersed or restricted to a few localities; and species whose numbers are declining so rapidly that official listing may be necessary.
SFD	San Felipe Division
SHP	State Historic Park
SMPP	BCDC's <i>Suisun Marsh Protection Plan</i>
SOI	sphere of influence

Term	Definition
special-status species	Any species that is listed, or proposed for listing, as threatened or endangered by the U.S. Fish and Wildlife Service or National Marine Fisheries Service under the provisions of the Endangered Species Act; any species designated by the U.S. Fish and Wildlife Service as a “listed,” “candidate,” “sensitive,” or “species of concern”; and any species listed by the State in a category implying potential danger of extinction.
SP	State Park
SPFC	State Plan of Flood Control
SRA	State Recreation Area
Standardized Emergency Management System (SEMS)	Established throughout California to manage and coordinate any emergency response involving more than one agency or jurisdiction. It is the cornerstone of the emergency response system and the fundamental structure for the response phase of emergency management. SEMS is authorized under the California Emergency Services Act for managing multiagency and multijurisdictional responses to emergencies in California.
State	State of California
stormwater capture system	A facility operated by a public agency and designed to capture and retain stormwater flowing upon the public right-of-way, or through a public stormwater management system or a public stormwater drainage system, for subsequent use.
stressors (ecosystem)	<p>Actions or factors, whether human or natural, that cause negative impacts on desirable ecosystem elements, processes, and functions.</p> <p><i>See also: globally determined stressor, legacy stressors, current stressors, and anticipated future stressors.</i></p>
stressor fees	A companion principle to user fee, stressor fees are paid by persons who have been identified as stressing Delta natural systems. The fees fund regulatory and restoration programs.
subsidence	Sinking of the land surface due to a number of factors, including groundwater extraction, agricultural activities, or oil or gas extraction. In the Delta, land subsidence is mainly caused by oxidation of peat soils, but also from wind erosion. Drainage and cultivation dries the saturated peat, reducing its volume by approximately 50 percent.
subsidence reversal	The exposure of bare peat soils to air causes oxidation and decomposition, which results in subsidence, or a loss of soil elevation, on Delta islands. Flooding these lands and managing them as wetlands reduces exposure to oxygen, resulting in less decomposition of organic matter, which stabilizes land elevations. Wetland vegetation cycles lead to biomass accumulation, which sequesters carbon and helps stop and reverse subsidence. As subsidence is reversed, land elevations increase and accommodation space (the space in the Delta that lies below sea level and is filled with neither sediment nor water) on individual islands is reduced. A reduction in accommodation space decreases the potential for water quality impacts from salinity intrusion in the event of one or more levee breaks on deeply subsided Delta islands.



Term	Definition
subventions	Payments made by the State in the form of matching funds for the purpose of maintaining and improving Delta levees. The Delta Levees Maintenance Subventions Program is a cost share program providing technical and financial assistance to local levee-maintaining agencies in the Sacramento–San Joaquin Delta for the maintenance and rehabilitation of nonproject and eligible project levees. The subventions program is authorized by Water Code sections 12980 through 12995 and is managed by the California Department of Water Resources.
surface storage	Reservoirs used to collect and hold water for future release and use.
surface water	Water naturally open to the atmosphere including rivers, lakes, reservoirs, ponds, streams, impoundments, seas, and estuaries.
sustainable communities strategy	Regional transportation agencies are required to develop a sustainable communities strategy. The strategy is intended to demonstrate how the region will meet its greenhouse gas reduction target through integrated land use, housing, and transportation planning.
SWP	State Water Project
SWRCB	State Water Resources Control Board
threatened species	As defined by the California Endangered Species Act, a threatened species is a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by the act. Any animal determined to be rare on or before January 1, 1985, is a threatened species (Fish and Game Code section 2067).
THM	trihalomethanes
tiered fee structures	Refers to a block-type fee structure where the unit price of a quantified benefit or impact, such as the amount of water used or the volume of contaminants discharged, increases with each additional block of benefit or impact.
TMDL	See total maximum daily load
total maximum daily load (TMDL)	A calculation of the maximum amount of a pollutant that a water body can receive and still safely meet water quality standards.
total water use	In the Delta Plan, refers to 60 to 65 million acre-feet of water in California that goes to urban, agricultural, and Central Valley environmental water uses such as instream flow requirements and non-CVP managed wetlands.
tributary	A river or stream that flows into a larger river or stream. Usually, a number of smaller tributaries merge to form a river.
unimpaired flow	The natural water production of a river basin, unaltered by upstream diversions, storage, or by export or import of water to or from other watersheds.
urbanization	The expansion of residential, commercial, and industrial development into rural areas or areas that may have previously been used for agricultural or ecosystem habitat.
urban water use	The use of potable and nonpotable water for urban purposes including, but not limited to, residential, commercial, industrial, recreation, energy production, military, and institutional purposes.

Term	Definition
urban water use efficiency	Water management measures that are implemented in residential, commercial, industrial, and institutional settings that reduce water and per capita water use and result in the most effective use of water to prevent its waste, unreasonable use, or unreasonable method of use.
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USEPA	U.S. Environmental Protection Agency
user fees	Fees proposed to fund programs identified in the Delta Plan that are paid by the users or beneficiaries of those programs. Fees may be volume-based or impact-based.
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UWMP	See urban water management plan
vector-borne disease	Disease that results from an infection transmitted to humans and other animals by blood-feeding arthropods, including mosquitoes, ticks, and fleas. Examples of vector-borne diseases include Dengue fever, viral encephalitis, Lyme disease, and malaria.
waste discharge requirement (WDR)	An order adopted by a regional water board that regulates and permits specified discharges of waste to surface water and discharges of waste to land.
water balance	An analysis of the total developed/dedicated supplies, uses, and operational characteristics of water in a region. The analysis is intended to determine if actual water use equals supply.
water demand	An economic principle that describes consumer desire and willingness to pay a price for a specific amount of water. Holding all other factors constant, the price of a good or service increases as its demand increases and vice versa.
water export	The amount of water that a hydrologic region transfers to another hydrologic region.  <i>See also: Delta exports.</i>
water import	The amount of water brought in from another hydrologic region or regions.
water quality criteria	Numeric limitations or levels (for example, concentrations) or narrative statements established to protect uses of a water body under the authority of the Clean Water Act. This term has two separate meanings: (1) Water quality criteria promulgated by the U.S. Environmental Protection Agency under Clean Water Act section 303(c) are enforceable components of water quality standards. (2) Recommended water quality criteria published under Clean Water Act section 304(a) are advisory and may be used by states and tribes to develop their own water quality standards or to implement narrative criteria in water quality standards.
water quality objectives	Numeric limitations or levels (concentrations or narrative statements) that are established for the reasonable protection of the beneficial uses of a water body. Determination of what is reasonable may include factors that are not required in federal development of a water quality criterion. Water quality objectives are included in water quality control plans adopted by regional water boards.

Term	Definition
water quality standards	Pursuant to the federal Clean Water Act, water quality standards are provisions of State or federal law that define the water quality goals of a water body, or portion thereof, by establishing (a) designated uses of water to be protected, and (b) water quality criteria to protect those uses. Water quality standards are enforceable in the bodies of water for which they have been promulgated.
water recycling	(1) The treatment of wastewater to remove solids and certain impurities to meet a beneficial use or a controlled use that would not otherwise occur, thus supplanting or augmenting a potable, or potentially potable, supply.  (2) The treatment of municipal, industrial, or agricultural wastewater for reuse.
watershed	The land area that drains into a stream. The watershed for a major river may encompass a number of smaller watersheds.
water shortage contingency element	The Urban Water Management Planning Act requires water suppliers to include a water supply reliability and water shortage contingency element in urban water management plans, recognizing that suppliers need to prepare for extended droughts or the potential catastrophic interruption of water deliveries due to earthquakes or other events.
water supply reliability	See sidebar in Chapter 3, “What Does It Mean to Achieve the Goal of Providing a More Reliable Water Supply for California?”
water supply reliability element	Required components of urban water management plans (Water Code section 10631(c)), agricultural water management plans (Water Code section 10826 (b)(7)), and integrated regional water management plans (Water Code section 10540(c)(1)).
water transfer	A temporary or long-term change in the point of diversion, place of use, or purpose of use due to a transfer or exchange of water or water rights. Many transfers, including transfers among contractors of the State Water Project or Central Valley Project, do not fit this definition. A more general definition of a water transfer is a voluntary change in the way water is normally distributed among water users in response to water scarcity. Compared to water exchanges, which are typically water delivered by one water user to another water user, the receiving water user will return the water at a specified time or when the conditions of the agreement are met (Water Code section 1735).
water year	A compilation of hydrologic records collected over a 12-month period.
water year-type classifications	California Department of Water Resources uses five water year-type classifications for planning and water management purposes: wet, above normal, below normal, dry, and critically dry.
WDR	See waste discharge requirement
Wild and Scenic River	A State- and federal-designated river system that includes 17 California rivers and their many forks and tributaries. Approximately 1,900 miles of river are designated wild, scenic, or recreational under the National Wild and Scenic Rivers Act (1968) and the California Wild and Scenic Rivers Act of 1972.
X2	The location in the Bay-Delta where the tidally averaged salinity is 2 parts per thousand.

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