

Glossary



---

# GLOSSARY OF TERMS

**Acoustic Barrier**—Uses sound to discourage fish from going into waters that are not desirable for them or their migration patterns.

**AF**—Abbreviation for acre feet; the volume of water that would cover one acre to a depth of one foot, or 325,851 gallons of water. On average, could supply 1-2 households with water for a year.

**Alternative**—A collection of actions or action categories assembled to provide a comprehensive solution to problems in the Bay-Delta system. Alternatives will be considered by the Program in the CEQA/NEPA process.

**Action**—A structure, operating criteria, program, regulation, policy, or restoration activity that is intended to address a problem or resolve a conflict in the Bay-Delta system.

**Action Category**—A set of similar actions. For example, all new or expanded off-stream storage might be placed into a single action category.

**Anadromous Fish**—Fish that spend a part of their life cycle in the sea and return to freshwater streams to spawn.

**Best Management Practices (BMP)**—An urban water conservation measure that the California Urban Water Conservation Coalition agrees to implement among member agencies.

**Cause**—An activity or occurrence that contributes to a problem in the Bay-Delta. There may be several causes of a problem. For example, urban storm water runoff is one cause of reduced water quality in the Bay-Delta system.

**Channel Islands**—Natural, unleveed land masses within Delta channels. Typically good sources of habitat.

**Conflict**—A situation in which two beneficial uses or resources of the Bay-Delta are in opposition. For example, fish survival rates are in conflict with water diversions from the Bay-Delta.

**Conjunctive Use**—The operation of a groundwater basin in combination with a surface water storage and conveyance system. Water is stored in the ground water basin for later use in place of or to supplement surface supplies. Water is stored by intentionally recharging the basin during years of above-average water supply.

**Conveyance**—A pipeline, canal, natural channel or other similar facility that transports water from one location to another.

---

**CVPIA (Central Valley Project Improvement Act)**—This federal legislation, signed into law on October 30, 1992, mandates major changes in the management of the federal Central Valley Project. The CVPIA puts fish and wildlife on an equal footing with agricultural, municipal, industrial, and hydropower users.

**Delta Islands**—Islands in the Sacramento-San Joaquin Delta protected by levees. Delta Islands provide space for numerous functions including agriculture, communities, and important infrastructure such as power plants, transmission lines, pipelines, and roadways.

**Demand Management**—Programs that seek to reduce demand for water through conservation, rate incentives, fallowing of agricultural lands, drought rationing, and other activities.

**Diversions**—The action of taking water out of a river system or changing the flow of water in a system for use in another location.

**Drought Conditions**—A time when rainfall and runoff are much less than average. One method to categorize annual rainfall is as follows, with the last two categories being drought conditions: *extremely wet, wet, normal, dry, and critically dry.*

**Efficient Water Management Practice (EWMP)**—An agricultural water conservation measure water suppliers can implement to reduce water use. Three categories of EWMPs are irrigation management, physical and structural improvements, and institutional changes.

**Ecosystem**—A recognizable, relatively homogeneous unit that includes organisms, their environment, and all the interactions among them.

**Enhancement**—Actions that improve the natural functioning of a habitat type or area.

**Entrainment**—The process of drawing fish into diversion pumps along with water, resulting in the loss of such fish.

**ESA (Endangered Species Act)**—Federal legislation that provides protection for species that are in danger of extinction.

**Export**—Water diversion from the Delta used for purposes outside the Delta.

**Fish Migration Barriers**—Physical structures or behavioral barriers that keep fish within their migration route and prevent them from entering waters that are not desirable for them or their migration pattern.

**Fish Screens**—Physical structures placed at water diversion facilities to keep fish from getting pulled into the facility and dying there.

**Gray Water**—Wastewater from a household or small commercial establishment for reuse. Does not include water from a toilet, kitchen sink, dishwasher, washing machine, or water used for washing diapers.

**Groundwater Banking**—Storing water in the ground for use to meet demand during dry years.

---

***In-lieu Groundwater Banking***—Replaces groundwater used by irrigators with surface water to build up and save underground water supply for use during drought conditions.

***HMP (Hazard Mitigation Plan)***—One of two standards referred to in the alternatives for levee flood protection. Following the flood disasters of the 1980s, HMP standards were established at 1 foot of freeboard above the 100-year flood event level.

***Inclining Block Rate Pricing***—Sets the cost for water rates in blocks that increase as the comparative usage does. This is in contrast to historical pricing in which per unit rates went down as comparative usage increased.

***Inverted Siphon***—A pipeline that allows water to pass beneath an obstacle in the flow path. For example, an inverted siphon could be used to allow water in a canal to pass under a Delta channel.

***Isolated Conveyance Facility***—A canal or pipeline that transports water between two different locations while keeping it separate from Delta water.

***Land Fallowing/Retirement***—Allowing previously irrigated agricultural land to temporarily lie idle or purchasing such land and allowing it to remain out of production for a variety of purposes.

***Mining Drainage Remediation***—Controlling or treating polluted drainage from abandoned mines.

***Meander Belt***—Protecting and preserving land in the vicinity of a river channel in order to allow the river to meander. Meander belts are a way to allow the development of natural habitat around a river.

***Non-native Species***—Also called introduced species; refers to plants and animals that originate elsewhere and migrate or are brought into a new area, where they may dominate the local species or in some way negatively impact the environment for native species.

***Performance Measure***—A measure of the effectiveness of a set of actions or an alternative. Performance measures are designed to measure the degree to which an alternative accomplishes Program objectives.

***Problem***—A situation within the Bay-Delta system that reduces one of the system's four values: water quality, ecosystem quality, water supply reliability, and system vulnerability.

***Real-Time Monitoring***—Continuous observation in multiple locations of biological conditions on site in order to adjust water management operations to protect fish species and allow optimal operation of the water supply system.

***Restoration***—Activities to redevelop the natural functions of a natural system or area.

***Riparian***—The strip of land adjacent to a natural water course such as a river or stream. Often supports vegetation that provides the best fish habitat values when growing large enough to overhang the bank.

***Riverine***—Habitat within or alongside a river or channel.

---

**Setback Levee**—A constructed embankment to prevent flooding that is positioned some distance from the edge of the river or channel. Setback levees allow wildlife habitat to develop between the levee and the river or stream.

**Shallow Water**—Water with little enough depth to allow for sunlight penetration, plant growth, and the development of small organisms that function as fish food. Serves as spawning areas for Delta smelt.

**Smolt**—A young salmon that has assumed the silvery color of the adult and is ready to migrate to the sea.

**Solution Principle**—Fundamental principles that guide the development and evaluation of Program alternatives. They provide an overall measure of acceptability of the alternatives.

**Solution Strategy**—A description of approaches and desired results that guides development of a preliminary alternative. Each solution strategy is intended as a starting point for assembling actions and action categories into a preliminary alternative for consideration and evaluation.

**Subsidence**—The process of land settling downward over time. On Delta Islands, land between the levees has settled to below sea level.

**TAF**—An abbreviation for thousand acre feet, as in 125 TAF or 125,000 AF.

**Take Limit**—The numbers of fish allowed to be lost or entrained at a water management facility before it must limit or cease operations. The numbers are set for different species by regulations.

**Terrestrial**—Types of species of animal and plant wildlife that live on or grow from the land.

**Water Conservation**—Practices that encourage consumers to reduce the use of water. The extent to which these practices actually create a savings in water depends on the total or basin-wide use of water.

**Water Reclamation**—Practices that capture, treat and reuse water. The waste water is treated to meet health and safety standards depending on its intended use.

**Water Transfers**—Voluntary water transactions conducted under state law and in keeping with federal regulations. The agency most involved is the State Water Resources Control Board (SWRCB).

**Watershed**—An area of a region that drains ultimately to a particular channel or river, usually bounded peripherally by a natural divide of some kind such as a hill, ridge, or mountain.

**X2**—A standard that regulates the salinity gradient in the Bay-Delta estuary so that a salt concentration of two parts per thousand is positioned where it may be beneficial to aquatic life.