

Water Words

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CALFED:

A program initiated in 1995 to provide a forum for federal and state agencies that have regulatory or management responsibility for the Bay-Delta to coordinate their activities and develop a plan to serve their common purposes. The California Bay-Delta Authority administers the program.

California Coastal Conservancy:

Established in 1976 by the Legislature and administered by the Resources Agency to improve public access to coast and bay shores, restore urban waterfronts, resolve coastal land use conflicts, and protect/enhance coastal wetlands, streams, watersheds, and agricultural lands.

California Environmental Quality Act:

The established state policy of environmental protection, maintenance, and enhancement.

California Integrated Water Quality System (CIWQS):

A database of the Water Boards containing information about core regulatory program dischargers.

California Toxics Rule (CTR):

U.S. EPA promulgated water quality criteria for 126 priority pollutants applicable to most of California's inland surface waters and enclosed bays and estuaries.

California Water Plan:

The California Water Plan, required by Water Code Section 10004, contains information about the coordinated control, protection, development, and utilization of water in California, and provides a framework for water managers, legislators, and the public to consider options and make decisions regarding California's water future. The Department of Water Resources updates the plan every 5 years.

Cap:

A layer of clay, or other impermeable material installed over the top of a closed landfill to prevent entry of rainwater and minimize leaching.

Capillary action:

Movement of water through very small spaces due to molecular forces called capillary forces.

Capillary forces:

Forces that cause ground water to rise above the surface of the saturated zone into the spaces between soil particles in the unsaturated zone.

Capillary fringe:

1. The porous material just above the water table that may hold water in the smaller void spaces. 2. The zone above the water table within which the porous medium is saturated by water under less than atmospheric pressure.

Carbon adsorption:

A treatment system that removes contaminants from ground water or surface water by forcing it through tanks containing activated carbon treated to attract the contaminants.

Carbon Neutrality:

In the climate change arena, an association between a carbon producing or emitting action and a carbon reducing action such that they offset each other to result in no net gain for carbon release to the atmosphere.

Cease and Desist Order:

Order issued by Regional Boards for violation or threatened violation of waste discharge requirements and NPDES permits, or for illegal discharge without waste discharge requirements. The order requires the discharger to comply immediately, comply in accordance with a time schedule or in the event of a threatened violation, take remedial or preventive action.

Central Valley Project:

A water and power development and conveyance system operated by the U.S. Bureau of Reclamation.

Channelization:

1. Natural or intentional Straightening and deepening of streams so water moves faster; 2. a marsh-drainage tactic that can interfere with waste assimilation capacity, disturb fish and wildlife habitats, and aggravate flooding.

Check-valve tubing pump:

Water sampling tool also referred to as a Water Pump.

Chemical Oxygen Demand (COD):

A measure of the oxygen required to oxidize all compounds, both organic and inorganic, in water.

Chlorination:

The application of chlorine to drinking water, sewage, or industrial waste to disinfect or to oxidize undesirable compounds.

Chlorpyrifos:

An insecticide that sometimes is found in runoff.

Chlorine-contact chamber:

That part of a water treatment plant where effluent is disinfected by chlorine.

Cistern:

Small tank or storage facility used to store water for a home or farm; often used to store rainwater.

Citizen monitoring:

Efforts made by community volunteers to monitor the local water quality conditions.

CIWQS Review Panel:

A panel commissioned by the Water Boards in May 2007 to review and recommend improvements in CIWQS.

Clarification:

Clearing action that occurs during wastewater treatment when solids settle out. This is often aided by centrifugal action and chemically induced coagulation in wastewater.

Clarifier:

A tank in which solids settle to the bottom and are subsequently removed as sludge.

Class I Priority Violations:

Those violations the Water Boards identify as posing the greatest threat of harm to water quality and/or public health and will be defined specifically in the 2008 Water Quality Enforcement Policy.

Clean Water Act:

Federal legislation enacted in 1972 to restore and maintain the chemical, physical and biological integrity of the surface waters of the United States. The stated goals of the Act are that all waters be fishable and swimmable.

Cleanup and Abatement Order:

An order which requires a discharger to clean up waste, abate its effects, and, in a case of threatened pollution, take necessary remedial action.

Clear cut:

Harvesting all the trees in one area at one time: a practice that can encourage fast runoff, erosion, sedimentation of streams and lakes, and flooding to destroy vital habitat.

Coastal zone:

Land and water adjacent to the coast that exert an influence on the uses of the sea and its ecology, or whose uses and ecology are affected by the sea.

Coliform index:

Rating water purity based on a count of fecal bacteria.

Collector sewers:

Pipes used to collect and carry wastewater from individual sources to an interceptor sewer that will carry it to a treatment facility.

Combined sewer overflows:

Discharge of a mixture of storm water and domestic waste when the flow capacity of a sewer system is exceeded during rainstorms.

Combined sewers:

A sewer system that carries both sewage and storm water runoff. Normally, its entire flow goes to a waste treatment plant, but during a heavy storm, the volume of water may be so great as to cause overflows of untreated mixtures of storm water and sewage into receiving waters. Storm water runoff may also carry toxic chemicals from industrial areas or streets into the sewer system.

Common law:

A body of law derived from court decisions based and precedent rather than codified written laws.

Community water system:

A public water system that serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents.

Complete treatment:

A method of treating water with the addition of coagulant chemicals, flash mixing, coagulation-flocculation, sedimentation, and filtration. Also called conventional filtration.

Composite sample:

A series of water samples taken over a given period of time and weighted by flow rate.

Concentrated animal feeding operation (CAFO):

An animal feeding operation that either has the potential to discharge to surface waters or exceeds a U.S. EPA defined animal threshold (e.g. 700 mature dairy cows, 1,000 cattle, 55,000 turkeys etc.) CAFOs are subject to NPDES permitting.

Confined aquifer:

An aquifer that is separated from the atmosphere by impermeable materials such as rock or clay.

Consent decree:

A judicial document formalizing an agreement reached between U.S.EPA and third parties regarding compliance with the *Clean Water Act*. A consent decree may also bind potentially responsible parties to perform a cleanup action at a Superfund site. The consent decree may be subject to a public comment period.

Consumptive use:

A use where a significant portion of water is removed from available water supplies without return to a water resources system, e.g., water used in agriculture or food preparation.

Constituent:

An informal term used to describe a detectable element or component or attribute of waste or effluent.

Contaminant:

Defined in the federal Safe Drinking Water Act as any physical, chemical, biological, or radiological substance or matter in air, water, or soil. The Department of Health Service administers the Safe Drinking Water Act in California.

Contamination:

An impairment of the quality of the waters of the state by waste to a degree, which creates a hazard to the public health through poisoning or through the spread of disease. Includes an equivalent resulting from the disposal of waste, whether or not waters are affected.

Contiguous zone:

The portion of ocean waters between the state and federal territorial limits.

Continuous sample:

A flow of water, waste, or other material from a particular place in a plant away from the location where samples are collected for testing. May be used to obtain grab or composite samples.

Conventional systems:

Systems that have been traditionally used to collect municipal wastewater in gravity sewers and convey it to a central primary or secondary treatment plant prior to discharge to surface waters.

Conveyance loss:

Water loss in pipes, channels, conduits, and ditches by leakage or evaporation.

Cross-connection:

Any actual or potential connection between a drinking water system and an unapproved water supply or other source of contamination.

Cross-contamination:

A condition created when a drill hole, boring, or improperly constructed well forms a pathway for fluid movement between a saturated zone which contains pollutants and a formerly separated saturated zone containing uncontaminated groundwater. Also, where potable water supplies and sanitary services are interconnected.

Cubic feet per second:

The rate of flow passing any point equal to the volume of one cubic foot of water every second. One cubic foot is equal to 7.48 gallons per second; 448.8 gallons per minute; 646,317 gallons per day.