Water Words

D

Dead end:
The end of a water main that is not connected to other parts of the distribution system.

Decomposable waste:
Waste, under suitable natural conditions, that can be transformed through biological and chemical processes into compounds that do not impair the state's water quality. Incomplete decomposition may result in some water quality degradation (i.e. hardness, taste, odor, etc.).

Delta:
The distributory at the lower end of a river where the channel is subdivided into several smaller channels with intervening islands.

Dense non-aqueous phase liquid (DNAPL):
Non-aqueous phase liquids, such as chlorinated hydrocarbon solvents or petroleum fractions, with a specific gravity greater than 1.0 that sinks through the water column until they reach a confining layer. Because they are at the bottom of aquifers instead of floating on the water table, typical monitoring wells do not indicate their presence.

Density:
A measure of how heavy a specific volume of a solid, liquid, or gas is in comparison to water.

Depletion curve:
In hydraulics, a graphical representation of water depletion from storage stream channels, surface soil, and groundwater. A depletion curve can be drawn for base flow, direct runoff, or total flow.

Deposition:
The laying down of material by erosion or transport by water or air.

Desalination:
1. Removing salts from ocean or brackish water by using various technologies, 2. removal of salts from soil by artificial means, usually leaching.

Designated uses:
Those water uses identified in state water quality standards and required by the Clean Water Act that must be achieved and maintained. Uses can include cold-water fisheries, public water supply, and irrigation. (See Beneficial Use)

Designated waste:
Nonhazardous waste which consists of or contains pollutants which, under ambient environmental conditions at the waste management unit, could be released at concentrations in excess of applicable water quality objectives, or which could cause degradation of waters of the state. Also applies to hazardous waste that has been granted a variance from hazardous waste management requirements.

Detention time:
1. The theoretical calculated time required for a small amount of water to pass through a tank at a given rate of flow; 2. the actual time that a small amount of water is in a settling basin, flocculating basin, or rapid-mix chamber; 3. in storage reservoirs, the length of time water will be held before being used.

Detergent:
Synthetic washing agent that helps remove dirt and oil. Some contain compounds that kill useful bacteria and encourage algae growth when they are in wastewater that reaches receiving waters.

Dewater:
1. Remove or separate a portion of the water in a sludge or slurry to dry the sludge so it can be handled and disposed; 2. Remove or drain the water from a tank or trench.

Diazinon:
An insecticide sometimes found in runoff.

Digester:
In wastewater treatment, a closed tank; in solid-waste conversion, a unit in which bacterial action is induced and accelerated in order to break down organic matter and establish the proper carbon to nitrogen ratio.

Dilution credit:
A numerical value associated with a mixing zone that accounts for the receiving water entrained into a discharge. A dilution credit may be used in the calculation of effluent limitations. It is calculated from the dilution ratio or determined through conducting a mixing zone study or modeling of the discharge and receiving water. (See Dilution ratio)

Dilution ratio:
The critical low flow of the upstream receiving water divided by the flow of the effluent discharged. It represents the ability of the stream to assimilate waste.

Dioxin:
Any of a family of compounds known chemically as dibenzo-p-dioxins. Concerns arise from their potential toxicity as contaminants in commercial products. Tests on laboratory animals indicate that Dioxin is one of the more toxic anthropogenic (artificial) compounds.

Direct filtration:
A method of treating water that consists of adding coagulant chemicals, flash mixing, coagulation, minimal flocculation, and filtration.

Discharger:
Any person who proposes to discharge or discharges waste that could affect the quality of California waters. The term includes any person who owns, or is responsible for the operation of, a waste management unit.

Disinfectant:
A chemical or physical process that kills pathogenic organisms in water. Chlorine is often used to disinfect sewage treatment effluent, water supplies, wells, and swimming pools.

Disinfectant byproduct:
A compound formed by the reaction of a disinfectant such as chlorine with organic material in the water supply; a chemical byproduct of the disinfection process.

Disinfectant time:
The time it takes water to move from the point of disinfectant application (or the previous point of residual disinfectant measurement) to a point before or at the point where the residual disinfectant is measured. In pipelines, the time is calculated by dividing the internal volume of the pipe by he maximum hourly flow rate; within mixing basins and storage reservoirs it is determined by tracer studies of an equivalent demonstration.

Dissolved Oxygen (DO):
The oxygen freely available in water. Dissolved oxygen is vital for the prevention of odors. Dissolved oxygen levels are considered an important indicator of a water body's ability to support desirable aquatic life. Secondary and advanced waste treatments are generally designed to ensure adequate dissolved oxygen in waste-receiving waters.

Dissolved solids:
Disintegrated organic and inorganic material in water. Excessive amounts make water unfit to drink or use in industrial processes.

Dormant:
Unexercised, not active, but capable of being exercised, as a dormant riparian right to use water.

Down gradient:
The direction that groundwater flows; similar to "downstream" for surface water.

Draft:
The act of drawing or removing water from a tank, reservoir or groundwater supply.
(See also Overdraft)

Draft permit:
A preliminary set of waste discharge requirements drafted and published by the State Water Board or regional board and is subject to public review and comment before final action on the application. (See Permit)

Drainage basin:
The area of land that drains water, sediment, and dissolved materials to a common outlet at a point along a stream channel. (See River basin)

Drainage reuse:
Reuse of agricultural drainage on salt-tolerant crops.

Drainage well:
A well drilled to carry excess water off agricultural fields. Because they act as a funnel from the surface to the groundwater below, drainage wells can contribute to groundwater pollution.

Drawdown:
1. The drop in the water table or level of groundwater when water is being pumped from a well; 2. the amount of water used from a tank or reservoir; 3. the drop in the water level of a tank or reservoir.

Dredging:
Removal of mud from the bottom of water bodies. This can disturb the ecosystem and cause silting that kills aquatic life. Dredging of contaminated mud can expose biota (the flora and fauna of a region) to heavy metals and other toxics. Dredging activities may be subject to Water Boards' regulation under state and federal laws.

Drought conditions:
Hydrologic conditions during a defined period when rainfall and runoff are much less than average.