

# Water Words

## R

**Radionuclide:**

Radioactive particle, man-made (anthropogenic) or natural, with a distinct atomic weight number. Can have a long life as soil or water pollutant.

**Radius of influence:**

1. The radial distance from the center of a wellbore to the point where there is no lowering of the water table or potentiometric surface (the edge of the cone of depression); 2. The radial distance from an extraction well that has adequate airflow for effective removal of contaminants when a vacuum is applied to the extraction well.

**Raw sewage:**

An untreated municipal discharge and its contents.

**Reasonable potential analysis:**

An analysis used to determine if an effluent will discharge pollutants at a level that will cause, have the reasonable potential to cause, or contribute to an exceedance of any State water quality standard.

**Recarbonization:**

Process in which carbon dioxide is bubbled into water being treated to lower the pH.

**Receiving waters:**

A river, lake, ocean, stream or other watercourse into which effluent is discharged.

**Recharge:**

The process by which water is added to a saturation zone, usually by percolation from the soil surface.

**Recharge area:**

A land area in which water reaches the zone of saturation from surface infiltration.

**Recharge rate:**

The quantity of water per unit of time that replenishes or refills an aquifer.

**Reclaimed wastewater:**

Treated wastewater that can be reused for beneficial purposes such as irrigation. (See also Recycled water).

**Recycled water:**

Water that is used more than one time before it passes back into the natural hydrologic system and is suitable for a beneficial use. (See also Reclaimed wastewater)

**Recycled Water Task Force:**

Established in 2002, the Recycled Water Task Force was created to make recommendations on approaches to increase California's supply and use recycled water. The Task Force was made up of experts on the safe and beneficial uses of recycled water, including a broad range of community participants, and representatives from environmental organizations and industry. (Task Force recommendations can be found in the June 2003 *Recycle Water Task Force Final Report: Water Recycling 2030.*)

**Region 1:**

North Coast Regional Water Quality Control Board (NCRWQCB), located in Santa Rosa.

**Region 2:**

San Francisco Bay Regional Water Quality Control Board (SFBRWQCB), located in Oakland.

**Region 3:**

Central Coast Regional Water Quality Control Board, located in San Luis Obispo.

**Region 4:**

Los Angeles Regional Water Quality Control Board, located in Los Angeles.

**Region 5:**

Central Valley Regional Water Quality Control Board; field offices in Sacramento, Redding and Fresno.

**Region 6:**

Lahontan Regional Water Quality Control Board, located in South Lake Tahoe; field office also in Victorville.

**Region 7:**

Colorado River Basin Regional Water Quality Control Board, located in Palm Desert.

**Region 8:**

Santa Ana Regional Water Quality Control Board, located in Riverside.

**Region 9:**

San Diego Regional Water Quality Control Board, located in San Diego.

**Regional Water Quality Control Boards (Regional Boards):**

The nine Regional Boards located throughout California are defined by watersheds, and are responsible for enforcing water quality standards within their boundaries.

**Release:**

Term defined by the federal Superfund program. Any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment of a hazardous or toxic chemical or extremely hazardous substance.

**Remediation:**

1. Methods used to remove or contain a toxic spill or hazardous materials from a Superfund site; 2. A generic term used to describe cleanup activities.

**Reservoir:**

Any natural or artificial holding area used to store, regulate, or control water.

**Residual:**

Amount of a pollutant remaining in the environment after a natural or technological process has occurred.

**Residual saturation:**

Saturation level below which fluid drainage will not occur.

**Residue:**

The dry solids remaining after the evaporation of a sample of water or sludge.

**Resolution:**

A formal action that is adopted by the State or Regional Board on a variety of official matters. Resolutions have been issued in the past to adopt policies, approve basin plans, and to award grants and loans.

**Resource Conservation and Recovery Act (RCRA):**

RCRA is a federal statute that requires the safe management and disposal of waste generated nationwide. RCRA was passed in 1976 as an amendment to the Solid Waste Disposal Act of 1956 and was last amended in 1984. The 1984 amendments are referred to as the Hazardous and Solid Waste Amendments (HSWA). There are three RCRA interrelated programs, which include:

- the Solid Waste Program (Subtitle D) which sets criteria for municipal solid waste and other non-hazardous waste disposal facilities and prohibits open dumping of solid waste;
- the Hazardous Waste Program (Subtitle C) which manages hazardous waste from the time it is generated until it is disposed (referred to as cradle to grave); and
- the Underground Storage Tank Program (Subtitle I), which regulates underground storage, tanks storing petroleum or other hazardous substances.

**Retrofitting:**

Installing modern pollution control devices at facilities without making major changes to the facility's design.

**Return flow:**

1. Surface water that returns to the natural environment after diversion for beneficial uses, such as for irrigation; 2. Subsurface flow of a stream that re-emerges at the surface.

**Reuse:**

The additional use of previously used water.

**Reverse osmosis:**

A treatment process used in water systems by adding pressure to force water through a semi-permeable membrane. Reverse osmosis removes most drinking water contaminants. Also used in wastewater treatment.

**Rill:**

A small channel eroded into the soil by surface runoff; can be easily smoothed out or obliterated by normal tillage.

**Riparian habitat:**

Areas adjacent to rivers and streams with a differing density, diversity, and productivity of plant and animal species relative to nearby uplands.

**Riparian water rights:**

Rights that come with the ownership of land adjacent to a water source wherein owners of land adjacent to a stream have the right to make reasonable use of a correlative share of the natural flow stream.

**Riparian vegetation:**

The vegetation along a watercourse that is distinguished from other vegetation by its dependence on the combination of soil moisture and other environmental factors provided by a permanent or intermittent stream.

**Riparian zone:**

The zone characterized by riparian vegetation.

**River basin:**

The land area drained by a river and its tributaries (See also Drainage basin).

**Rodenticide:**

A chemical or agent used to destroy rats or other rodent pests, or to prevent them from damaging food, crops, etc.

**Runoff:**

Precipitation, snowmelt, or irrigation water in excess of what can infiltrate the soil surface and be stored in small surface depressions. A major transporter of nonpoint source pollutants to rivers, streams, and lakes (See also Surface runoff).