

## GLOSSARY

**Alluvium** A stratified bed of sand, gravel, silt, and clay deposited by flowing water.

**Applied Water Demand** The quantity of water delivered to the intake of a city's water system or factory, the farm headgate, or a marsh or other wetland, either directly or by incidental drainage flows (this is primarily for wildlife areas). For instream use, it is the portion of the streamflow dedicated to instream use or reserved under the federal or State Wild and Scenic Rivers Acts.

**Aquifer** A geologic formation that stores and transmits water and yields significant quantities of water to wells and springs.

**Dependable yield** The average quantity of water that can be extracted from an aquifer or groundwater basin over a period of time (during which water supply conditions approximate average conditions) without resulting in adverse effects such as subsidence, sea water intrusion, permanently lowered groundwater levels, or degradation of quality. If water management in the basin changes, the perennial yield of the basin may change.

**Disinfected Secondary-2.2 Recycled Water** Recycled water that has been oxidized and disinfected so that the median concentration of total coliform bacteria in the disinfected effluent does not exceed a most probable number (MPN) of 2.2 per 100 milliliters utilizing the bacteriological results of the last seven days for which analyses have been completed and the number of total coliform bacteria does not exceed a MPN of 23 per 100 milliliters in more than one sample in any 30-day period (Proposed definition in Title 22, Division 4, Chapter 3 in California Code of Regulations, approval pending).

**Disinfected Secondary-23 Water** Recycled water that has been oxidized and disinfected so that the median concentration of total coliform bacteria in the disinfected effluent does not exceed a most probable number (MPN) of 23 per 100 milliliters utilizing the bacteriological results of the last seven days for which analyses have been completed and the number of total coliform bacteria does not exceed a MPN of 240 per 100 milliliters in more than one sample in any 30-day period (Proposed definition in Title 22, Division 4, Chapter 3 in California Code of Regulations, approval pending).

**Disinfected Tertiary Recycled Water** Recycled water that has been filtered and disinfected, meeting the following criteria: (a) disinfected by either: (1) a chlorine disinfection process that provides a CT (chlorine concentration times modal contact time) value of not less than 450 milligram-minutes per liter at all times with a modal contact time of at least 90 minutes, based on peak dry weather design flow; or (2) a disinfection process that, when combined with the filtration process, has been demonstrated to reduce the concentration of plaque-forming units of F-specific bacteriophage MS2, or polio virus, per unit volume of water in the wastewater to one hundred thousandths of the initial concentration in the filter influent throughout the range of

qualities of wastewater that will occur during the recycling process; (b) the median concentration of total coliform bacteria in the disinfected effluent does not exceed a most probable number (MPN) of 2.2 per 100 milliliters utilizing the bacteriological results of the last seven days for which analyses have been completed and the number of total coliform bacteria does not exceed a MPN of 23 per 100 milliliters in more than one sample in any 30-day period. No sample shall exceed a MPN of 240 total coliform bacteria per 100 milliliters. (Proposed definition in Title 22, Division 4, Chapter 3 in California Code of Regulations, approval pending).

***En echelon*** Said of geologic features that are in an overlapping or staggered arrangement. Each is relatively short, but collectively they form a linear zone, in which the strike of the individual features is oblique to that of the zone as a whole.

***Eolian*** Caused or carried by wind.

***Evapotranspiration*** The quantity of water transpired (given off), retained in plant tissues, and evaporated from plant tissues and surrounding soil surfaces. Quantitatively, it is usually expressed in terms of depth of water per unit area during a specified period of time.

***Evapotranspiration of applied water (ETAW)*** The portion of the total evapotranspiration that is provided by irrigation.

***Fluvial*** Of or pertaining to a river or rivers or produced by the action of a stream or river.

***Geomorphic*** Pertaining to the form of the earth or of its surface features.

***Groundwater*** Water that occurs beneath the land surface and completely fills all pore spaces of the alluvium, soil, or rock formation in which it is situated.

***Groundwater basin*** A groundwater reservoir, defined by an overlying land surface and the underlying permeable materials capable of furnishing a significant supply of groundwater to wells or storing a significant amount of water. A groundwater basin is delineated by reasonably well-defined boundaries in a lateral and vertical direction. It is three-dimensional and includes both the surface extent and all of the subsurface water-yielding material; however, the surface boundaries of the basin should not be construed to imply that those boundaries extend vertically downward in a third dimension.

***Groundwater subbasin*** A subbasin is a subdivision of a groundwater basin that is delineated using geologic and hydrogeologic conditions, such as faults or zones of low permeability, or consideration of institutional boundaries for purposes of collecting and analyzing data.

***Groundwater recharge*** Increase groundwater storage by natural conditions or by human activity.

**Hydraulic gradient** In an aquifer, the rate of change of total head per unit of distance of flow at a given point and in a given direction.

**Infiltration** The movement of water into a soil or porous rock above the saturated zone.

**Irrigation efficiency** The efficiency of water application and use computed by dividing evapotranspiration of applied water by applied water and converting the result to a percentage. Efficiency can be computed at three levels: farm, district, or basin.

**Net water demand (net water use)** The amount of water needed in a water service area to meet all requirements. It is the sum of evapotranspiration of applied water in an area, the irrecoverable losses from the distribution system, and the outflow leaving the service area; it does not include reuse of water within a service area (such as reuse of deep-percolated applied water or use of tail water).

**Overdraft** The condition of a groundwater basin or subbasin 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 the water supply conditions approximate average conditions (Department of Water Resources, Bulletin 118 Update, Draft 2002).

**Pacific Flyway** A geographic course along which birds customarily migrate between breeding and wintering areas.

**Per capita water use** The water produced by or introduced into the system of a water supplier divided by the total residential population; normally expressed in gallons per capita per day.

**Pyroclastic** Pertaining to clastic rock material formed by volcanic explosion or aerial expulsion from a volcanic vent; also, pertaining to rock texture of explosive origin. It is not synonymous with the adjective “volcanic.”

**Runoff** The surface flow of water from an area; the total volume of surface flow from an area during a specified time.

**Safe yield** A technical definition of groundwater basin yield that has been adopted by the courts to define the legal rights to extract groundwater in a basin.

**Secondary treatment** In wastewater treatment systems, it is the biological process of reducing suspended, colloidal, and dissolved organic matter in the effluent from primary treatment systems. Secondary treatment is usually carried out through the use of trickling filters or by the activated sludge process.

**Sensitive Resource Area (SRA)** Designation used by the San Luis Obispo County Department of Planning and Building for an environmentally sensitive habitat area.

**Service area** The geographical land area served by a distribution system of a water agency.

**Strike-slip fault** A fault on which the movement is parallel to the fault's strike.

**Transmissivity** The rate at which water is transmitted through a unit width of the aquifer under a unit hydraulic gradient.

**Transpiration** An essential physiological process in which plant tissues give off water vapor to the atmosphere.

**Tuff** A general term for all consolidated pyroclastic rocks.

**Unrecoverable losses** The water lost to a salt sink or lost by evaporation or evapotranspiration from a conveyance facility, drainage canal, or in fringe areas.

**Vadose water** Groundwater suspended or in circulation above the water table.

**Water conservation** Reduction in applied water resulting from more efficient use of water such as implementation of urban best management practices or agricultural efficient water management practices. The extent to which these actions actually create a savings in water supply depends on how they affect net water use and depletion.

**Watershed** The area of land from which water drains into a river or stream. Also called drainage basin.

**Water year** A continuous 12-month period for which hydrologic records are compiled and summarized. In California, it begins on October 1 and ends September 30 of the following year. It is usually designated by the second year.

**Zone of aeration** A subsurface zone containing water under pressure less than that of the atmosphere, including water held by capillarity, and containing air or gases generally under atmospheric pressure.