

PART VIII: GLOSSARY

10-year, 24-hour storm - A rainfall event of 24-hour duration and 10-year frequency that is used to calculate the runoff volume and peak discharge rate to a best management practice (BMP).

25-year, 24-hour storm - A rainfall event of 24-hour duration and 25-year frequency that is used to calculate the runoff volume and peak discharge rate to a BMP.

Adsorption - The adhesion of one substance to the surface of another.

Ahupua'a - In ancient Hawaii, the division of land known as an ahupua'a generally ran from the sea to the mountains. A principle very largely obtaining in these divisions of territory was that a land should run from the sea to the mountains, thus affording to the chief and his people a fishery residence at the warm seaside, together with the products of the high lands, such as fuel, canoe timber, mountain birds, and the right of way to the same, and all the varied products of the intermediate land as might be suitable to the soil and climate of the different altitudes from sea soil to mountainside or top.

Animal Unit - A unit of measurement for any animal feeding operation calculated by adding the following numbers: the number of slaughter and feeder cattle multiplied by 1.0, plus the number of mature dairy cattle multiplied by 1.4, plus the number of swine weighing over 25 kilograms (approx. 55 pounds) multiplied by 0.4, plus the number of sheep multiplied by 0.1, plus the number of horses multiplied by 2.0.

Animal waste - Animal waste (manure) includes the fecal and urinary wastes of livestock and poultry; process water (such as from a milking parlor); and the feed, bedding, litter, and soil with which they become intermixed.

Backflow prevention device - A safety device used to prevent water pollution or contamination by preventing flow of water and/or chemicals in the opposite direction of that intended.

Benthic - Associated with the sea bottom.

Berm - A low earth fill constructed in the path of flowing water to divert its direction, or constructed to act as a counterweight beside the road fill to reduce the risk of foundation failure (buttress).

Best Management Practice (BMP) - A practice or combination of practices that are determined to be the most effective and practicable (including technological, economic, and institutional considerations) means of controlling point and nonpoint pollutants at levels compatible with environmental quality goals.

Biochemical oxygen demand (BOD) - the quantity of dissolved oxygen used by microorganisms in the biochemical oxidation of organic matter and oxidizable inorganic matter by aerobic biological action.

Cable logging - A system of transporting logs from stump to landing by means of steel cables and winch. This method is usually preferred on steep slopes, wet areas, and erodible soils where tractor logging cannot be carried out effectively.

Channel - A natural or constructed waterway that continuously or periodically passes water.

Channelization or **channel modification** - These terms (used interchangeably) describe river and stream channel engineering systems that facilitate flood control, navigation, drainage improvement, and reduction of channel migration potential. Activities such as straightening, widening, deepening, or relocating existing stream channels and clearing or snagging operations fall into this category.

Chemigation - The addition of one or more chemicals (fertilizers or pesticides) to the irrigation water.

Confined animal facility - A lot or facility (other than an aquatic animal production facility) where the following conditions are met:

- Animals (other than aquatic animals) have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period, and
- Crops, vegetation forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility.

Constructed wetland - Engineered systems designed to simulate natural wetlands to exploit the water purification functional value for human use and benefits. Constructed wetlands consist of former upland environments that have been modified to create poorly drained soils and wetlands flora and fauna for the primary purposes of contaminant or pollutant removal from wastewaters or runoff. Constructed wetlands are essentially wastewater treatment systems and are designed and operated as such even though many systems do support other functional values.

Contour - An imaginary line on the surface of the earth connecting points of the same elevation. A line drawn on a map connecting the points of the same elevation.

Conveyance system - The drainage facilities, both natural and human-made, which collect, contain, and provide for the flow of surface water and urban runoff from the highest points on the land down to a receiving water. The natural elements of the conveyance system include swales and small drainage courses, streams, rivers, lakes, and wetlands. The human-made elements of the conveyance system include gutters, ditches, pipes, channels, and most retention/ detention facilities.

Culvert - A metal, wooden, plastic, or concrete conduit through which surface water can flow under or across roads.

Cumulative effect - The impact on the environment that results from the incremental impact of an action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such action.

Dams - Constructed impoundments that are either: (1) 25 feet or more in height *and* greater than 15 acre-feet in capacity; or (2) 6 feet or more in height *and* greater than 50 acre-feet in capacity.

Denitrification - The chemical or biochemical reduction of nitrate or nitrite to gaseous nitrogen, either as molecular nitrogen or as an oxide of nitrogen.

Deposition - The accumulation of material dropped because of a slackening movement of the transporting material - water or wind.

Dissolved oxygen (DO) - The concentration of free molecular oxygen in the water column.

Diversion - A channel, embankment, or other man-made structure constructed to divert water from one area to another.

Ecosystem - The complex of a community and its environment functioning as an ecological unit in nature; a basic functional unit of nature comprising both organisms and their nonliving environment, intimately linked by a variety of biological, chemical, and physical processes.

Erosion - Wearing away of the land surface by running water, glaciers, winds, and waves. Erosion occurs naturally from weather or runoff but can be intensified by land-clearing practices related to farming, residential or industrial development, road building, or timber cutting. The term erosion is usually preceded by a definitive term denoting the type or source of erosion such as gully erosion, sheet erosion, or bank erosion.

Fallow - Allowing cropland to lie idle, either tilled or untilled, during the whole or greater portion of the growing season.

Fecal coliform - Bacteria present in mammalian feces, used as an indicator of the presence of human feces, bacteria, viruses, and pathogens in the water column.

Fertilizer - Any organic or inorganic material of natural or synthetic origin that is added to a soil to supply elements essential to plant growth.

Filtration - The process of being passed through a filter (as in the physical removal of impurities from water) or the condition of being filtered.

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Ground water - Subsurface water occupying the zone of saturation. In a strict sense, the term is applied only to water below the water table.

Habitat - The place where an organism naturally lives or grows.

Hydromodification - An alteration of the hydrologic characteristics of coastal and noncoastal waters, which in turn could cause degradation of water resources. In other words, any alteration to a stream or coastal waters, whether a diversion, channel, dam or levee, is considered a hydromodification.

Impervious surface - A hard surface area that either prevents or retards the entry of water into the soil mantle as under natural conditions prior to development and/or a hard surface area that causes water to run off the surface in greater quantities or at an increased rate of flow from the flow present under natural conditions prior to development. Common impervious surfaces include, but are not limited to, rooftops, walkways, patios, driveways, parking lots, storage areas, concrete or asphalt paving, gravel roads, packed earthen materials, and oiled, macadam, or other surfaces that similarly impede the natural infiltration of urban runoff. Open, uncovered retention/ detention facilities shall not be considered as impervious surfaces.

Impoundment - The collection and confinement of water as in a reservoir or dam.

Infiltration - The penetration of water through the ground surface into subsurface soil or the penetration of water from the soil into sewer or other pipes through defective joints, connections, or manhole walls.

Integrated Pest Management (IPM) - A pest population management system that anticipates and prevents pests from reaching damaging levels by using all suitable tactics including natural enemies, pest-resistant plants, cultural management, and the judicious use of pesticides, leading to an economically and environmental safe agriculture.

Intermittent stream - Stream that carries water most of the time but ceases to flow occasionally because evaporation or seepage into its bed and banks exceed the available streamflow. For the purposes of this management plan, intermittent streams will also include:

ephemeral streams that carry water only after rains; and
interrupted streams that carry water generally through their length but may have sections with dry streambeds.

Irrigation - Application of water to lands for agricultural purposes.

Leaching - The removal from the soil-in-solution of the more soluble materials by percolating waters.

Management measure - An economically achievable measure for the control of the addition of pollutants from existing and new categories and classes of nonpoint sources of pollution, which reflects the greatest degree of pollutant

reduction achievable through the application of the best available nonpoint pollution control practices, technologies, processes, siting criteria, operating methods, or other alternatives.

NPDES - National Pollutant Discharge Elimination System. A permitting system for point source polluters regulated under Section 402 of the Clean Water Act.

Nutrients - Elements, or compounds, essential as raw materials for organism growth and development, such as carbon, nitrogen, phosphorus, etc.

On-site disposal system (OSDS) - A sewage disposal system designed to treat wastewater at a particular site. Septic tank systems are common OSDS.

Pasture - Grazing lands planted primarily to introduced or domesticated native forage species that receives periodic renovation and/or cultural treatments such as tillage, fertilization, mowing, weed control, and irrigation. Not in rotation with crops.

Percolation - The downward movement of water through the soil.

Perennial stream - A stream that carries water all the time.

Permeability - The quality of a soil horizon that enables water or air to move through it; may be limited by the presence of one nearly impermeable horizon even though the others are permeable.

Persistence - The relative ability of a pesticide to remain active over a period of time.

Pesticide - This term includes any substance or mixture of substances used for preventing, destroying, repelling, or mitigating any pest or intended for use as a plant regulator, defoliant, or desiccant.

Pollutant - Dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste discharged into water (Section 502(6) of The Clean Water Act as amended by the Water Quality Act of 1987, PL 100-4).

Pollution abatement function - The ability of a wetland or riparian area to remove pollutants from runoff passing through the wetland or riparian area.

Postdevelopment peak runoff - Maximum instantaneous rate of flow during a storm, after development is complete.

Predevelopment - This term refers to the sediment loadings and runoff volumes/velocities that exist onsite immediately before the planned land disturbance and

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development activities occur. Predevelopment is not intended to be interpreted as that period before any human-induced land disturbance activity has occurred.

Prescribed burning - Skillful application of fire to natural fuels that allows confinement of the fire to a predetermined area and at the same time produces certain planned benefits.

Range - Land on which the native vegetation (climax or natural potential) is predominantly grasses, grass-like plants, forbs, or shrubs. Includes lands revegetated naturally or artificially when routine management of that vegetation is accomplished mainly through manipulation of grazing. Range includes natural grasslands, savannas, shrublands, most deserts, tundra, alpine communities, coastal marshes, wet meadows, and riparian areas.

Residence time - The length of time water remains in a waterbody. Generally the same as ***flushing time***.

Right-of-way - The cleared area along the road alignment that contains the roadbed, ditches, road slopes, and back slopes.

Riparian areas - Vegetated ecosystems along a waterbody through which energy, materials, and water pass. Riparian areas characteristically have a high water table and are subject to periodic flooding and influence from the adjacent waterbody. These systems encompass wetlands, uplands, or some combination of these two land forms; they will not in all cases have all of the characteristics necessary for them to be classified as wetlands.

Root zone - The part of the soil that is, or can be, penetrated by plant roots.

Runoff - That part of precipitation, snow melt, or irrigation water that runs off the land into streams or other surface water. It can carry pollutants from the air and land into the receiving waters.

Sediment - Sediment is the result of erosion. It is the solid material, both mineral and organic, that is in suspension, is being transported, or has been moved from its site of origin by air, water, or gravity.

Settleable solids - Solids in a liquid that can be removed by stilling a liquid. Settling times of 1 hour or more are generally used.

Shoreline erosion - This term is used in this report to refer to the loss of beach or fastland in tidal portions of coastal bays or estuaries.

Silt fence - A temporary barrier used to intercept sediment-laden runoff from small areas.

Skid trail - A temporary, nonstructural pathway over forest soil used to drag felled trees or logs to the landing.

Stream - Any natural water course in which water usually flows in a defined bed or channel, whether or not the flow is constant, uniform, or uninterrupted, and regardless of whether the stream has been altered or channelized. In distinguishing between a stream and other water features such as gullies, the most significant feature of a stream is the existence of a streambed that has graded or sorted deposits consisting primarily of sand, gravel, and boulders.

Streambank - The side slopes of a channel between which the streamflow is normally confined.

Streambank erosion - This term is used in this report to refer to the loss of fastland along nontidal streams and rivers.

Streamside management zone (SMZ) - A designated area that consists of the stream itself and an adjacent area of varying width where management activities that might affect water quality, fish, or other aquatic resources are modified to mitigate the adverse effects. The SMZ is not an area of exclusion, but an area of closely managed activity.

Suspended sediment - The very fine soil particles that remain in suspension in water for a considerable period of time.

Suspended solids - Solid materials that remain suspended in the water column.

Tilth - The physical condition of the soil as related to its ease of tillage, its fitness as a seedbed, and its impedance to seedling emergence and root penetration.

Turbidity - A cloudy condition in water due to suspended silt or organic matter.

Urban runoff - That portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, underflow, or channels or is piped into a defined surface water channel or a constructed infiltration facility.

Vegetated buffer - Strips of vegetation separating a waterbody from a land use with potential to act as a nonpoint pollution source; vegetated buffers (or simply buffers) are variable in width and can range in function from a vegetated filter strip to a wetland or riparian area.

Vegetated filter strip (VFS) - Created areas of vegetation designed to remove sediment and other pollutants from surface water runoff by filtration, deposition, infiltration, adsorption, decomposition, and volatilization. A vegetated filter strip is an area that maintains soil aeration as opposed to a wetland, which at times exhibits anaerobic soil conditions.

Vegetative treatment system (VTS) - A system that consists of a vegetated filter strip, a constructed wetland, or a combination of both.

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Watershed - A drainage area or basin in which all land and water areas drain or flow toward a central collector such as a stream, river, lake, or ocean at a lower elevation.

Wetlands - Areas that are inundated or saturated by surface or ground water at a frequency and duration to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions; wetlands generally include swamps, marshes, bogs, and similar areas.

Yarding - Method of transport (of felled trees) from harvest area to storage landing.