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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 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.

ACP — Agricultural Conservation Program (the ACP is no longer an active USDA program; it was replaced by EQIP).

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

Allelopathy — The inhibition of growth in one species of plants by chemicals produced in another species.

Animal unit (au) — 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 (approximately 55 pounds) multiplied by 0.4, plus the number of sheep multiplied by 0.1, plus the number of horses multiplied by 2.0.

Aquifer — A saturated, permeable geologic unit of sediment or rock that can transmit significant quantities of water under hydraulic gradients.

ASCS — Agricultural Stabilization and Conservation Service of USDA (now called Farm Service Agency).

AUM — Animal unit month. A measure of average monthly stocking rate that is the tenure of one animal unit for a period of 1 month. With respect to the literature reviewed for the grazing management measure, an animal unit is a mature, 1,000-pound cow or the equivalent based on average daily forage consumption of 26 pounds of dry matter per day (Platts, 1990). Alternatively, an AUM is the amount of forage that is required to maintain a mature, 1,000-pound cow or the equivalent for a one-month period. See animal unit for the NPDES definition.

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 economic and environmental quality goals.

BMP system — A combination of two or more individual BMPs into a "system" that functions to reduce the same pollutant.

Biochemical oxygen demand (BOD) — A quantitative measure of the strength of contamination by organic carbon materials.

Chemigation — The addition of one or more chemicals to the irrigation water.

Conservation management system (CMS) — a generic term used by the NRCS that includes any combination of conservation practices and management that achieves a level of treatment of the five natural resources that satisfies criteria contained in the USDA–Natural Resources Conservation Service *National Handbook of Conservation Practices*, such as a resource management system or an acceptable management system.

Critical area — An area identified in a watershed or project area as having a significant impact on the impaired use of the receiving waters.

Conservation Reserve Enhancement Program (CREP) — A new initiative of CRP which uses financial incentives to encourage farmers and ranchers to voluntarily protect soil, water, and wildlife resources.

Conservation Reserve Program (CRP) — A volunteer program offering annual rental payments, incentive payments, and cost-share assistance for establishing long-term, resource-conserving cover crops on highly erodible land.

CZARA — Coastal Zone Act Reauthorization Amendments of 1990.

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 left in a new position by a natural transporting agent such as water, wind, ice, or gravity, or by the activity of man.

Designated use — A beneficial use type established by a State for each water resource and specified in water quality standards, whether or not it is being attained.

Drainage area — Watershed; an area of land that drains to one point.

Ecosystem — A network of interactions between biological communities and the associated physical environment.

EPA — United States Environmental Protection Agency

Environmental Quality Incentives Program (EQIP) — A voluntary conservation program for farmers and ranchers, offering financial, technical, and educational help to install or implement practices to conserve soil and other natural resources.

Erosion — Wearing away of the land surface by running water, glaciers, winds, and waves. 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.

Eutrophication — The natural process whereby a lake or other body of water evolves from low productivity and low nutrient concentrations to high productivity and high nutrient levels that is greatly accelerated by nutrient enrichment from human activities. Results of eutrophication can include algal blooms, low dissolved oxygen, and changes in community composition.

Fertigation — Application of plant nutrients in irrigation water.

FOTG — USDA-NRCS's Field Office Technical Guide.

FSA — Farm Service Agency, part of the U.S. Department of Agriculture.

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 sound and environmentally safe agriculture.

Lateral — Secondary or side channel, ditch, or conduit.

Leachate — Liquids that have percolated through a soil and that contain substances in solution or suspension.

Management measures — As defined in section 6217(g)(5) of CZARA; "economically achievable measures for the control of the addition of pollutants from existing and new categories and classes of nonpoint sources of pollution, which reflect the greatest degree of pollutant reduction achievable through the application of the best available nonpoint source control practices, technologies, processes, siting criteria, operating methods, and other alternatives."

MCL — Maximum contaminant level. The enforceable standard or number against which a system's treated water samples are judged for compliance with U.S. Environmental Protection Agency regulations.

Micronutrient — A plant nutrient found in relatively small amounts (<100 mg kg^{-1}) in plants. These are usually B, Cl, Cu, Fe, Mn, Mo, Ni, Co, and Zn.

Natural Resources Conservation Service (NRCS) — An agency of the U.S. Department of Agriculture.

Nitrogen (N) — An element occurring in manure and chemical fertilizer that is essential to the growth and development of plants, but which, in excess, can cause water to become polluted and threaten aquatic animals.

NPS pollution — Nonpoint source pollution; pollution originating from diffuse areas (land surface or atmosphere) having no well-defined source.

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

Pasture — Those improved lands that are primarily used for the production of adapted domesticated forage plants for livestock.

Phosphorus (P) — An element occurring in manure and chemical fertilizer that is essential to the growth and development of plants, but which, in excess, can cause water to become polluted and threaten aquatic animals.

Range — Those lands on which the native or introduced vegetation (climax or natural potential plant community) is predominantly grasses, grasslike plants, forbs, or shrubs suitable for grazing or browsing use. Range includes natural grassland, savannas, many wetlands, some deserts, tundra, and certain forb and shrub communities.

Return flow — That portion or the water diverted from a stream that finds its way back to the stream channel either as surface or underground flow.

Resource management system (RMS) — A term used by NRCS defined as a combination of NRCS conservation practices and management identified by land or water uses that, when installed, will prevent resource degradation and permit sustained use by meeting criteria established in the FOTG for treatment of soil, water, air, plant, and animal resources.

Riparian areas — Vegetated ecosystems along a water body 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 water body.

Runoff — The portion of rainfall or snow melt that drains off the land into ditches and streams by overland flow.

Rural Clean Water Program (RCWP) — A 15-year federally sponsored nonpoint source pollution control program initiated in 1980 as an experimental effort to address agricultural nonpoint source pollution problems in watersheds throughout the United States. The program concluded in 1995.

Sediment — The solid material, both mineral and organic, that is in suspension, is being transported, or has been moved from its site or origin by air, water, gravity, or ice.

Sedimentation — The process of sediment deposition.

Tailwater — Irrigation water that reaches the lower end of a field.

Tillage — The mechanical manipulation of the soil profile for any purpose; but in agriculture, it is usually restricted to modifying soil conditions, managing crop residues and/or weeds, or incorporating chemicals for crop production.

Total Maximum Daily Load (TMDL) — The maximum amount of pollution that a water body can receive without violating water quality standards. Total Maximum Daily Loads are the sum of point and nonpoint source loads.

Watershed — A geographic area in which water, sediments, and dissolved materials drain to a common outlet- a point on a larger stream, a lake, an underlying aquifer, an estuary, or an ocean. This area is also called the drainage basin of the receiving water body.

Watershed approach — A coordinating framework for environmental management that focuses public and private sector efforts to address the highest priority problems within hydrologically defined geographic areas, taking into consideration both ground and surface water.