

GLOSSARY

- ablation**—describes processes that remove snow or ice from a glacier, including melting, evaporation, wind erosion, and sublimation
- accretionary**—in this usage, describes the gradual addition of new land to old by the deposition of sediment carried by stream flow
- action level**—the Food and Drug Administration's recommended limit for a toxic substance in the edible portion of a fish, above which fish are not safe to consume and interstate sales are not allowed
- adiabatically**—occurring without loss or gain of heat
- air mass**—a large portion of the atmosphere that is fairly uniform in temperature and humidity
- alluvial fan**—a cone-shaped, poorly sorted deposit of sand, gravel, and fine material formed by a stream where its gradient lessens abruptly
- alluvium**—a general term describing deposits of clay, silt, sand, gravel, or other particulate rock material in a streambed, on a floodplain, or on a delta
- anaerobic**—occurring in the absence of free oxygen
- anion**—a negatively charged ion
- aquifer**—a saturated geologic unit that can transmit significant quantities of water under ordinary hydraulic gradients
- aquitard**—a confining layer that retards but does not prevent the flow of water to or from an adjacent aquifer
- arcuate**—curved or bowed
- argillaceous**—pertaining to, largely composed of, or containing clay-sized particles or clay minerals
- artesian**—see confined
- bank storage**—the water absorbed into the banks of a stream channel when the stage rises above the water table, then returns to the channel as effluent seepage when the stage falls below the water table
- basal contact**—the bottom interface of a rock unit
- base flow**—the portion of stream flow derived largely or entirely from ground-water discharge
- benthic**—describes organisms, sediment, and other material at the bottom of an aquatic system
- biochemical oxygen demand (BOD)**—the amount of dissolved oxygen needed for the decomposition of organic matter in water
- bog**—a poorly drained wetland, usually found in a glacial depression, which is characterized by the presence of saturated organic soil (peat) and acidic ground water; plant decomposition is very slow in this environment
- calcareous**—describes a rock or sediment that contains calcium carbonate
- cation**—a positively charged ion
- channel slope**—the difference in elevation between points 10 percent and 85 percent of the distance along the channel from a gaging station (or discharge point) upstream to the watershed boundary, divided by the distance between the two points; expressed in feet per mile
- channelization**—in this usage, any excavation and construction activities intended to widen, deepen, straighten or relocate a natural river channel; the term does not include maintenance activities on existing channels, such as the clearing of debris or dredging of accumulated sediments
- clast (geology)**—a fragment of rock produced by erosion or weathering
- clastic**—pertaining to a rock or sediment composed principally of broken fragments that are derived from pre-existing rocks or minerals and that have been transported some distance from their places of origin
- combined sewer overflow**—a discharge composed of untreated or partially treated sewage mixed with stormwater
- confined**—describes an aquifer which lies between impermeable formations; confined ground-water is generally under pressure greater than atmospheric; also referred to as artesian
- conformable**—describes strata or groups of strata lying one above another in parallel order as a result of successive depositions uninterrupted by crustal movement
- contaminant (drinking water)**—as defined by the U.S. Environmental Protection Agency, any physical, chemical, biological, or radiological substance in water, including constituents which may not be harmful
- continuous-record station**—a site on a stream or lake where continuous, systematic observations of stage and/or discharge are obtained by recording or nonrecording instruments and periodic measurements of flow
- craton**—a part of the Earth's crust that has attained stability and has been little deformed for a long period of time
- crest-stage station**—a site on a stream or lake where peak stage and/or discharge data are collected systematically over a period of years
- debris flow**—a high-velocity flow of water-laden sediment
- deltaic**—associated with an alluvial deposit at the mouth of a river
- direct runoff**—see runoff, direct
- disintegration**—applied to the natural mechanical breaking down of a rock due to weathering
- dissecting**—the process of being cut by erosion into hills and valleys or into flat upland areas separated by valleys
- drainage basin**—the land area drained by a river and its tributaries; also called watershed or drainage area
- drawdown (ground water)**—the difference between the water level in a well before and during pumping
- drift**—a general term to describe unconsolidated sediment and rock debris transported and deposited by glaciers or glacial streams
- ecosystem (aquatic)**—the community of plants and animals interacting together and with their physical and chemical environment
- end moraine**—see moraine, end
- eolian**—describes sediments deposited after transport by wind
- eolian plain**—a region of low relief consisting primarily of wind-blown deposits
- ephemeral gully erosion**—see erosion, ephemeral gully
- epicontinental**—situated upon a continental plateau or platform
- erosion, ephemeral gully**—uneven removal of soil on tilled land caused by runoff waters converging and flowing along a concentrated flow path, causing scouring of land; a short-term feature, obscured by tillage, which normally occurs more than once per year
- erosion, gully**—uneven removal of soil by running water that forms distinct, narrow channels that are larger and deeper than rills and that cannot be obscured by normal tillage operations
- erosion, rill**—uneven removal of soil by running water that forms many small, closely-spaced channels, typically a few inches deep, that can be obscured by normal tillage operations

- erosion, sheet**—removal of a thin, fairly uniform layer of soil from an extensive area of gently sloping land by broad, continuous sheets of running water or by wind
- eutrophication**—in this usage, a general term describing the process by which lakes and streams become enriched by high concentrations of nutrients such as nitrogen and phosphorus
- evapotranspiration**—a collective term that includes water discharged to the atmosphere as a result of evaporation from the soil and surface-water bodies and by plant transpiration
- facies**—features, such as bedding characteristics or fossil content, which characterize a sediment as having been deposited in a unique environment
- fecal coliform**—bacteria that occur naturally in the intestines of humans and animals; bacterial counts in waterways are used as indicators of pollution from human and animal waste
- fen**—a saturated wetland characterized by the presence of basic or calcareous ground water (as contrasted to a bog); often found as seepage areas on gentle slopes comprised of glacial deposits
- ferruginous**—iron-bearing; also describes rocks of red color
- flood, 100-year**—a statistically-derived flood discharge having an average frequency of occurrence of once in 100 years, or a one percent chance of being equaled or exceeded in any given year
- floodbasin**—in this usage, a physiographic lowland once occupied by a glacial lake and which now includes the geologically recent floodplain and adjacent depositional features
- flowing well**—a well completed in a confined aquifer in which the hydrostatic pressure is greater than atmospheric pressure, and the water rises naturally to an elevation above land surface
- fluvial**—of or pertaining to rivers
- fossiliferous**—containing fossils, which are preserved plant or animal imprints or remains
- geomorphic**—describes physical characteristics of the land surface that are the result of geologic processes
- glacial lobe**—one of the lobate protrusions of the margin of a slowly moving ice mass (glacier) originating from the compaction of snow
- grab sample**—water collected at a single location and at a single time as opposed to a sample composited over space or time
- ground-water discharge**—in this usage, the part of total runoff which has passed into the ground and has subsequently been discharged into a stream channel
- gully erosion**—see erosion, gully
- gypsiferous**—containing gypsum, a mineral consisting of hydrous calcium sulfate
- herbaceous**—with the characteristics of a herb; a plant with no persistent woody stem above ground
- highly erodible (cropland)**—as defined by the U.S. Department of Agriculture, Soil Conservation Service, land on which the potential erosion is at least eight times the rate at which the soil can maintain continued productivity
- horizon (soils)**—a layer of soil, approximately parallel to the land surface, having distinct characteristics produced by soil-forming processes
- hummocky**—describes glacial deposits arranged in mounds with intervening depressions
- hydraulic conductivity**—a parameter that describes the conductive properties of a porous medium; often expressed in gallons per day per square foot
- hydric soil**—soil that in its undrained condition is saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions that favor the growth and regeneration of hydrophytic vegetation
- hydrophyte**—plants typically found in wet habitats; any plant growing in water or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content
- igneous**—describes rocks that solidified from molten or partly molten material
- incised**—describes the result of the process whereby a downward-eroding stream deepens its channel or produces a narrow, steep-walled valley
- industry**—in this usage, a general term encompassing all major employment categories
- infiltration**—the process (rate) by which water enters the soil surface and which is controlled by surface conditions
- interflow**—the part of precipitation which infiltrates the surface soil, and moves laterally toward streams as perched ground water
- interpolate**—to estimate intermediate values of a function between two known points
- intratill**—describes geologic materials contained within a single till unit or between two till units
- kame**—a conical hill or short irregular ridge of gravel or sand deposited in contact with glacial ice
- karst**—topography characterized by closed depressions or sinkholes, caves, and underground drainage formed by dissolution of limestone, dolomite or gypsum
- knoll**—a small, low, rounded hill
- lacustrine**—pertaining to, produced by, or formed in a lake or lakes
- lithologic**—describes the physical character of a rock; includes features such as composition, grain size, color and type of bedding
- loam**—describes a soil composed of a mixture of clay, silt, sand, and organic matter
- macrophyte**—a plant large enough either as an individual or in communities to be readily visible without the aid of optical magnification
- major land resource area**—as defined by the U.S. Department of Agriculture, Soil Conservation Service, a geographic area characterized by a particular pattern of soils, climate, water resources, and land uses
- marsh**—a wet, level, treeless area covered mostly with grasses, sedges or cattails and usually underlain by a mucky or mineral soil; sometimes referred to as a wet meadow
- maximum contaminant level**—the maximum permissible level of a contaminant in water which is delivered to the free-flowing outlet of the user of a public water system
- mean**—arithmetic average of a set of observations
- median**—middle value of a set of observations arranged in order of magnitude
- meltwater**—water resulting from the melting of snow or glacial ice
- methemoglobinemia**—a disease, primarily in infants, caused by the conversion of nitrates to nitrites in the intestines, and which limits the body's ability to receive oxygen
- moraine**—glacial drift deposited chiefly by the direct action of glacial ice
- moraine, end**—a ridgelike accumulation of glacial drift built along any part of the outer margin of an active glacier
- moraine, ground**—glacial drift deposited on the ground surface over which the glacier moved, and generally forming a region of low relief
- morphometry**—in this usage, the structure and form of a lake

- moving average**—a consecutive chronological sequence of arithmetic averages
- normal (climate)**—the average (mean) value for a particular parameter over a designated period, usually the most recent 30-year period ending on the decade
- organic (soils)**—containing partially decomposed plant remains; formal designation depends on relative percentage of organic material and clay
- orographic lifting**—the rising and adiabatic cooling of air as it passes upward over mountains or rough terrain
- outlier (geology)**—an area or group of rocks surrounded by dissimilar rocks
- outwash**—sand and gravel deposited by meltwater streams in front or beyond the margin of active glacial ice
- outwash apron**—a broad slope formed by coalescing outwash fans deposited by meltwater streams
- outwash fan**—a fan-shaped accumulation of primarily sand and gravel deposited by meltwater streams flowing in front of or beyond a glacier
- outwash plain**—a broad, flat or gently sloping sheet of outwash deposited by glacial meltwater streams
- overbank**—describes water or sediment carried out of a stream channel onto the surrounding land surface during a flood
- overland flow**—the part of runoff which passes over the land surface to the nearest stream channel
- oxbow**—a sharp bend in a river forming a distinct crescent or U-shape
- oxbow lake**—the crescent-shaped body of shallow, standing water formed by a cut-off river meander
- parent material (soils)**—the horizon of weathered rock or partly weathered soil material from which soil is formed
- partial-record station**—a site where limited stream-flow and/or water quality data are collected systematically over a period of years
- per capita income**—the total money income of the residents of a given area divided by the resident population of that area; as defined by the U.S. Bureau of the Census, total money income is the sum of all sources of cash income, excluding transfer payments, the imputed value of non-monetary income, and other income included under the Bureau of Economic Analysis' definition of personal income
- percolate (geology)**—to seep downward from an unsaturated zone to a saturated zone
- permeability**—the capacity of a porous medium to transmit a fluid; highly dependent upon the size and shape of the pores and their interconnections
- plankton**—an assemblage of suspended or floating microscopic plants and animals that drift passively with water currents
- physiographic region**—an area of characteristic soils, landforms and drainage that have been developed on geologically similar materials
- phytoplankton**—an assemblage of suspended or floating microscopic plants and animals that drift passively with water currents
- piezometric surface**—an imaginary surface representing the level to which water from a given aquifer will rise under the hydrostatic pressure of the aquifer
- polychlorinated biphenyls (PCBs)**—a family of chlorinated hydrocarbons potentially toxic to animals and humans and that persists in the environment for as long as 30 years
- porosity**—the amount of pore space; specifically, the ratio of the total volume of voids to the total volume of a porous medium
- probable maximum precipitation**—the theoretically greatest depth of precipitation for a given duration that is physically possible over a particular drainage basin at a certain time of year
- proglacial**—describes deposits formed just beyond the outer limits of a glacier
- progradation**—a seaward advance of the shoreline resulting from the nearshore deposition of sediments brought to the sea by rivers
- projected**—describes a number based on trends and patterns of the past
- pumping test**—a test conducted by pumping a well at a constant rate for period of time, and monitoring the change in hydraulic head in the aquifer
- recharge (ground water)**—the process by which water is absorbed and added to the zone of saturation
- recurrence interval**—the average number of years within which a stream-flow event is expected to occur once
- reducing**—describes the process of removing oxygen from a compound
- rill erosion**—see erosion, rill
- runoff, direct**—water entering a stream channel promptly after a precipitation event; it is presumed to consist of surface runoff and a substantial portion of the interflow
- runoff, surface**—water which passes over the land surface to the nearest stream channel (overland flow) plus precipitation falling directly onto the stream
- runoff, (total)**—the part of precipitation that appears in surface-water bodies; it is the same as stream flow unaffected by artificial manipulation
- savanna**—tract of land having wet soil except during periods of dry weather, and supporting grass and other low vegetation; sometimes applied to open prairie land
- scarp**—a steep slope along the margin of an elevated surface
- seismic**—pertaining to an earthquake or earth vibration, including those that are artificially induced
- senescence (lakes)**—approaching the end stages of eutrophication when the lake is being filled in by organic sediments and aquatic weeds
- sheet erosion**—see erosion, sheet
- skewed**—describes the state of asymmetry of a statistical frequency distribution, which results from a lack of coincidence of the mode, median, and arithmetic mean of the distribution
- slough**—a backwater area or remnant of a former river channel which contains standing water and serves as the main river channel only during high water
- spit**—a small point of land or narrow shoal projecting into a body of water from the shore
- standard industrial classification code**—a four-digit code established by the Office of Management and Budget, and used in the classification of establishments by type of activity
- static water level**—the level of water in a well that is not being affected by withdrawal of ground water
- stratigraphy**—the geologic study of the formation, composition, sequence and correlation of unconsolidated or rock layers
- subaerial**—formed, existing, or taking place on or near a sediment surface significantly above sea level
- subaqueous**—formed, existing, or taking place under water
- supraglacial**—describes sediment or processes occurring on the surface of a glacier
- surface runoff**—see runoff, surface

swale—a slight depression, sometimes marshy, in the midst of generally level land

swamp—a forested wetland that usually is seasonally flooded and that is dominated by either trees or shrubs; the interior of swamps may contain open-water areas such as ponds

swell—a well-rounded hill with a gentle slope in the midst of elevated and generally level land

thermocline—the horizontal plane in a thermally stratified lake located at the depth where temperature decreases most rapidly with depth

till—sediment transported by and deposited directly from glacier ice with little or no sorting by water, and consisting of a heterogeneous mixture of clay, sand, and gravel

till plain—an extensive area with a flat to undulating surface, underlain by till and commonly covered by ground moraines and subordinate end moraines

topography—the relief and contour of a surface, especially land surface

toxic—describes materials which are or may become harmful to plants or animals when present in sufficient concentrations

transgression—the gradual expansion of a shallow sea resulting in the progressive submergence of land, as when sea level rises or land subsides

transmission (soils)—process by which water moves through the soil and which is controlled by the soil horizons

transmissivity—the rate at which water is transmitted through a unit width of an aquifer under a unit hydraulic gradient

transpiration—process by which water is evaporated from plants, primarily through microscopic air spaces in their leaves

unconfined—describes an aquifer whose upper surface is the water table which is free to fluctuate under atmospheric pressure

unit (discharge)—a general term describing a stream-flow parameter calculated on a unit-area basis, usually per square mile, during a specified period of time

water table—the upper surface of the zone of saturation below which all voids in rock and soil are saturated with water

water-table control structure—a structure placed in a ditch or tile line to alter the water-table elevation for subsurface irrigation and/or drainage purposes

watershed—see drainage basin