

XVIII. Glossary

Acre-foot: An area of one acre covered with water to a depth of one foot. One acre-foot is 43,560 cubic feet or 325,851 gallons.

Agricultural levee: A levee that protects agricultural areas where the degree of protection is usually less than that of a flood control levee.

Appropriation: The setting aside of money by Congress, through legislation, for a specific use.

Authorization: House and Senate Public Works Committee resolutions or other specific legislation which provide the legal basis for conducting studies or constructing projects. The money necessary for accomplishing the work is not a part of the authorization but must come from a separate appropriation by Congress.

Bank and channel stabilization: The process of preventing bank erosion and channel degradation.

Basin: (1) Drainage area of a lake or stream, as a river basin. (2) A naturally or an artificially enclosed harbor for small craft such as a yacht basin.

By-channel: A channel formed around the side of a reservoir past the end of the dam to convey flood discharge from the stream above the reservoir into the stream below the dam.

Closure structure: A structure built along low points of a levee or floodwall such as a street or railroad intersection to prevent floodwaters from flooding the area protected by the levee or floodwall.

Confluence: The place where streams meet.

Control dam: A dam or structure with gates to control the discharge from the upstream reservoir or lake.

Crest length: The length of a wave along its crest.

Dam: A barrier constructed across a valley for impounding water or creating a reservoir.

Damages Prevented: The difference between damages occurring if the project had never been built and the damages with the project in place.

Degree of protection: The amount of protection that a flood control measure is designed for, as determined by engineering feasibility, economic criteria, social, environmental, and other considerations.

Dike: An embankment to confine or control water and/or soil.

Diversion channel: (1) An artificial channel constructed around a town or other point of high potential flood damage to divert floodwater from the main channel to minimize flood damages. (2) A channel carrying water from a diversion dam.

Draft: The vertical distance from the waterline to the bottom of a floating vessel.

Dredged material: The material removed in excavating or dredging in access canals, boat or navigation channels, drainage ditches and lakes.

Earthfill dam: A dam, the main section of which is composed principally of earth, gravel, sand, silt and clay.

Flank levee: A levee constructed nearly perpendicular to the streamflow.

Flat pool: The pool on the upstream side of navigation lock and dam where the water surface level is nearly horizontal or has a very mild slope.

1% Flood: This is the same as a 100-year flood and is a flood which has a 1% chance of occurrence in any year.

Flood capacity: The flow carried by a stream of floodway at bank-full water level. Also, the storage capacity of the flood pool at a reservoir.

Flood crest: The highest or peak elevation of the water level during a flood in a stream.

Flood plain: Valley land along the course of a stream which is subject to inundation during periods of high water that exceed normal bank-full elevation.

Floodproofing: Techniques for preventing flood damage to the structure and contents of buildings in a flood hazard area.

Floodwall: Wall, usually built of reinforced concrete, to confine streamflow to prevent flooding.

Freeboard: (1) Vertical distance between the normal maximum level of the surface of the liquid in a conduit, reservoir, tank, canal, etc., and the tip of the sides of the conduit, reservoir, canal, etc. (2) An allowance in protection above the design water surface level.

Gate bay walls: Those portions of the lock in which the gate recess, gate anchorages, gate machinery and sometimes culvert valves and culvert bulkheads are located.

Gravity drainage outlets: (1) Outlets for gravity drains such as tiles, perforated conduits, etc., servicing an agricultural area and discharging into a drainage ditch. (2) Pipe, culvert, etc., used for dewatering ponded water by gravity.

Habitat: The totality of the environmental conditions which affect the life of plants and animals.

Headwaters: (1) The upper reaches of a stream near its source. (2) The region where groundwaters emerge to form a surface stream. (3) The water upstream from a structure.

Intercepting sewer: A conduit that receives flow from a number of transverse sewers or outlets and conducts such waters to a point for treatment or disposal.

Left right bank of river: The left-hand or right-hand/ bank of a stream when the observer faces downstream.

Levee: A dike or embankment, generally constructed close to the banks of the stream, lake or other body of water, intended to protect the landside from inundation or to confine the streamflow to its regular channel.

Lift: The difference in elevation between the upstream and downstream water surface levels in a lock and dam system.

Lift Lock: A canal lock serving to lift a vessel from one reach of water to another such as from the downstream side to the upstream side of a navigation lock and dam system.

Lift station: A small wastewater pumping station that lifts the wastewater to a higher elevation when the continuance of the sewer at reasonable slopes would involve excessive depths of trench.

Lock: An enclosed part of a canal, waterway, etc., equipped with gates so that the level of the water can be changed to raise or lower from one level to another.

Lock operation: Locks fill and empty by gravity, with pumps. To raise the water level, valves are opened above the upper gates and water flows into the lock through tunnels in both lock walls. To lower water in the lock, valves are opened below the lower gates and water drains out of the lock through the tunnels. Gates at both ends of the lock open and close electrically after the proper water level has been reached.

Meander: The name given to the winding course of a stream or river.

Miter gates: A type of gate commonly used to trap water in a lock chamber.

Mouth of river: The exit or point of discharge of a stream into another stream, a lake or the sea.

Oxbow lake: A lake formed in the meander of a stream, resulting from the abandonment of the meandering course due to the formation of a new channel course.

Ponding area: An area reserved for collecting excess runoff preparatory to its being discharged by gravity or by pumping.

Pool: A small and rather deep body of quiet water, as water behind a dam.

Reach: A length, distance or leg of a channel or other watercourse.

Recurrence interval: The average time interval between actual occurrence of a flood of a given magnitude.

Rehabilitation: A major repair job. Usually involves considerable reconstruction of already existing structures.

Reservoir: A pond, lake, tank, basin, or other space, either natural or created in whole or in part by the building of a structure such as a dam, which is used for storage, regulation, and control of water for power, navigation, recreation, etc.

Retarding dam: A dam used to reduce the floodflow of a stream through temporary storage.

Revetment: (1) A facing of stone, concrete, sandbags, etc., to protect a bank of earth from erosion. (2) A retaining wall.

Riprap: A layer, facing, or protective mound of randomly placed stones to prevent erosion, scour, or sloughing of a structure or embankment. The stone so used for this purpose is also called riprap.

River basin: A water resource basin is a portion of a region defined by a hydrological boundary which is usually the drainage area of one of the lesser streams in the region.

River region: A water resource is a major hydrologic area consisting of either the drainage area of a major river, such as the Mississippi River, or the combined drainage areas of a series of streams.

River tow: An assemblage of one or more barges propelled by a towboat in a riverine waterway.

Rock dike: An embankment built principally of rock.

Sandbag closure: A temporary closure structure consisting of sandbags. This closure may be found where a levee or floodwall has a sudden break in grade such as in a street crossing. Sandbags are used to close the street in times of high water to prevent flooding.

Sedimentation basin: A basin or tank in which water or wastewater containing settleable solids is retained to remove (by gravity) a part of the suspended matter.

Sediment load: The total sediment composed of suspended load and bed load transported by a stream. The suspended load is composed of fine sediment transported in suspension while bed load is composed of relatively coarse material transported along or near the bottom.

Shoal area: Patches of sand, gravel, or other hard bottom lying at shallow depths.

Slack-water area: (1) In tidal waters, the area where tidal current velocity is at a minimum; especially the moment when a reversing current changes direction and its velocity is zero. (2) In streams, a place where there is very little current.

Slough: (1) A small muddy marshland or tidal waterway, which usually connects other tidal areas. (2) A tide land or bottom land creek. A side channel or inlet, as from a river or bayou, that may be connected at both ends to a parent body of water.

Spillway: A waterway or a dam or other hydraulic structure used to discharge excess water to avoid overtopping of a dam.

Stage: The elevation of the water surface above or below an arbitrary datum.

Standard project flood: A flood that may be expected from the most severe combination of meteorological and hydrological conditions that are reasonably characteristic of the geographical region involved, excluding extremely rare combinations.

Stop-log closure: Logs, planks, cut timber, or steel or concrete beams fitting into the guides between walls or piers to close an opening in a dam or conduit to the passage of water. The logs are usually placed one at a time.

Swale: (1) A slight depression, often wet and covered with vegetation. (2) A wide, shallow ditch, usually grassed or paved.

Tainter gate: A semi-circular gate which opens and closes through pivoting on a shaft. It is used to control the flow of water over spillway.

Tributary: A stream or other body of water that contributes its water to another stream or body of water.

Uncontrolled spillway: An overflow spillway having no control gates.

Watershed: The whole surface drainage area that contributes water to a collecting river or lake.

Wing dam: A wall, crib, row or pilings, stone jetty, or other barrier projecting from the bank into a stream for protecting the bank from erosion, arresting sand movement or for concentrating the low flow of a stream into a smaller channel.