



Channel Erosion

Includes the processes of streambank erosion, streambed scour, and degradation.

Cubic Feet Per Second (CFS)

A rate of flow that would fill a container of one cubic foot size, that is about 7 ½ gallons, in one second.

Conditional Use

A land use which is not allowed unless certain conditions specified in the zoning ordinance are met and a permit is granted by the board of adjustment or appeals, or where appropriate the zoning agency. Synonymous with special exception.

County Shoreland Zoning

The recognized authority by the legislature of Wisconsin to administer the Shoreland and Floodplain Management Programs in Ozaukee County (NR115 - NR116). These programs control shorelands, wetlands, floodplains and polluting of the navigable waters in unincorporated areas of Ozaukee County. The legislature of Wisconsin has also delegated responsibility to the county to further the maintenance of safe and healthful conditions; prevent and control water pollution; protect spawning grounds, fish and aquatic life; control building sites, placement of structures and land uses; and to preserve shore cover and natural beauty along those areas within 300 feet of the ordinary high water mark of a navigable river or stream and / or within 1,000 feet of the ordinary high water mark of navigable lakes, ponds or flowages.

Confluence

A meeting of two or more streams or rivers.

Culvert

Any covered structure not classified as a bridge which conveys a waterway under a road or other paved area.

Degradation

Process of a channel lowering its elevation through increased erosion, channel bed scour, or down-cutting. A type of fluvial geomorphic instability.

Design Capacity	An engineering term used to describe the amount of water that a modified channel was designed to convey. Generally, the design capacity for improved District facilities is to accommodate the 1 % or 100-Year Flood. This is the level of protection. Capacity is in CFS or Q. See "Flood Capacity."
Design Flow	The magnitude of stream flow that is used in design of channel improvements and structures across the channels.
Drainage Area	Area that drains into a body of water such as a stream or a reservoir.
Drop Structure	A structure designed to convey flows over a vertical distance from a higher to a lower elevation.
Easement	Right of way granted by a property owner to another party for an expressed purpose of either constructing flood and erosion control improvements or maintaining the channel. The property owner retains the ownership rights on the area under the easement but his use of the area is restricted only by those uses which are compatible with the other party uses.
Erosion	The detachment and movement of soil or rock fragments by water, wind, ice, gravity, or extreme sun or heat.
FEMA	Federal Emergency Management Agency. Has authority over federal flood insurance program and publishes the 100-Year Flood map.
Fish Ladders	Artificial, stepped pools to enable fish traveling upstream, against the flow of water, to span a large vertical distance in a series of gradual steps. Used at dams or other in-stream barriers.
Flood	The temporary inundation of lands normally dry; any waters escaping from a creek or river.
Flood Storage	Those floodplain areas where storage of flood waters has been taken into account in reducing the regional flood discharge.
Floodproofing	Any combination of structural provisions, changes or adjustments to properties and structures, water and sanitary facilities and contents of buildings subject to flooding, for the purpose of reducing or eliminating flood damage.

Flood Protection Elevation	An elevation 2 feet above the regional flood elevation.
Floodfringe	That portion of the floodplain outside of the floodway, which is covered by flood water during the regional flood. This term is generally associated with standing water rather than flowing water.
Floodplain	That land which has been or may be covered by flood water during the regional flood. This includes the floodway, floodfringe, shallow depth flooding, flood storage, and coastal plain areas.
Floodwall	A wall constructed adjoining channel to prevent flooding of the surroundings areas.
Floodway	The channel of a river or stream, and those portions of the floodplain adjoining the channel required to carry the regional flood discharge. This term is generally associated with flowing water rather than standing water.
Freeboard	Vertical distance between the top of an embankment adjoining a channel and the water level in the channel.
Human Habitation	A human residence or dwelling.
Hard Structures	A type of bank protection structure incorporating rock, riprap, sack concrete, gabion baskets and mattresses, or concrete. These structures are inert and rigid.
Hydrology	The science dealing with the origin, distribution and circulation of waters of the earth such as rainfall, streamflow, infiltration, evaporation, and groundwater storage.
Invasive Species	A subcategory of nonnative plants that aggressively invade natural plant communities and displace native plants or less aggressive weedy plants. Examples of invasive species in Santa Clara County wetland and riparian areas are broad-leaf peppergrass ( <i>Lepidium latifolium</i> ) and giant reed ( <i>Arundo donax</i> ).

Invert	A creek or channel bottom.
Levee	An embankment constructed to prevent a river or stream from flooding adjacent lands.
Low Flow Channel	That section of stream which carries the more frequent, periodic streamflows.
Modified Natural Channel	A watercourse which has had improvements such as bank protection (e.g., gabions, rip rap, other revetments) and selected areas of historical channelization (e.g., widening, straightening) and/or other capacity or passage improvements.
Natural Channel	A watercourse without any significant improvements or modifications and very little evidence of historical alterations.
Non-Native Vegetation	Any vegetation which, under natural conditions, does not originate within the ecosystem in which it is found. Synonymous with invasive plant species.
Reach	The smallest subdivision of a drainage system consisting of a uniform length of channel or a discrete portion of a channel.
Regional Flood	A flood determined to be representative of large floods known to have occurred in Wisconsin or which may be expected to occur on a particular lake, river or stream once in every 100 years. Synonymous with 100-Year Flood.
Restoration	The reestablishment of the structure and function of ecosystems. Ecological restoration is the process of returning an ecosystem as closely as possible to predisturbance conditions and functions. Implicit in this definition is that ecosystems are naturally dynamic. It is therefore not possible to recreate a system exactly. The restoration process reestablishes the general structure, function, and dynamic but self-sustaining behavior of the ecosystem.
Riparian	Located along the edge of a channel, generally on the floodplain. Characterized by access to and influence of the channel, but not in it.
Riprap	Loose rock or concrete of varying size, typically brought to a site. Used to protect channel banks from scouring forces.

Runoff (surface)	The flow of water across the land surface and in stream channels. Occurs only after the local storage capacity of the landscape has been exceeded and includes both overland flow and streamflow.
Scour	The clearing and digging action of flowing air or water, especially the downward erosion caused by stream water in removing material (e.g., soil, rocks) from a channel bed or bank or around in-channel structures.
Sediment	Solid material, both mineral and organic, that settles to the bottom of channels, canals, percolation ponds, or behind dams.
Sediment Removal	The act of removing sediment deposited within a stream. Typically, sediment is removed when it reduces capacity.
Sheetflooding	A shallow (less than a foot) flooding caused by inadequate drainage systems.
Shoreland Zoning	Ozaukee County is the recognized authority by the legislature of Wisconsin to control shorelands, wetlands, floodplains and polluting of the navigable waters in unincorporated areas of Ozaukee County . The legislature of Wisconsin has also delegated responsibility to the county to further the maintenance of safe and healthful conditions; prevent and control water pollution; protect spawning grounds, fish and aquatic life; control building sites, placement of structures and land uses; and to preserve shore cover and natural beauty along those areas within 300 feet of the ordinary high water mark of a navigable river or stream and/or within 1,000 feet of the ordinary high water mark of navigable lakes, ponds or flowages.
Stormwater Management	Public policy and action to control stormwater runoff associated with development within a rapidly urbanizing watershed in order to prevent the occurrence of, or increase in, flood damage potential.
Streambed	The part of a stream over which a column of water moves.
Special Exception	A land use which is not allowed unless certain conditions specified in the zoning ordinance are met and a permit is granted by the board of adjustment or appeals or, where appropriate the zoning agency. Synonymous with conditional

use.

Vegetation  
Management

Removal of vegetation in and adjacent to creeks to maintain the ability of channels to function as flood protection facilities. In addition, vegetation is removed to meet local fire code requirements and to reduce combustible weeds and grasses on property adjacent to the streams within the District's jurisdiction. The control of invasive nonnative vegetation is another purpose for which the District undertakes vegetation control. Vegetation management can be accomplished through mowing, discing, hand clearing, or herbicide applications (depending on the environmental conditions of the site).

Velocity

Speed with which water should flow in a channel. It depends on several factors, such as slope, smoothness and uniformity of channel, area of flow and wetted perimeter.

Watershed

A geographic area from which water is drained by a river and its tributaries to a common outlet. A ridge or drainage divide separates a watershed from adjacent watersheds.

100-Year Flood

Flood of a magnitude with an expected recurrence of once in 100 years. Synonymous with regional flood.