

CHAPTER 10: DEFINITIONS

NOTE: The definitions in this Chapter are set forth here for convenience and ease of reference, and are not intended to modify, supplant, expand, or replace definitions in the Ordinance or in rules promulgated pursuant to the Ordinance. Any conflict between the definitions in this chapter and the definitions in the Ordinance and/or rules should be resolved in favor of the Ordinance and/or rules.

Applicant - A person responsible for regulated construction activity on a development site who is seeking to obtain storm water construction approval.

Aquatic Bench or Safety Shelf - A bench, usually 4-feet to 5-feet wide, that is constructed around the inside perimeter of a permanent pool and that ranges in depth from zero to 12 inches. Normally vegetated with emergent plants, the bench augments pollutant removal, provides habitat, conceals trash and changes in water level, and enhances safety.

Bank Full Flood - The storm water generated by the 1.5-year storm.

Bare-Root Stock – Plants used as a component of vegetation for open detention basins and retention basins that are received with very little, if any, soil around the roots and are generally wrapped in Hessian cloth or plastic to prevent the roots from drying out.

Best Management Practice (BMP) - A practice or combination of practices that have been determined by the County to be the preferred method of preventing, minimizing, or reducing pollution and other effects of storm water and storm water runoff.

Bioretention Area – A component of a storm water management system that is comprised of a depressed land area that contains specific soil, plant materials, and other features and is used as a pretreatment system.

Borings - Cylindrical samples of a soil profile used to determine soil properties.

Bridge - A structure, including supports, built to carry a feature over a surface water or watercourse, with a clear span of more than 20 feet measured along the center of the feature being carried.

Buffer Strip - A zone that is used for filtering direct storm water and storm water runoff into a storm water management system and for providing maintenance access to a storm water management system.

Catch Basin - A belowground structure designed to collect and convey water into a storm sewer system.

CFS - Cubic feet per second.

Check Dam - A crushed rock or earthen structure used in vegetated swales to reduce water velocities, promote sediment deposition, and enhance infiltration.

Closed Conduit - An enclosed conveyance designed to carry storm water runoff such that the surface of the water is not exposed to the atmosphere, including without limitation storm sewers, culverts, closed County drains, and pipes.

Constructed Wetland - An open detention basin that uses a variety of water depths and wetland plants to provide pollutant removal.

Construction Activity - A human-made activity, including without limitation, clearing, grading, excavating, construction and paving, that results in an earth change or disturbance in the existing cover or topography of land, including any modification or alteration of a site or the “footprint” of a building that results in an earth change or disturbance in the existing cover or topography of land.

Conveyance - Any structure or other means of safely conveying storm water or storm water runoff within a storm water management system, including without limitation a watercourse, closed conduit, culvert, or bridge.

County - The Charter County of Wayne.

County Drains -Drains established pursuant to the Michigan Drain Code of 1956, MCL 280.1 et seq., as amended.

County Road –Roads and road rights-of-way within the jurisdiction of the County.

Culvert - A structure, including supports, built to carry a feature over a surface water or watercourse, with a clear span of less than 20 feet measured along the center of the feature being carried.

Design Storm - A rainfall event of specified size and return interval that is used to calculate the runoff volume and peak flow rate that must be handled by a storm water management system.

Design Water Level - The water surface elevation in a detention system at which the storage volume in the system (above the permanent pool water level, if any) equals the required flood control storage volume.

Detention or Detain - The temporary storage of storm water and storm water runoff to control peak flow rates and/or provide pollutant removal before discharging the water to a surface water or closed conduit.

Detention System – A component of a storm water management system, either aboveground or belowground, that detains storm water and storm water runoff. Detention systems may include, without limitation, open detention basins and underground detention systems.

Detention Time - The amount of time that a volume of water will be detained in a detention system.

Development Site - The property on which regulated construction activity will occur, is occurring, or has occurred.

Director - The Director of the Wayne County Department of Public Services or its designee.

Drain Commissioner - In Wayne County, the Drain Commissioner is an appointed position within the Department of Environment.

Drainage Area - The entire upstream land area from which storm water runoff drains to a particular location, including any off-site drainage area.

Easement - A legal right, granted by a property owner to another person, allowing that person to make limited use of the property involved for a specific purpose.

Edge Zone - The area within an open detention basin or retention basin between the permanent pool water surface elevation and the bank full elevation.

Emergency Spillway - A depression in the embankment of an open detention basin or retention basin that is used to pass flows in excess of the overflow structure capacity.

Fill - Earth or other substances that are added to land to change its contour.

Filter Fabric - Textile of relatively small mesh or pore size that is used 1) to allow water to pass through while keeping sediment out (permeable), or 2) to prevent both runoff and sediment from passing through (impermeable).

First Flush- Storm water runoff that occurs during the early stages of a storm as a result of the washing effect of storm water runoff on pollutants that have accumulated on the surface of the drainage area.

Floodplain - For a given flood event, that area of land adjoining a continuous watercourse that has been covered temporarily by water.

Flow Restrictor - A structure, feature, or device in a detention system or pretreatment system that is used to restrict the discharge from the system for specified design storm(s).

Forebay - A component of a storm water management system that is comprised of a surface water that is used as a pretreatment system.

Freeboard - The vertical distance from the design water level to the top of the embankment of an open detention basin or retention basin.

Hydrograph - A graph showing variation in the water depth or discharge in a watercourse or closed conduit over time.

Infiltration - The rate of absorption of water into the ground, usually expressed in terms of inches/hour.

Manhole - A structure that allows access into a closed conduit or other underground component of a storm water management system.

Manning's Formula - A technique for estimating the hydraulic capacity of a closed conduit, watercourse, or other means of conveyance of storm water and storm water runoff.

Manning's Roughness Coefficient ("n") - A coefficient used in Manning's Formula to describe the resistance to flow due to the roughness of a conveyance.

Manufactured Treatment System - A component of a storm water management system that consists of a manmade device or structure that is used as a pretreatment system.

Open Detention Basin - A component of a storm water management system that is comprised of a surface water that is used as a detention system.

Ordinance - The Wayne County Storm Water Management Ordinance, as amended.

Outflow Rate - The rate of discharge in volume per unit time.

Overflow Structure - A structure designed to allow unrestricted discharge from a component of a storm water management system when the water level exceeds the design water level.

Peak Flow Rate - The maximum instantaneous rate of flow at a particular location within a storm water management system, usually in reference to a specific design storm event.

Permanent Pool - A pool in an open detention system or forebay that provides additional removal of pollutants through settling and biological uptake.

Permit Office - The Permit Office of the Wayne County Department of Public Services, Engineering Division.

Person - A natural person, trustee, court-appointed representative, syndicate, association, partnership, firm, club, company, corporation, business trust, institution, agency, government corporation, municipal corporation, city, county, municipality, district, or other political subdivision, department, bureau, agency or instrumentality of federal, state, or local government, or other entity recognized by law as the subject of rights and duties.

Plug - Plants used as a component of vegetation for open detention basins and retention basins that are raised as individual plants, each in a small container about the size of an ice cube.

Pollutant - Any substance introduced into the environment that may adversely affect the public health, safety, welfare, or the environment, or the usefulness of a resource.

Pond Zone - The area within an open detention basin or retention basin where the permanent water depths range from 0 to 3 ft deep.

Ponding Area - In bioretention areas, the area where excess storm water runoff is temporarily stored prior to infiltration into the ground.

Pretreatment System - A structure, feature, or appurtenance, or combination thereof, either aboveground or below ground, that is used as a component of a storm water management system to remove incoming pollutants from storm water and storm water runoff. Pretreatment systems may include, without limitation, forebays, manufactured treatment systems, and bioretention areas.

Rational Method Formula - A technique for estimating peak flow rates at a particular location within a storm water management system, based on the rainfall intensity, watershed time of concentration, and a runoff coefficient.

Regulated Construction Activity - Construction activity that is subject to the provisions of the Ordinance or a rule promulgated pursuant to the Ordinance.

Regulated Wetland - Any wetland protected by federal, state, or local laws or regulations.

Retention or Retain - The temporary storage of storm water and storm water runoff to provide gravity settling of pollutants and to promote infiltration into the soil, rather than to discharge the storm water or storm water runoff to a surface water or closed conduit.

Retention Basin - A component of a storm water management system that is comprised of a surface water that retains storm water and storm water runoff.

Return Interval - The average expected time interval between events of some kind.

Riprap - A combination of large stone, cobbles, and boulders used to line watercourses, stabilize banks, reduce runoff velocities, or filter out sediment.

Runoff Coefficient - The ratio of the volume of storm water runoff from a given drainage area over a given time period, to the total volume of precipitation that falls on the same drainage area over the same time period.

Safety Shelf – *See* the definition of Aquatic Bench.

Storm Water - Water resulting from precipitation, including without limitation rain, snow, and snowmelt.

Storm Water Construction Approval - An approval issued pursuant to the Ordinance and rules promulgated pursuant to the Ordinance.

Storm Water Management Program - Ordinances, orders, rules, regulations, and other mechanisms that provide for the management of storm water to prevent flooding and to ensure the restoration and/or protection of surface waters. Wayne County's storm water management program consists of this Ordinance, rules or regulations promulgated under this Ordinance, the Storm Water Management Standards, and any other activities mandated

by the Certificate of Coverage issued by MDEQ to the County pursuant to the Michigan General Storm Water Permit No. MIG619000.

Storm Water Management System - Any structure, feature or appurtenance subject to the Ordinance or a rule promulgated pursuant to the Ordinance that is designed to collect, detain, retain, treat, or convey storm water runoff, including without limitation buffer strips, swales, gutters, catch basins, closed conduits, detention systems, pretreatment systems, wetlands, pavement, unpaved surfaces, structures, watercourses, or surface waters.

Storm Water Runoff - The excess portion of precipitation that does not infiltrate the ground, but "runs off" and reaches a conveyance, surface water, or watercourse.

Surface Water - A body of water, including without limitation seasonal and intermittent waters, in which the surface of the water is exposed to the atmosphere, including without limitation lakes, open detention basins, forebays, watercourses, bioretention areas, retention basins, wetlands, and impoundments.

Time of Concentration - The time duration (typically in minutes) that is required for storm water runoff from the most remote area of the watershed to reach a given location in a storm water management system.

Total Suspended Solids - Particles or other solid material suspended in storm water or storm water runoff. "Total suspended solids" is commonly expressed in concentration (mg/l).

Underdrain - One or more underground pipes installed beneath bioretention areas, terraced side slopes, or other structures to facilitate conveyance of storm water runoff from beneath the structure to another part of the storm water management system.

Underground Detention System - One or more underground pipes and/or other structures that are utilized as a detention system.

Upland Zone – The area within an open detention basin or retention basin between the bank full elevation to the 100-year flood elevation and beyond.

Vegetated Swale – A conveyance, open to the atmosphere, consisting of a broad, shallow channel lined with vegetation to slow and filter storm water runoff and promote infiltration.

Watercourse - An open conduit, either naturally or artificially created, that periodically or continuously conveys water, including without limitation rivers, streams, vegetated swales, open channels, and open County drains.

Watershed - The complete area or region draining into a watercourse, surface water or closed conduit.

Weir - A structure that extends across the width of a surface water, watercourse or closed conduit and is used to impound or restrict the flow of water.

Wetted Perimeter –The length of the perimeter of a watercourse or closed conduit cross-section that is submerged and thereby causes resistance to flow.