

GLOSSARY OF STORMWATER TERMS:

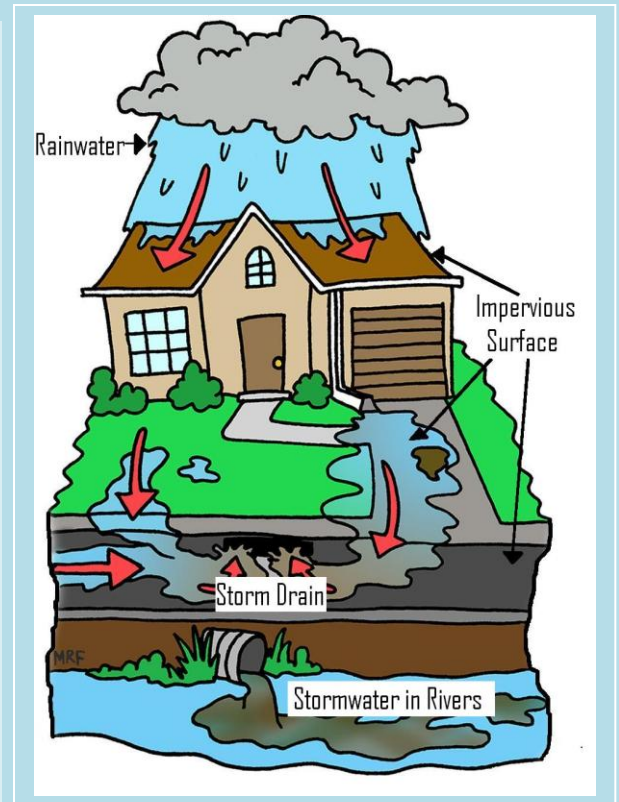


- **Basin:** The entire area of land drained by a river and its tributaries
- **Berm:** A constructed barrier of compacted earth.
- **BMPs:** Best Management Practices. Best available practices or devices that, when used singly or in combination, eliminate or reduce the contamination of surface and/or ground waters.
- **Catch basin:** Curbside opening that collects rainwater from streets and serves as an entry point to the storm drain system.
- **Channel:** A long narrow excavation or surface feature that conveys surface water and is open to the air.
- **Channel, natural:** A channel which has occurred naturally due to the flow of surface waters.
- **Conveyance:** The process of transporting or transmission of something from one place to another.
- **Culvert:** Pipe or concrete box structure which drains open channels, swales, or ditches under a roadway or embankment typically with no catch basins or manholes along its length.
- **Ditch:** A long narrow excavation dug in the earth for drainage of stormwater runoff.
- **Detention:** Release of surface and storm water runoff from the site at a slower rate than it is collected by the drainage facility system, the difference being held in temporary storage.
- **Discharge:** To cause or allow to throw, drain, release, dump, spill, empty, emit or pour any pollutants or harmful quantity of any substance into the municipal storm sewer system or into the waters of the United States.
- **Drainage:** The collection, conveyance, containment, and/or discharge of surface and storm water runoff.
- **Erosion:** When land is diminished or worn away due to wind, water, or glacial ice.
- **Flood:** A temporary rise in flow or stage of any watercourse or stormwater conveyance system that results in stormwater runoff exceeding its normal flow boundaries and inundating adjacent, normally dry areas.
- **Floodplain:** Areas adjacent to a stream or river that are subject to flooding or inundation during severe storm events (often called the 100-year floodplain, it would include the area or flooding that occurs, on average, once every 100 years). Sometimes referred to as the "FEMA Floodplain."
- **Grading:** The cutting and/or filling of the land surface to a desired slope or elevation.

- **Groundwater:** Underground water usually found in aquifers. Groundwater usually originates from infiltration. Runoff can seep into the soil and recharge groundwater that supplies drinking wells and springs.
- **IDDE** Illicit Discharge Detection and Elimination.
- **Illicit Discharge:** Any intentional discharge to the municipal storm sewer system that is not composed entirely of stormwater, except discharges pursuant to a permit, or discharges resulting from fire fighting activities.

• **Impervious surface:** Any hard-surfaced area that prevents or retards the entry of water into the soil in the manner and to the extent that such water entered the soil under natural conditions, causing water to run off the surface in greater quantities or at an increased rate of flow than was present under natural conditions such as, but not limited to, roof tops, asphalt or concrete sidewalks, paving, driveways, parking lots, walkways, patio areas, storage areas, and gravel, bituminous substances or other surfaces which similarly affect the natural infiltration or runoff patterns of real property in its natural state.

• **Outfall:** The point where wastewater or drainage discharges from a pipe, ditch, or other conveyance to a receiving body of water.



• **Point discharge:** The release of collected and/or concentrated surface and storm water runoff from a pipe, culvert, or channel.

• **Pollutant:** Any dredge spoil, solid waste, incinerator residue, oil, grease, sewage, garbage, sewage sludge, munitions, medical waste, chemical waste, industrial waste, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, agricultural and industrial waste, and characteristics of the wastewater (i.e., pH, temperature, total suspended solids, turbidity, color, biochemical oxygen demand, chemical oxygen demand, toxicity, odor).

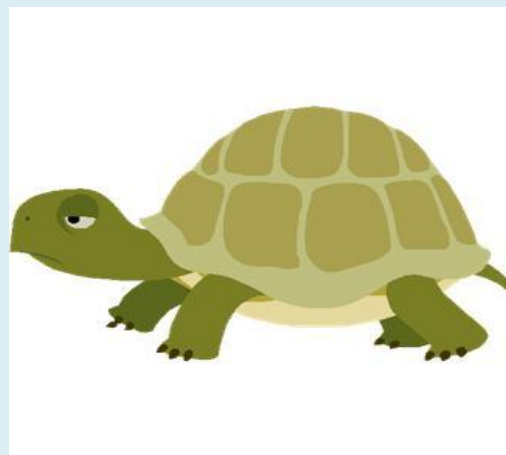
• **Retention:** The process of collecting and holding surface and storm water runoff with no surface outflow.

• **Riprap:** A facing layer or protective mound of stones placed to prevent erosion or sloughing of a structure or embankment due to the flow of surface and storm water runoff.

• **Runoff:** Water originating from rainfall and other precipitation that ultimately flows into drainage facilities, rivers, streams, springs, seeps, ponds, lakes, and wetlands as well as shallow groundwater.



- **SSO:** Sanitary Sewer Overflow.
- **Stormwater:** Any precipitation runoff, surface runoff and drainage related to rain, storm events or snow melt.
- **Storm drain system:** Any facility, structure, improvement, development, equipment, property or interest therein, or other structural or nonstructural element made, constructed, used or acquired for the purpose of collecting, containing, storing, conveying and controlling stormwater wherever located including, but not limited to, storm sewers, curbs, street drains, conduits, natural and manmade channels, pipes, culverts and detention ponds whether public or private.
- **Storm drain:** An opening leading to an underground pipe or open ditch for carrying surface runoff, separate from the sanitary sewer or wastewater system.
- **SWP3:** Stormwater Pollution Prevention Plan. A document that describes all potential sources of pollution and the measures that will be taken to prevent pollution.



Frequently Asked Questions Regarding Stormwater Issues

1. What is stormwater runoff?

Stormwater runoff is the water that flows off roofs, driveways, sidewalks, parking lots, streets and other impervious surfaces during rainstorms and when snow melts. Instead of being absorbed into the ground, it flows into ditches, culverts, detention ponds, and storm drains. Stormwater runoff then collects and dissolves harmful pollutants carrying them into the creeks and streams. Since stormwater runoff does not receive any treatment before entering the creeks and streams, it poses a threat to humans, wildlife, and water quality.

2. Why are the stormwater and sanitary systems separate?

It is impossible to predict when and how much it will rain. Due to unpredictable nature of stormwater, it is allowed to flow directly into our cities ponds, creeks, and lakes. Treatment for stormwater is also very expensive. Unlike stormwater, wastewater is continuously flowing and requires treatment before it is released back into the environment.

3. What is non-point source pollution?

Non-point source pollution (NPS) is water pollution that is difficult to trace to a specific discharge point. Because it comes from many diverse sources, it is hard to control. Examples of common nonpoint source pollutants include fertilizers, pesticides, sediments, oils, salts, trace metals and litter. They come from farms, yards, roofs, construction sites, businesses, automobiles and streets. Nonpoint source pollution can be contrasted with point source pollution, where discharges occur to a body of water at a single location, such as discharges from a chemical factory, urban runoff from a roadway storm drain or from ships at sea.

4. What can residents do to help improve stormwater quality?

- Pick up after your pets and properly dispose of their waste in the trash.
- Never pour pesticides, household paints, chemicals and motor oil on the ground or down a storm drain or in a roadside ditch.
- Take household hazardous waste products to our hazardous waste facility.
- Don't over water or over fertilize your lawn. Use natural products when possible.
- Wash your vehicle on your lawn instead of your driveway or street.

5. What is impervious surface?

“Impervious surface” as defined as any hard-surfaced area that prevents or retards the entry of water into the soil. This causes water to run off the surface in greater quantities or at an increased rate of flow than was present under natural conditions such as roof tops, asphalt or concrete sidewalks, paving, driveways, parking lots, walkways, patio areas, storage areas, gravel, bituminous substances, or other surfaces which similarly affect the natural infiltration or runoff patterns of land property in its natural state.

6. What is a MS4?

“MS4” is an acronym for Municipal Separate Storm Sewer System. MS4’s are systems of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels or storm drains) owned or regulated by the city and designed or used for collecting or conveying stormwater.

7. What is an illicit discharge?

Illicit discharge means any intentional discharge to the municipal separate storm sewer system that is not composed entirely of stormwater, except discharges pursuant to any National Pollutant Discharge Elimination System (NPDES) permit, or discharges resulting from fire fighting activities. Examples of illicit discharges are overflowing sanitary sewers, draining a swimming pool into the street, or dumping used motor oil into a storm drain.

WEBSITES THAT PROVIDE GUIDANCE AND INFORMATION ON MS4 PHASE II TOPICS

- Environmental Protection Agency – Home Page
 - <http://www.epa.gov/>
- Environmental Protection Agency – Storm water
 - http://cfpub.epa.gov/npdes/home.cfm?program_id=6
- EPA Best Management Practices - Construction
 - <http://cfpub.epa.gov/npdes/stormwater/const.cfm>
- Oklahoma Department of Environmental Quality – Home Page
 - <http://www.deq.state.ok.us/>
- Oklahoma Department of Environmental Quality – Stormwater
 - <http://www.deq.state.ok.us/WQDnew/stormwater/index.html>

OKLAHOMA STATE GENERAL PERMITS GOVERNING STORMWATER

- ODEQ, General Permit OKR04. PHASE II - SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEM DISCHARGES WITHIN THE STATE OF OKLAHOMAS
- ODEQ, General Permit OKR10, FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES WITHIN THE STATE OF OKLAHOMA
- ODEQ, General Permit OKR05, FOR STORMWATER DISCHARGES FROM INDUSTRIAL FACILITIES.
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