



Rainwater runoff sources-above



Catch basin



Outfall-rainwater into stream



Culvert under a street for streams

PLEASE TURN
PAGE OVER FOR
STORMWATER
QUALITY IMPACTS

STORMWATER FACT SHEET

Department of Public Works maintains three major types of underground infrastructure:

Drains do not carry sewage / wastewater from properties. Drains carry only stormwater from rainfall runoff and transfer into the rivers and streams untreated. Drain infrastructure includes: Catch basins, Drain pipelines, Drain manholes, Outfalls, Inlets and Outlets and Culverts.

Two major aspects of Stormwater are critical for our infrastructure maintenance and compliance to federal and state regulations:

1. QUANTITY of stormwater.

Water, Sewer and Drains,

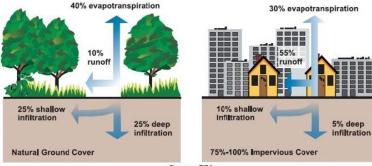
QUALITY of stormwater.

STORMWATER QUANTITY AND HOW IT IMPACTS OPERATIONS

When it rains, a portion of water seeps into the ground (infiltration) – stored in the soil as moisture and used by plants, the rest continue to flow downward by gravity and this overflow is called run off. There is higher run off when rainwater does not infiltrate through the soil.

More rainstorms or short but intense storms test the capacities of our Drain infrastructure. In order to limit flooding on streets and properties, maintenance efforts like cleaning and repairing our drain pipe lines and catch basins are important. The installation of new drain infrastructure in low lying areas can also help tackle the higher quantity of stormwater.

The development of a previously undeveloped site for another use can alter the quantity of runoff and the creation of impervious surfaces (driveways and roofs) can increase the volume and rate of stormwater runoff when compared to natural conditions. See below:



Source: EPA

Increase in volume of runoff. The volume of water available for runoff increases because the impervious area created by roofs, parking lots, streets, and other surfaces reduces the amount of infiltration that can occur.

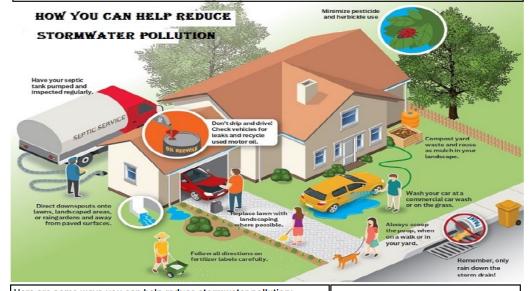
Increase in runoff rates. Intense storms and urban development involving changes in surface cover like the introduction of channels, curbing, gutters, and storm drainage collection systems are a contributing factor. These changes result in increasing the speed of runoff as it flows through the drain pipes and outfalls into the streams and rivers.



STORMWATER QUALITY AND HOW IT IMPACTS ALL OF US

Stormwater is carried by drain infrastructure and it does not get treated prior to entering our streams and rivers. Stormwater carries pollutants that harm lakes, streams, estuaries and other waterbodies. Mismanaged and illicit pollutants in stormwater can harm wildlife, limits recreation in public spaces and cause flooding and erosion.

Regulatory requirements: The Town of Hudson has an existing stormwater permit from the U.S. Environmental Protection Agency (EPA), known as the Municipal Separate Storm Sewer System (MS4) permit. The Town reports its stormwater activities to EPA every year and these reports are publicly available for all regulated cities and towns. EPA re-issued the MS4 Permit in April 2016 and it contains new requirements that the Town must meet over the next several years. The goal of the MS4 Permit is to improve water quality through more robust stormwater management activities, such as Public education, maintaining and repairing drain infrastructure and installing best management practices.



Here are some ways you can help reduce stormwater pollution:

- Maintain your septic systems: Leaking systems release bacteria and pollute groundwater which percolate to local streams.
- Pickup after your pet: Pet waste contains bacteria and is high in nitrogen.
- Barrel it up: Connect gutters to water tanks and user the rain run off to water your lawn or garden when there is a water ban on irrigation.
- Washing vehicles: The soap, dirt and grime from washing your car cause buildup issues in public drains. Wash the car at a car wash or on your lawn.
- Do NOT overfertilize your lawn: The excess just washes away in the next rain and pollutes our waterways with too much algae and less oxygen for aquatic life.
- Industrial properties: Gas, oil and grease from gas and repair stations can wash into storm drains and pollute our waters. Keep these away from the street and drains, Follow government regulations.

More information:

Visit our DPW and Stormwater website to learn about our operations and capital projects around drain infrastructure.

https://www.townofhudson.org/ department-public-works

Questions? Comments?

Contact: Department of Public Works Phone: 978-562-9333