



## STORMWATER POLLUTION PREVENTION



## WE CAN ALL LEND A HAND IN PREVENTION

### What is stormwater runoff?

Stormwater runoff is precipitation (rain or snowmelt) that flows across the land. Stormwater may infiltrate into soil, discharge directly into streams, water bodies, or drain inlets, or evaporate back into the atmosphere. In the natural environment, most precipitation is absorbed by trees and plants or permeates into the ground, which results in stable stream flows and good water quality. Things are different in the built environment. Rain that falls on a roof, driveway, patio or lawn runs off the surface more rapidly, picking up pollutants as stormwater flows.

### Is stormwater runoff a problem?

Runoff picks up fertilizer, oil, pesticides, dirt, bacteria and other pollutants as it makes its way through storm drains and ditches - untreated - to our streams, rivers, lakes and the ocean. Polluted runoff is one of the greatest threats to clean water in the U.S.

### What are the effects of stormwater runoff?

- **Sediment** - Sediment enters stormwater when rainwater flows across bare soil. Soil particles become entrained in the runoff and are carried to streams. Sediment reduces water clarity, impedes aquatic plant growth and destroys aquatic habitats
- **Nutrients** - In urban environments the two largest contributors to nutrients in stormwater runoff are pet waste and fertilizer. Excess nutrients cause algae overgrowths or algal blooms which may be toxic to humans and pets and reduce water oxygen levels for fish and other aquatic organisms.
- **Bacteria and pathogens** - Human and animal waste (pets and wildlife) contribute bacteria and pathogens to stormwater. Animal waste is carried to the storm sewer system by surface runoff. Human waste may enter the storm sewer system due to aging and failing infrastructure and sanitary sewer overflows. In excess, these bacteria and pathogens cause illness and result in closing of swimming areas and impairment of streams that limits other recreational use.

- **Trash and debris** - Stormwater runoff picks up trash and pollutants from streets and parking lots. These are carried through the storm sewer system and into our waterways. Trash may choke or suffocate wildlife and is unsightly.
- **Oils, chemicals, and other pollutants** - From leaking automotive fluids to paint brushes rinsed out in the driveway, any chemical that is not properly stored, used, or disposed of has the potential to end up in the storm drain. Pollutants and chemicals alter water chemistry, diminishing water quality that supports many aquatic organisms.

### How can I do my part in stormwater pollution?

- Do not dump anything down storm drains
- Direction of your downspouts makes a difference. Direct away from paved surfaces when possible.
- Monitor the use of salt and deicers in the winter.
- Lawn mowing, do not cut or blow grass into streets or curbs.
- Repair leaky vehicles, oil and antifreeze leaks are classic examples.
- Always pick up after your pets on private and public property.
- Use commercial carwashes instead of washing cars in your driveway.
- Trash cans, keep in proper condition. Cracked sides and bottoms. Keep cans covered.
- Use fertilizers properly.



<https://www.epa.gov/nutrientpollution>

<https://www.epa.gov/nutrientpollution/sources-and-solutions-stormwater>

<https://www.youtube.com/watch?v=nxVmwTNAHgE>

<https://www.youtube.com/watch?v=GVm-d-zOxJs&t=47s>