

TOP 10 MYTHS ABOUT STORMWATER

10. Stormwater is clean- Until it hits the ground carrying pollutants that can seriously harm our waters. The following are common types of contaminants found in storm water runoff:

- **Sediment** – During construction projects, soil is exposed and susceptible to erosion. Rainfall on the bare soil may cause erosion and create storm water runoff carrying soil particles. Sediment deposited in a lake or stream, can destroy fish spawning areas and other aquatic habitats, besides being unsightly.
- **Microorganisms** – Sources of bacteria and viruses, in urban runoff, are pet wastes, bird and animal droppings; and effluent from malfunctioning septic systems.
- **Phosphorous and Nitrogen** – These nutrients, often due to over fertilizing, fuel excessive growth of algae and aquatic weeds. When this plant life rots, removing dissolved oxygen from the water; this leaves insufficient oxygen for fish to breath
- **Toxic Chemicals** – Motor oil, gas, grease, zinc from roof drains and road salt when mixed in with storm water runoff, can be toxic to aquatic life, as can household products such as insecticides, pesticides, paint and solvents.

Organic waste such as pet wastes, leaves, grass clippings and litter in storm water runoff use oxygen as they decay. This can result in depleted oxygen in waterbodies, ultimately killing fish.

9. Stormwater Drains Lead to Treatment Plants – Storm drains normally, lead directly to nearby streams and lakes without, any type of treatment. Only Plum Island sewage goes to Newburyport's Waste Water Treatment facility.

8. The Pollutants in Stormwater are not really harmful – As Stormwater flows down roads and lawns, it picks up sediment loaded with nutrients, spilled oil and paint, herbicides and pesticides, grass clippings and leaves. All of these end up directly deposited into a body of water. Extra nutrients from plant debris and soil, overload streams and lakes, feeding algae which in turn depletes, oxygen, killing fish, covering the water surface with algae and, causing a strong dead fish odor. Sewerage from malfunctioning septic systems can be carried to waters in which we and our children swim, play and, fish.

7. Stormwater flows only to local streams – Storm water can make its way to rivers, ponds and lakes, where our families fish and swim.

6. Stormwater is mainly an urban problem – Over-fertilizing and excessive use of herbicides and pesticides, as well as pollution from malfunctioning septic systems, are a problem in suburban and rural areas.

5. Industries and Municipal Sewage Treatment Plants are the greatest source of water pollution – Pollution can be classified into two categories: point source and non-point source. Point source pollution can be tracked to a single, identifiable source, like a pipe leading directly from sewage treatment or manufacturing plant into a stream. Nonpoint source pollution comes from diffuse sources, like stormwater runoff, over a large area. According to the US Environmental Protection Agency, (EPA), non-point source pollution from storm water runoff represents approximately 75% of water pollution in this country.

4. Roads are responsible for most of the state's stormwater runoff – Roads typically make up about 3% of the total land use in urban areas.

3. The state should take care of all stormwater pollution – The state only manages a portion of the land within its borders. While the state often sets guidelines and policies to improve stormwater quality, it is up to the Municipalities, residents, businesses, farmers and commercial and industrial operations to step up and become local leaders in water quality.

2. Stormwater Pollution will eventually go away – The problem will continue to grow, unless each one of us does our part. Simple practices such as keeping your car maintained, recycling motor oil, checking for leaks, composting yard clippings, and cleaning up after your pets, can play a major part in preventing pollution.

1. No real solutions exist to solve our stormwater problem – Plenty of solutions exist to combat stormwater pollution:

- Local governments may implement various stormwater management policies and rules
- Rain gardens and infiltration basins can be installed in yards and next to parking lots
- Rain barrels can be placed under gutters
- Asphalt driveways can be converted to permeable pavers
- Lawns can be converted to native plantings to soak up more rainwater
- Residents can sweep up or mow in grass clippings to keep them out of streets
- Clean up pet droppings in your yard
- Avoid dumping any substance besides rainwater down a storm drain