



What We Can Do To Prevent Water Pollution



Some Historical Perspective

- *In the 1960s, most water pollution in New Jersey emanated from sources such as municipal and industrial wastewater treatment facilities, industrial properties and landfills.*
- *After the passage of the Federal Clean Water Act and the N.J. Water Pollution Control Act in the early 1970s, and aggressive regulation and enforcement, water pollution from those sources has been greatly reduced or eliminated.*
- *Currently, most of the water pollution in New Jersey originates from our neighborhoods and properties. Therefore, education of the public is the key to future improvements in water quality.*



We All Live in a Watershed

- *Most people will tell you that they don't live in a watershed if they can't see a surface water body from their home.*
- *They don't realize that a watershed is mostly comprised of land, not water, and that we all live in watersheds.*
- *A watershed is comprised of all of the land, surface and ground water that influences a discrete surface water system based on local topography.*
- *Therefore, all of our activities on our properties and in our neighborhoods can influence our local watersheds.*



Categories of Water Pollutants

- **TOXIC & HAZARDOUS POLLUTANTS (Paints, Stains, Household Cleaners)** – These products contain organic chemicals and heavy metals, which are considered Toxic & Hazardous Water Pollutants which, if discharged to a waterway, could potentially cause death or harm to fish and other aquatic biota and/or negatively impact human health during primary or secondary contact recreation (swimming, fishing and boating).
- **TOXIC & HAZARDOUS POLLUTANTS (Insecticides, Herbicides)** – These products contain organic chemicals and toxic and hazardous substances specifically designed to kill living creatures, which would include fish and other aquatic biota if they were discharged into a waterway. Harmful impacts to human health are also possible.



Categories of Water Pollutants

- **TOXIC & HAZARDOUS POLLUTANTS (Disinfectants)** – These products, such as chlorine bleach, are intended to protect human health through the destruction of harmful bacteria and viruses in our homes, schools and workplaces, but when discharged into a waterway, they are considered toxic and hazardous water pollutants which will indiscriminately kill fish and other aquatic biota.
- **BACTERIAL & VIRAL POLLUTANTS (Warm Blooded Animal Wastes)** – Just like human waste, droppings from warm blooded animals can contain harmful bacteria and viruses, as well as nutrients and other pollutants. Therefore, it is important to properly manage large concentrations of ducks and geese on or near waterways by prohibiting or discouraging their feeding. Managing livestock and their manure on farms, and picking up after our pets, are other important ways we can prevent water pollution from these sources.



Categories of Water Pollutants

- **NUTRIENT POLLUTANTS (Fertilizers)** – These products contain nutrients, such as phosphorus and nitrogen, which can cause excessive aquatic plant and algae growth when discharged to waterways. This can impede photosynthesis, and result in oxygen depletion and the death of fish and other aquatic biota.
- **PARTICULATE POLLUTANTS (Soil)** – While clean soil would not contain any nutrients or toxic or hazardous substances, when discharged into a waterway, it would be considered a Particulate Water Pollutant, because in quantity, it will turn clear water cloudy and turbid, which in turn can impede photosynthesis and cause oxygen depletion. It will also deposit excessive silt on the bottom, which can impede or prevent fish nesting and reproduction.



Categories of Water Pollutants

- **OXYGEN DEMAND POLLUTANTS (Organic Foodstuffs)** – We need to eat food every day to nourish and fuel our bodies, and we also eat food for enjoyment. What may be good for our bodies and minds, however, is not usually good for the health of a waterway, because most of our foods are rich in natural organic matter. Dairy products, in particular, have high levels of organic content. When discharged into a waterway, the natural “good” bacterial organisms will attempt to cleanse the waterway by consuming this organic matter. The “good bugs” also consume oxygen in this process. In a stream heavily polluted with organic matter, this can severely deplete the oxygen such that the fish and aquatic biota do not have enough left to survive.



In Summation

In summary, many of the things that we have and use on our properties and in our neighborhoods are helpful, useful or necessary for our health, well-being, property maintenance and lifestyles. However, it is important to recognize that most of them are potential water pollutants, that we all live in a watershed, and that we must be vigilant to assure that our use and/or disposal of these products and substances will not negatively impact our local waterways.



Any Questions or Comments?
Thank you for your interest & attention

