



Guide to Preventing Nonpoint Source Pollution in Waterways

With the focal point of Holland being the Hamilton Reservoir and with the vast amount of ponds, rivers, streams, and other unique ecological systems within our community, we must take a proactive approach in prioritizing the preservation of our environment.

In order to protect and foster the natural, scenic, and aesthetic qualities of our community it is necessary that we focus on defending our forests and other ecological habitats from destruction, floods, erosion, and pollution, enhancing watershed control systems, and managing the growth of invasive vegetation and bacteria in our waterways. According to the Executive Office of Energy and Environmental Affairs, EEA, a lake's water quality reflects what is happening in its surrounding watershed.



Hamilton Reservoir Dam- September 2, 2021
Photo Credit: Holland Police Department Archives

A watershed includes all the land, or drainage area, that drains into the body of water. Nonpoint source (NPS) pollution occurs when water flows throughout the watershed, picking up pollutants and depositing them into water resources. Common types of NPS pollutants include phosphorus and nitrogen in lawn and garden fertilizers, pet waste, phosphorus and bacteria from septic systems, oil and grease from parking lots, and sediment from construction activities and soil erosion. The combined effect of NPS pollutants such as phosphorus, sediment, and bacteria may result in degraded water quality and loss of recreational use and wildlife habitat.

You can help reduce and eliminate introducing nutrients and bacteria into our waterways by simply following these tips provided by the EEA:

Encourage infiltration and control sedimentation:

- **Minimize impervious surfaces such as driveways and parking lots to encourage infiltration**
- **Slow or divert stormwater runoff toward vegetated areas where water can seep into the ground**
- **Mulch and seed exposed soils to eliminate erosion**
- **Wash cars over pervious surfaces, such as lawns, not over driveways, and wash undercarriages at commercial car wash facilities**

Reduce and eliminate nutrients and bacteria:

- **Plant vegetation around driveways, shorelines, and on slopes, (the vegetation will absorb nutrients, filter out pollutants, and trap sediment)**
- **Keep yard waste such as grass clippings and leaves out of the lake, storm drains, and off streets, (although yard waste is natural, when it decomposes it becomes high in nutrients)**
- **Use phosphate-free or low-phosphate (less than 1%) automatic dishwashing detergents**
- **Maintain septic tanks with regular pumping and inspection at least every (3-5 years)**
- **Pick up pet waste and dispose of it in the trash**
- **Establish a vegetated buffer strip along shorelines to discourage waterfowl, such as geese, and avoid feeding them, (the average goose will produce one pound of droppings a day)**