

Nonpoint Sources of Water Pollution Reference List

Background Information

Defined: Nonpoint source water pollution runoff results when rain and snowmelt carries natural and human-made pollutions and sediments from land to waterways. Deposition of air pollution particles (air pollution particles settled in waterways) is also a source of nonpoint water pollution. These pollutants in excessive amounts cause problems health problems for humans and wildlife.

Significance: *Nonpoint source pollution is the remaining leading cause of water quality problems.* Nonpoint source pollution has harmful effects on drinking water supplies, recreation, fisheries, and wildlife. Sediment nonpoint source pollution is especially problematic. *Sediments darken the color of water sources which in turn causes the absorption of more sunlight. As water temperatures warm the ability for the water source to hold dissolved oxygen decreases. Less oxygen in waterbodies stresses aquatic life and, in some cases, can cause fish kills.*

Best Management Practices (BMPs): Methods that have been determined to be the most effective and practical methods for preventing and reducing nonpoint water pollution.

Agricultural Lands	Possible Nonpoint Source Pollutants
<i>Animal and/or Crop</i>	Excessive fertilizers and nutrients, herbicides, insecticides, fungicides, sediment from erosion, livestock wastes carrying bacteria, antibiotics and hormones, and overgrazing, which causes erosion. NOTE: With the exception of Animal Feeding Operations (AFO) most “normal” agricultural activity is exempt from regulation under the Clean Water Act (CWA).

Urban Runoff	Possible Nonpoint Source Pollutants
<i>Includes suburbs, commercial areas, and some recreational areas</i>	Auto fluids and oil, grease, toxic chemicals, road salts, pet waste, litter (creating microplastics), legacy septic systems, lawn and garden chemicals, improper disposal of antifreeze, paints and other household hazardous wastes (poured down storm drains), and sediments from eroded areas not maintained in adequate vegetation

Forestry	Possible Nonpoint Source Pollutants
<i>Timber harvest - occurs on private and public lands</i>	Skid trails and forest roads not properly maintained cause sediment erosion; equipment oils left behind and dumped; logging too close to stream banks causing erosion; and large clear-cut areas, which produce greater chances for erosion if not planted with ground cover and surrounded by sediment catchments.

Rural Areas	Possible Nonpoint Source Pollutants
<i>Also see urban runoff and agriculture lands</i>	Erosion from improperly maintained stream banks, fields, wood areas and roads, chemicals, and metals from illegal dumping, personal property dumps, faulty septic systems, faulty wastewater lagoons, and domestic waste discharge pipes.

Wildlife	Possible Nonpoint Source Pollutants
<i>Wildlife Areas and Outdoors Nature Recreation – occurs on private and public lands</i>	Local, state, and national public lands managed for wildlife generally are managed to have minimal nonpoint pollution in order to protect and maintain wildlife habitat. These areas do include roads, human waste collection, and litter.

<https://www.epa.gov/nps/basic-information-about-nonpoint-source-nps-pollution>