



Nonpoint Source Pollution: The Nation's Largest Water Quality Problem

A series of fact sheets on nonpoint source (NPS) pollution

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Why is there still water that's too dirty for swimming, fishing or drinking? Why are native species of plants and animals disappearing from many rivers, lakes, and coastal waters?

The United States has made tremendous advances in the past 25 years to clean up the aquatic environment by controlling pollution from industries and sewage treatment plants. Unfortunately, we did not do enough to control pollution from diffuse, or nonpoint, sources. Today, nonpoint source (NPS) pollution remains the Nation's largest source of water quality problems. It's the main reason that approximately 40 percent of our surveyed rivers, lakes, and estuaries are not clean enough to meet basic uses such as fishing or swimming.

NPS pollution occurs when rainfall, snowmelt, or irrigation runs over land or through the ground, picks up pollutants, and deposits them into rivers, lakes, and coastal waters or introduces them into ground water. Imagine the path taken by a drop of rain from the time it hits the ground to when it reaches a river, ground water, or the ocean. Any pollutant it picks up on its journey can become part of the NPS problem. NPS pollution also includes adverse changes to the vegetation, shape, and flow of streams and other aquatic systems.

NPS pollution is widespread because it can occur any time activities disturb the land or water. Agriculture, forestry, grazing, septic systems, recreational boating, urban runoff, construction, physical changes to stream channels, and habitat degradation are potential sources of NPS pollution. Careless or uninformed household management also contributes to NPS pollution problems.

The latest *National Water Quality Inventory* indicates that agriculture is the leading contributor to water quality impairments, degrading 60 percent of the impaired river miles and half of the impaired lake acreage surveyed by states, territories, and tribes. Runoff from urban areas is the largest source of water quality impairments to surveyed estuaries (areas near the coast where seawater mixes with freshwater).

The most common NPS pollutants are sediment and nutrients. These wash into water bodies from agricultural land, small and medium-sized animal feeding operations, construction sites, and other areas of disturbance. Other common NPS pollutants include pesticides, pathogens (bacteria and viruses), salts, oil, grease, toxic chemicals, and heavy metals. Beach closures, destroyed habitat, unsafe drinking water, fish kills, and many other severe environmental and human health problems result from NPS pollutants. The pollutants also ruin the beauty of healthy, clean water habitats. Each year the United States spends millions of dollars to restore and protect the areas damaged by NPS pollutants.

Three Leading Sources of Water Quality Impairment

Rank	Rivers	Lakes	Estuaries
1	Agriculture	Agriculture	Urban runoff
2	Municipal point sources	Municipal point sources	Municipal point sources
3	Stream/habitat changes	Urban runoff	Agriculture

Source: Water National Quality Inventory, 1994

NPS pollution occurs when water runs over land or through the ground, picks up pollutants, and deposits them in surface waters or introduces them into groundwater

Progress

During the last 10 years, our country has made significant headway in addressing NPS pollution. At the federal level, recent NPS control programs include the Nonpoint Source Management Program established by the 1987 Clean Water Act Amendments, and the Coastal Nonpoint Pollution Program established by the 1990 Coastal Zone Act Reauthorization Amendments. Other recent federal programs, as well as state, territorial, tribal and local programs also tackle NPS problems.

In addition, public and private groups have developed and used pollution prevention and pollution reduction initiatives and NPS pollution controls, known as management measures, to clean up our water efficiently. Water quality monitoring and environmental education activities supported by government agencies, tribes, industry, volunteer groups, and schools have provided information about NPS pollution and have helped to determine the effectiveness of management techniques.

Also, use of the watershed approach has helped communities address water quality problems caused by NPS pollution. The watershed approach looks at not only a water body but also the entire area that drains into it. This allows communities to focus resources on a watershed's most serious environmental problems--which, in many instances, are caused by NPS pollution.

Just as important, more citizens are practicing water conservation and participating in stream walks, beach cleanups, and other environmental activities sponsored by community-based organizations. By helping out in such efforts, citizens address the Nation's largest water quality problem, and ensure that even more of our rivers, lakes, and coastal waters become safe for swimming, fishing, drinking, and aquatic life.