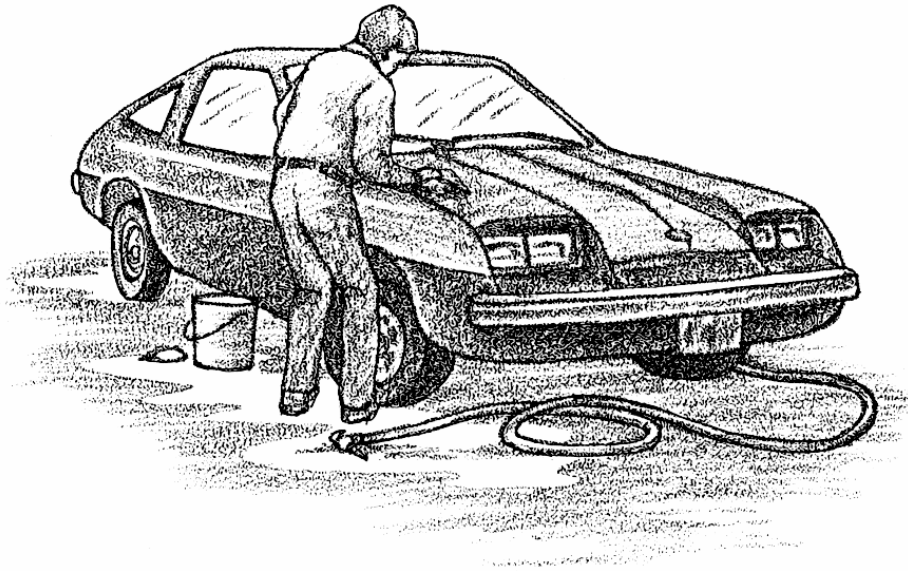


Nonpoint-Source Pollution

by Kenn Oberrecht



In recent years, agencies contending with all the ways we've found to foul our planet's waters have begun focusing their attention on a major source of pollution that, well, you can't really put your finger on. They call it nonpoint-

source pollution and define it as "all pollution entering the surface-water system other than from pipes."

According to the National Oceanic and Atmospheric Administration, the sources you can't point to "contribute more than half of the suspended solids, phosphorus, chromium, copper, lead, iron, zinc and fecal coliform bacteria" that pollute our rivers and estuaries.

When pollution comes from a single point, usually a pipe, it's called point-source pollution. Examples are pulp-mill effluents, sewage discharges, and most industrial wastes that get dumped into our rivers and estuaries. You can point to them.

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They include soil eroding into creeks and rivers from farms, ranches, construction sites, and logging areas. This soil buries valuable gravel spawning grounds in our streams. It increases turbidity, which diminishes sunlight penetration and retards plant growth. It also causes lakes to fill in and age too rapidly.

Runoff in rural areas usually contains harmful chemicals, fertilizer, livestock manure, and waste oil. Runoff in urban areas isn't much different, carrying, as it does, fertilizers and pesticides used on lawns and gardens, pet wastes, and oil leaked from vehicles.

Toxic chemicals, heavy metals, and oil also reach the rivers and estuaries in the leachings from mine tailings and landfills and runoff from scrap heaps and wrecking yards. Rain and melting snow also flush highways, streets, and parking lots of road salt, oil, metals, and other pollutants. Marinas and boat basins contribute untreated sewage and fish wastes. They add cleaning compounds and anti-fouling paints to the pollution brew, as well as contaminated runoff from nearby parking lots.

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Nonpoint-source pollution is a severe problem only recently recognized. Both federal and state agencies throughout the United States are now working to find solutions.

A major contributing factor associated with urban growth and industrial development is the vast and rapid replacement of vegetated, undeveloped land with such impervious surfaces as highways, streets, parking lots, and sidewalks. Streets that end at the edge of an estuary can be particularly harmful, providing a fast and direct route for polluted runoff.

A number of states now require new construction to be set back from waterways for distances of 50 to 200 feet or more, leaving vegetated buffers between structures and the water. Some have redesigned street ends to alleviate the runoff problem. Others encourage planting new buffer zones where none existed before.

The buffer areas filter rainfall and snowmelt runoff, removing much of the harmful contamination from it before it reaches rivers and estuaries.

These measures, coupled with strict permit systems and review of all new development near rivers, estuaries, and tidal wetlands will go a long way toward cleaning up our coastal waters and keeping them clean.

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