
1) Non-Point Source Water Pollution

As discussed in the EPA News⁶, " the task of controlling NPS pollution is in many respects more difficult than controlling pollution from point sources, and requires different control strategies". According to the EPA, nonpoint-source pollution is the main reason lakes and rivers fail to meet clean water standards for fishing, swimming and drinking. This is clearly a growing concern in the United States.

For example, 50-70 percent of impaired or threatened surface waters are affected by NPS pollution from agricultural activities. Pollutants carried by runoff from streets, commercial and industrial sites, and parking lots affect 5-15 percent of surface waters. An estimated 10 percent of surface waters are adversely affected by acid drainage from abandoned mines, by pollution from mill tailings and mining waste piles, and by pollution from improperly sealed oil and gas wells. Engineering projects involving dams and reservoirs cause an increase in sediment deposits that adversely affects aquatic life and that affect around 5-15 percent of all U.S. surface waters.

Among specific NPS-related anecdotes are the following:

- It is estimated that five tons of soil erode off each acre of farmland in the US each year, carrying fertilizers, herbicides, and insecticides into the nation's waterways.
- The EPA estimates that do-it-yourself auto mechanics annually send 180 million gallons of used motor oil down storm drains or to landfills, and eventually into drinking water sources and other water bodies. This is the equivalent of more than 16 *Exxon Valdez* oil spills.
- One thousand miles of storm drains collect runoff from the streets of Los Angeles, dumping it directly into coastal bays. It is estimated, for instance, that the 1989 rainfall of eight inches washed 150 thousand pounds of lead, 500 thousand pounds of zinc, and 11 thousand pounds of cadmium into the Santa Monica Bay.

The control of NPS pollution requires finding technical solutions to managing storm-water runoff and minimizing migration of pollutants into rivers, lakes and ground water. The U.S. Congress is addressing non-point source problems through allowing grants to states under the Clean Water Act to be used for either NPS program development or implementation. As well, State Revolving Funds capitalized by the Environmental Protection Agency may be applied to implementation of NPS programs. In addition, many states are financing their own NPS control programs.

⁶ November/December, 1991 issue.