

Point Source vs. Nonpoint Source Pollution

Point source pollution refers to contaminants that enter the water directly from an identifiable source. The specific location where the pollutant enters a stream or body of water can be identified, because it is usually at the end of a pipe. Examples of point source pollution are sewage treatment plants and industrial sources. Point sources are easier to regulate than nonpoint sources and were the original target of the 1972 Clean Water Act. Although point sources were formerly the worst culprits in impairing water quality, most point sources have greatly reduced the pollution they discharge as a requirement of the permits they must obtain.

Nonpoint source pollution, also known as "polluted runoff," is different. The exact location where this type of pollution enters a stream cannot be easily identified because it comes from entire landscape areas: anywhere that rain falls and carries pollutants as it runs off. Your driveway and the road near your house may be sources of pollution if spilled oil or other contaminants flow from them to a stream. Agricultural areas can be significant sources of pollution when rainfall carries sediment, nutrients, or chemicals to streams. Developed areas are also the source of important, but sometimes different, nonpoint source pollutants. Nonpoint source pollution is currently the major water quality problem in the U.S. - and nonpoint source pollution is directly related to land use. Common nonpoint source pollutants in agricultural areas are sediment, pathogens, nutrients, and pesticides. Common nonpoint source pollutants in urban areas are sediment, pathogens, nutrients, oxygen-demanding substances, heavy metals, oil and other petroleum products, and road salt.