

## Where are These Pollutants Coming From?

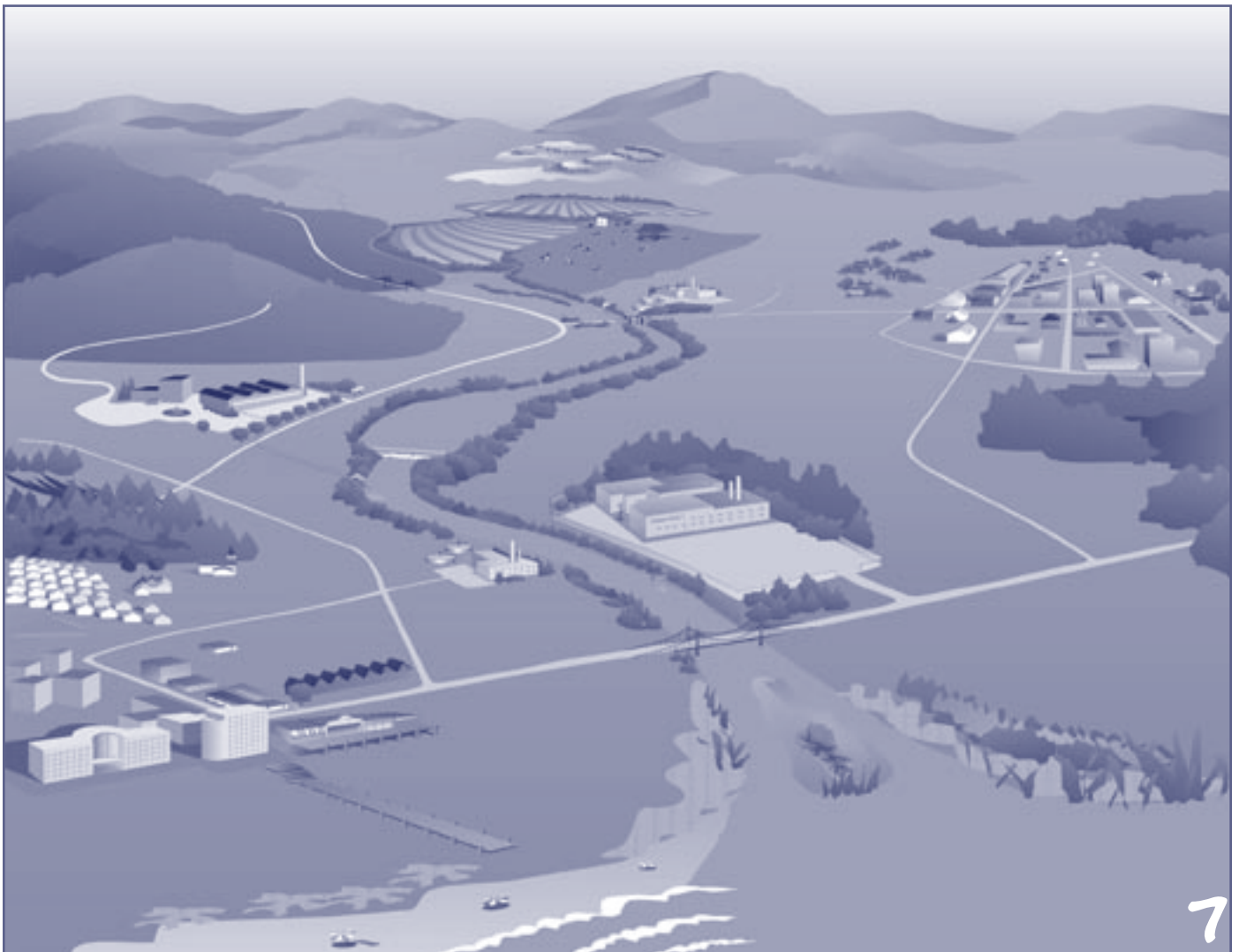
True or false? Factories are the major source of pollutants in our waters.

False. Thirty years ago that statement was true, but since then we've made a lot of progress cutting down on pollution from factories and sewage treatment plants. Although these can still pollute in some areas, today most of the problems in our waters comes from **polluted runoff** draining into rivers, lakes, and bays after a rain storm. Rain washing over the landscape carries dirt, oil, fertilizer, pesticides, animal waste and many other substances off streets and farms and into our waters.

As we pave over natural areas to make parking lots, driveways and roads (known as **impervious** surfaces) the rainwater doesn't slowly soak into the ground like it used to. Instead it's channeled into gutters, culverts, and storm drains. These tend to be convenient places for people to illegally dump used motor oil, trash, and yard waste. These pollutants then are whisked directly into our streams, wetlands, bays, and lakes.

Areas where water can slowly soak into the ground are described as **pervious**. Pervious areas include lawns, fields, wooded areas, and even brick walkways and gravel driveways that allow rainwater to soak in.

And there's more. All over the country, streams have been straightened and physically altered to flow in a certain direction; some have been lined with concrete. This makes water rush faster after a rainstorm (increasing erosion) and makes it difficult or impossible for plants and aquatic



If you  
were a  
trout or  
a mayfly,  
where  
would you  
rather  
live?

Does your  
nearby  
stream look  
like this?



or this?

creatures to live and thrive. Wetlands have been dredged and filled to make way for houses, golf courses, and shopping malls. Dams constructed to control the flow of water also prevent migratory fish, such as salmon, shad and sturgeon, from swimming upstream to spawn.

### **What's being done?**

We all need to work together to reduce and prevent polluted runoff. For example, the federal government works to ensure that lands belonging to the government are properly managed to cut down on soil erosion. Farmers are learning how to manage their land, crops, and animals to keep them from affecting nearby waters. Your city, town or county has local laws controlling what can be built where, and how construction sites should be managed to keep rainwater from washing bare dirt away. You can play an important role by practicing water conservation and by changing certain everyday habits (see What Can I Do??? on p. 11).

As for all those straightened and channeled streams and impervious surfaces, prevention is the key. Once a stream has been altered or an area has been paved over, it's very difficult (and it costs a lot of money) to undo the damage. Some communities are beginning to realize the value of clustering new buildings where roads and paved areas already exist, and leaving open spaces like woods and farmland alone. Laws that make it illegal to drain or fill a wetland are being enforced. And many streams that were altered in the past are now being restored to flow in a more natural way.