



Ohio Department of Natural Resources

Division of Soil and Water Resources

Fact Sheet

Fact Sheet 97-45

Individual Practices to Protect Ground Water Quality

People often believe that they have no control of the quality of water they use. It is frequently felt that federal, state, and local agencies determine legislation (or lack thereof) for the protection of natural waters. This, however, is not entirely true. Water quality can be protected at some level by each person. There are some actions you can take to help assure good quality water for you, your family, and your neighbors.

Protecting Your Individual Well Water Quality

The first step is to look at water quality within your own well. Initially, you may need to install corrective devices to remove any unwanted constituents in the water. Devices such as water softeners, reverse-osmosis systems, and ion-exchange systems are commonly used for in-home application. Secondly, you should regularly shock-chlorinate your well to eliminate any bacterial growth/accumulation in the well. Periodic inspections of the well casing and cap should be conducted to assure casing integrity.

To reduce the possibility of nitrate in ground water, you should have your septic tank cleaned and serviced every two years. This eliminates back-up of wastes and prevents leaching of unwanted material into the soil. Finally, periodic testing of the well water will keep you abreast of constituents contained within the water. With this knowledge you can correct many problems in your ground water supply.

What You Can Do to Reduce NPS Pollution

While it is true that government agencies regulate point sources of contamination such as industrial plant discharge, wastewater treatment plants, and sewage treatment plants; they have limited power in controlling nonpoint source pollution. Nonpoint source (NPS) pollution includes things like pesticide and herbicide runoff, street runoff, and soil erosion. Because nonpoint sources now contribute the majority of contamination to ground and surface water, they must be the focus of our attention.

Nonpoint source pollution is derived from “diffuse” sources. Therefore, it is impossible to determine the source that is contaminating ground water. NPS pollution is generally widespread in nature and affects all of us. Therefore, it should be all of our responsibility to improve water quality by reducing NPS pollution.

Reducing nonpoint source pollution begins with common sense. For example, avoid spilling motor oil, antifreeze, or other toxic chemicals directly onto the ground, which may infiltrate the soil and subsequently enter the ground water system. Mix chemicals such as fertilizers and pesticides on a cement pad to avoid ground water infiltration or runoff to surface waters by accidental spillage. Always read the manufacturers instructions posted on the bottles for best mixing ratios. It is extremely important not to over-apply the chemicals to gardens and fields, and always use correct application times and procedures.

Wetlands and thick vegetative growths provide excellent natural filtration systems for pollutants. Preservation of these natural sites is important. When possible, avoid cutting down trees, shrubbery, and grasses that are next to natural surface waters as these materials may serve as natural filters. Soil erosion can be reduced by leaving natural vegetation in place.

Answers for Questions

There are various resources available that are set up to help you and answer your questions. These resources range from the federal agencies down to local interest groups. You may choose the agency that is best suited to service your particular needs.

Federal agencies include the United States Environmental Protection Agency (USEPA), and the United States Geological Survey (USGS). On the state level there is the Ohio Department of Natural Resources (ODNR), the Ohio Department of Health (ODH), and the Ohio Environmental Protection Agency (OEPA). Finally, on the local level, agencies such as the soil and water conservation districts, the county health departments, and the local cooperative extension service offices may provide information.

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Your county or town may have already formed a steering committee or planning committee designed to address water problems in the area. These committees are important because they ask and answer questions that are relevant to protecting water quality in and around where you live. These committees are excellent places to start looking when you need information.

If you have any questions on how to protect water quality in your home or town, or have questions on how to get in touch with the appropriate agencies, please contact:

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