

How It Works

"A drop in the bucket." This often-used expression gives many people the excuse to resist change in their normal way of doing things. "Why change?" they say. My actions mean nothing in relation to the total actions of everyone around me." This may have been true years ago, but today it's different. With the high concentration of people now living in our state, the total accumulative effect is no longer a drop in the bucket. Homeowners need to recognize those activities that are a risk to the environment and understand the practices that can help to reduce those risks.

Many of today's environmental problems are caused by man's activities on the land. If we want to reduce the adverse effect our actions are having, then each of us must do what we can to avoid polluting our environment. Take a minute to think about our water and how it cycles. All the water we have is already here on earth in some form. It is in the atmosphere; in icebergs; in oceans, lakes and ponds; in plants and animals; and in our soil at various levels. Water falls as rain, which either runs off or soaks into the soil. The water that runs off usually enters some sort of surface storage area such as a lake, pond, river or ocean where it is subject to evaporation. The water that soaks into the soil becomes groundwater. This water is available for our use as a shallow well and feeds our lawns, crops and trees.

All living plants return some of this water back into the atmosphere through transpiration. Some groundwater also returns to the surface by flowing down grade to fill a pond, supply a stream or just bubble as a spring. Certain soils allow groundwater to infiltrate deeper into the soil and fill aquifers and deep wells. We are talking about a lot of water in a very delicate, but balanced system. The old saying "what goes around comes around" certainly describes the [water cycle](#).

So, you see what we do on the surface dramatically affects our water both above and below the surface.

Just as an example, when you fertilize your lawn, some fertilizer may land on the sidewalk or street. It is carried by the next rain past your neighbor's house and joins the fertilizer he spilled on his driveway. It then enters a small stream along with fertilizer from other developments. The small stream joins a larger one carrying even more material from our county and that stream enters the river carrying nutrients from our own and other states.

In addition, by applying too much fertilizer to your lawn, you may supply more nutrients than your plants can use. This excess of nutrients enters the groundwater and follows the flow of the water table.

The effluent from a septic system that is improperly designed, located too near a well, or is improperly maintained also follows the groundwater flow. Therefore, never dispose of hazardous material through your septic system, and keep your system maintained properly. Disposing of solvents such as gasoline, paint thinner or other hazardous materials on the ground is dangerous and could be a risk to groundwater.

In total, each of us has had an opportunity to contribute to this serious environmental impact. Fortunately, nature has the ability to correct or reduce the effect of some of our activities. But as we grow in numbers or increase our poor practices, we reach a point where the problem cannot be buffered by nature.

The purpose of these examples is to stimulate you to think about your activities and the impact they may have on the environment.

- When you fertilize your lawn, does the fertilizer sometimes fall where it might run into a stream?
- When you spray your shrubs or garden, do you mix only what you need? If you have excess, how do you dispose of it where does it end up?
- Do you recognize that you probably have hazardous materials in your home? How do you properly dispose of them?
- If your home is serviced by a septic system, how can you keep it functioning properly? Should you be concerned if it is not?
- Have you ever considered how you could landscape your property to take advantage of more drought-tolerant plants in order to conserve water?

These topics are discussed in a series of circulars prepared by Delaware Cooperative Extension and the Delaware Nature Society. These are designed to inform homeowners about best management practices that can help to reduce the chances of our activities adversely affecting our environment. Each of us can make a commitment to improve our activities, but more important, let's put our commitment into action for positive results.

Together we can make a difference.

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Last revision: November 1995

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