

## How You Can Help Protect Our Water



- Identify the pest and learn about the best way to control it. Decide if pesticides are needed.** There are a number of methods, other than pesticides, available to manage pests. A source of information is Brochure #2 in this series, "IPM in and around Your Home," which is available from the DEC. If you decide to use pesticides outside your house, on the lawn, shrubs and garden, it is important to use them properly or they may enter surface or groundwater.



- Wait for the appropriate weather conditions and directly target the pest when applying a pesticide.** This will prevent pesticides from running off with rain water or spray drift being blown by the wind into surface water.



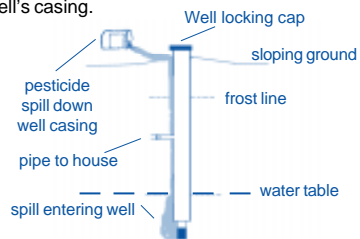
- Sweep up granular pesticides that fall on walks and driveways.** Deposit sweepings on treated area or back into container for later use. Runoff occurs more readily on impervious surfaces like walks, driveways and compacted soil. Runoff can carry pesticides to storm sewers.



- Leave buffer areas of vegetation near streams and water ways.** This will help prevent rain or irrigation water runoff from carrying pesticides to a nearby stream, pond or lake.

- Know the approximate depth to groundwater in the areas you intend to treat with a pesticide.** Shallow water tables and sandy soils permit water-carrying pesticides to more quickly percolate to groundwater.

- Do not use or mix pesticides near your well.** Pesticides can enter the ground and contaminate groundwater and your well by entry along the well's casing.



- If storing pesticides, use locked cabinets or sheds.** Unlocked cabinets or storage may lead to spills or incorrect use, causing pesticides to reach ground or surface water.
- Store pesticides in their original containers.** This insures that label precautions about use pertaining to humans, animals and water resources are readily accessible. Never store split or broken pesticide containers.
- Never pour leftover pesticides down the sink, bathtub drain, storm sewer, or on the ground outside.** Whether your house waste water goes to a sewage treatment plant or your own septic system, pesticides may make their way to surface or groundwater.

## Protecting Our Water is Everybody's Business!



Brochures in this series are:

- #1 - Why Manage Pests?
- #2 - IPM in and around Your Home
- #3 - Understanding Pesticide Product Labels
- #4 - Home Pest Management and Children
- #5 - Water Quality and Home Pesticide Use

They are available from the NYSDEC, Bureau of Pesticides Management, telephone 518-402-8781, Albany, NY, or the DEC regional offices. Visit the NYSDEC website,

<http://www.dec.state.ny.us/>



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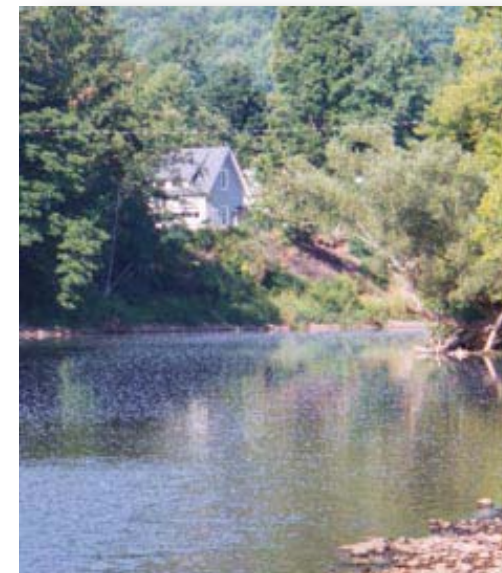


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New York State



PEST MANAGEMENT INFORMATION SERIES  
#5 Water Quality & Pesticides



## Water Quality and Home Pesticide Use



New York State  
Department of Environmental Conservation  
George E. Pataki, Governor      John P. Cahill, Commissioner

# How Home Pesticide Use Can Affect Water Quality

## Water: One of Our Greatest Resources

Water is essential for all life on earth. Therefore, it is critical for us to protect the quality of our water resources, which include:

- Surface water, such as lakes, rivers, streams, wetlands and drinking water reservoirs; and
- Groundwater.

Many of our homes and living areas are near streams and lakes or above groundwater that supplies us with water through private or municipal wells for drinking or other uses.

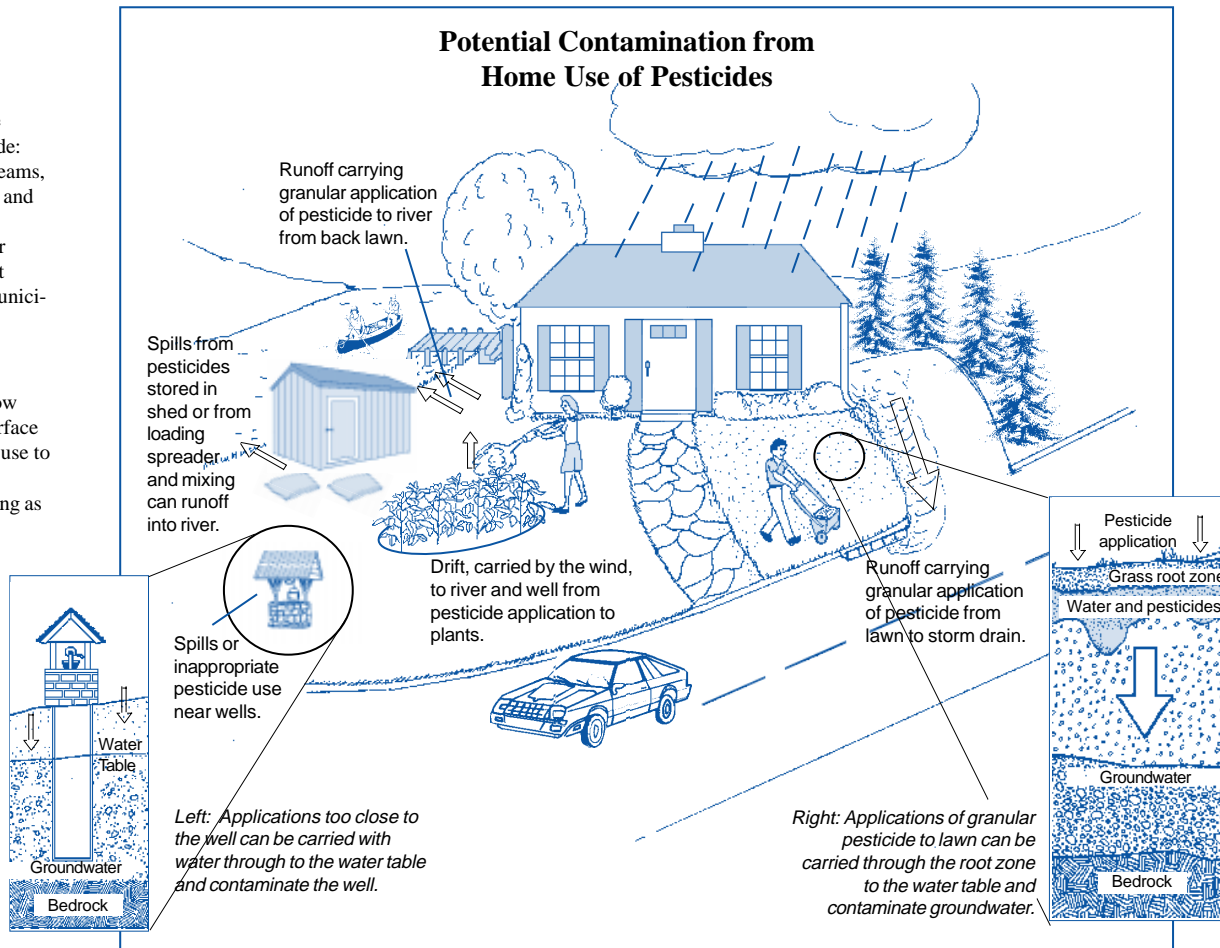
## Pesticides and Water Resources

It is our responsibility to understand how home use of pesticides can contaminate surface and groundwater and what practices we can use to prevent this from happening.

Two pathways water can take when falling as rain or other precipitation are:

- 1) Runoff from the land surface to surface waters; and
- 2) Percolation or leaching into groundwater. Precipitation can carry other substances with it, like pesticides, to our water resources.

When you use pesticides outside your house, on the lawn and in the garden, it is important to use them according to the instructions on the label to prevent the pesticides from entering water resources.



The illustration on the left shows examples of outdoor pesticide use at one household. It also demonstrates how pesticides not used responsibly, or not according to label directions, can:

- **Travel with water directly into streams.** How a pesticide travels with water depends on the characteristics of the pesticide, such as how easily it mixes with water, conditions of the soil, and how much vegetation, (including lawns) buffers the stream.
- **Leach or percolate into the soil.** Rain can carry pesticides into soil depending on the pesticide characteristics, such as how quickly it breaks down in the soil, on how much pesticide was applied, and also on your soil type. If you have sandy soils, for example, more leaching can occur.
- **Be carried by water.** Pesticides can run down roads to storm drains and possibly to lakes or streams.
- **Enter a drinking water well.** Applications too close to a well or a pesticide spill that finds its way down the casing of the well will carry pesticides into the groundwater.