

# The Facts About Lawn Chemicals

Lawn chemicals are the fertilizers, herbicides and insecticides used in lawn and garden care. When lawn chemicals are applied improperly, they can run off into streams, harming fish and other animals, and contaminating our drinking water.

Overapplication of any lawn chemical can result in runoff that carries toxic levels of chemicals or excessive nutrients into lakes, streams and groundwater.

Fertilizers usually contain nitrogen (N), phosphorous (P) and potassium (K), or potash. Nitrogen is an important lawn nutrient, but it can contaminate groundwater with nitrates. Phosphorous can promote excess weed growth in lakes and ponds and contaminate groundwater, while the chloride that is often combined with potassium in potash is also harmful.

Some lawn chemicals threaten native flowers and grasses by harming beneficial insects that safely control weeds and unwanted insects.

# What's the Problem?

When using lawn chemicals, become familiar with a product's toxicity and potential environmental impact. The following are some of the health risks that lawn chemicals pose to humans, pets, wildlife and aquatic organisms.

When lawn chemicals run off into lakes and streams, insects and fish are harmed or killed, causing disruption to the entire food chain.

The use of lawn chemicals accounts for the majority of wildlife poisonings reported to the Environmental Protection Agency.

Lawn chemicals can be absorbed through the skin, swallowed or inhaled. During application, lawn chemicals can drift and settle on ponds, laundry, toys, pools and furniture.

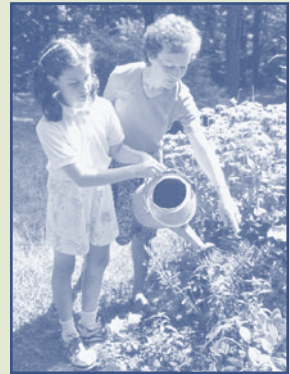
Even pets are at risk — studies show that the rates of lymphoma in pets of pesticide users are significantly higher than occurrences in the pets of non-chemical users.

Several types of cancer, immuno-response deficiencies, neurological diseases, and birth defects have been associated with exposure to lawn chemicals. By releasing chemical toxins into the environment, air and water quality suffer, ultimately causing health problems.

# What Can You Do?

Fortunately, there are some things that you can do to lessen the effect lawn chemicals have on water quality:

- Test the soil for nutrient deficiencies on a regular basis before using lawn chemicals.
- Read labels on lawn chemicals carefully and always apply products sparingly.
- Use caution on slopes and lawn edges so fertilizer will not wash into nearby storm sewers or waterways.
- Allow proper drying time for liquid chemicals, and never use lawn chemicals before a heavy rainfall is expected.
- Landscape with native plants, grasses and flower species whenever possible. A natural lawn reduces or eliminates the need for lawn chemicals.
- Try using compost or organic lawn chemical alternatives. Composting creates an organic, slow-release fertilizer and soil-enhancing material.
- Contact your county extension service for more information on lawn chemical use, or visit [www.oznet.ksu.edu](http://www.oznet.ksu.edu)



# What is a Watershed?

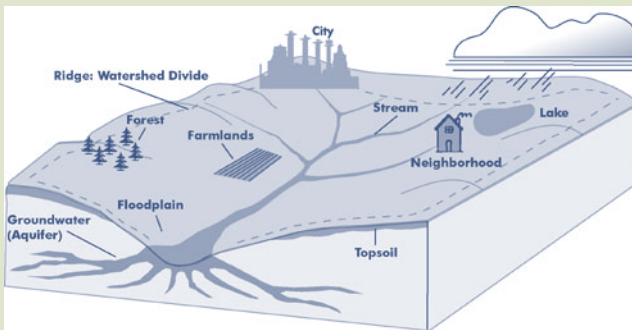
A watershed is an area of land that drains to a common point, such as a nearby creek, stream, river or lake. Every small watershed drains to a larger watershed that eventually flows to the ocean.

Watersheds support a wide variety of plants and wildlife and provide many outdoor recreation opportunities. By protecting the health of our watersheds we can preserve and enhance the quality of life for Kansas residents.

## What is Stormwater Runoff?

Stormwater is water from rain or melting snow. It flows from rooftops, over paved streets, sidewalks and parking lots, across bare soil, and through lawns and storm drains. As it flows, runoff collects and transports soil, pet waste, salt, pesticides, fertilizer, oil and grease, litter and other pollutants. This water drains directly into nearby creeks, streams and rivers, without receiving treatment at waste water treatment plants.

Polluted stormwater contaminates streams, rivers and lakes. It can kill or damage plants, fish and wildlife, while degrading the quality of our water.



A typical watershed system

For more information:  
[www.oznet.ksu.edu/kcare](http://www.oznet.ksu.edu/kcare)  
Or call 785-532-7108

For information or assistance on water quality protection in your community, contact a Kansas watershed specialist:

### Smoky Hill/Kanopolis Lake Watershed

Stacie Minson, Hays  
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### Lower Neosho Watershed

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# Use Lawn Chemicals Wisely

Watershed Tip

The improper use  
of lawn chemicals  
threatens the  
quality of our water



## Good Neighbors Care About Clean Water