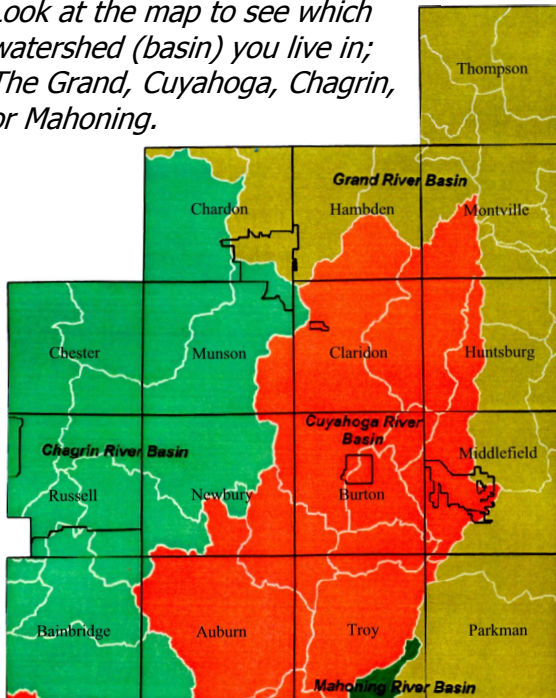


## Geauga County's Watersheds

We are lucky to live in Geauga County. This county is rich in its natural resources, and especially in its streams and rivers.

Here in Geauga County, we are home to four major watersheds; the Chagrin River Basin, the Cuyahoga River Basin, the Grand River Basin, and the Mahoning River Basin. Geauga County itself, is located mostly within the Lake Erie Watershed. This means that all of the water that flows in our streams and rivers will eventually flow into Lake Erie. The only exception to this is the Mahoning River Basin. The Mahoning River flows south, into the Ohio River.

Look at the map to see which watershed (basin) you live in; The Grand, Cuyahoga, Chagrin, or Mahoning.



This brochure created by the Staff of the Geauga Soil and Water Conservation District under the authority of the Board of Supervisors and assistance from the USDA - Natural Resources Conservation Service.

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Information for this brochure obtained in part by the United States Department of Agriculture, Natural Resource Conservation Service



## Geauga Soil and Water Conservation District

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Burton, Ohio 44021

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Fax: 440-834-0316  
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### Geauga SWCD Mission:

*"To conserve, protect, and enhance the resources of Geauga County by providing leadership, education, and assistance to all."*

Last Revision: 2015

All services are provided without regard to race, religion, gender, age, physical or mental handicap, national origin or politics.



## Geauga Soil and Water Conservation District

# Watersheds And You

Residents' Responsibilities  
In Protecting Geauga  
County Watersheds

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## What is a Watershed?

*Watersheds are an integral part to the survival of wildlife and our environment. A watershed is simply the land that water flows across or under on its way to a stream, river, or lake.*

### **How do watersheds work?**

The landscape is made up of many interconnected basins, or watersheds. Within each watershed, all water runs to the lowest point - a stream, river, or lake. On its way, water travels over the surface and across farm fields, forest land, suburban lawns, and city streets, or it seeps into the soil and travels as ground water. Large watersheds like the ones from the Mississippi River, Columbia River, and Ohio River are made up of many smaller watersheds, across several states!

### **Are all watersheds the same?**

Not at all. Watersheds come in many different shapes and sizes and have many different features. Watersheds can have hills or mountains or be nearly flat. They can have farmland, rangeland, small towns, and big cities. Parts of a watershed can be so rough, rocky, or marshy that they're suited only for certain trees, plants, and wildlife.

### **Your Watershed Community**

Everyone lives in a watershed. You and everyone in your watershed are part of the watershed community. The animals, birds, and fish are part of it too. You influence what happens in your watershed, good or bad, by how you treat the natural resources - the soil, water, air, plants, and animals. What happens in your small watershed also affects the larger watershed down stream.

## Harmful Habits

*The following activities contribute to the negative effects on our environment.*

### **Construction:**



More than 1.5 million acres of land are developed each year in the United States. Development can alter the landscape, causing many problems for our watershed. The main problem that construction poses on our waters is sedimentation. Without careful construction methods, much of the soil that construction leaves exposed can escape into our waterways. This can change the rivers natural stream flow, and cause the streams to change size and shape. Also, having a large amount of sediment in our waters is harmful for aquatic plants and animals.

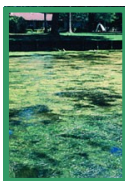
### **Impervious Cover:**

Development changes the land by replacing natural cover with rooftops, roads, parking lots, and other surfaces that are impermeable to rainfall. These surfaces are more commonly known as *impervious cover*. Since rainwater cannot penetrate these surfaces, it must 'runoff' the land. Impervious cover produces 16 times more runoff than a forested area. For example, if it were to rain 2 inches on an impervious surface, 1.9 inches would become runoff. However, in a forest only .12 inches would become runoff. This runoff can collect chemicals and other pollutants as it flows over the surface, finally depositing them into our waters. This type of pollution is known as *nonpoint source pollution*, meaning that it is difficult to point to the source. Some of these chemicals include oil, gasoline, paints, fertilizers, pesticides, soap, detergent, and many others.



### **Agriculture:**

Applications of fertilizers, manure, and pesticides, if not properly done, can degrade the quality of streams. Nutrients such as phosphorous and nitrogen, which are the main components of fertilizers, stimulate plant growth. A large amount of these nutrients enter lakes and streams through agricultural runoff from, fertilizers, pesticides, and livestock waste. The increase in these nutrients can cause algae blooms, which can be harmful for both human and aquatic life.



## Ways YOU Can Help Protect Your Watershed

*So...you don't run a farm, you don't control development, you don't litter, and you are only one person...so how are you affecting the health of our waters? The first step to protecting your watershed is understanding how you might contribute to the problem.*

The following is a list of the number of people in the United States who contribute to the following nonpoint source pollutants. *Do you do any of these things?*

- ✧ Hosers (*over watering*) — 15 million
- ✧ Pesticide Sprayers — 43 million
- ✧ Bad Mechanics (*improper disposal of oil*) — 3 million
- ✧ Septic Slackers — 15 million
- ✧ Chronic Car Washers — 27 million
- ✧ Bad Dog Walkers — 16 million
- ✧ Over Fertilizers — 38 million

### **Be A Solution To The Pollution**

There are several things you can do around your home to help clean up your runoff.

**Car Washing:** Wash your car on your lawn using a phosphate-free soap. This keeps soapy water out of the storm drain, and can double as a drink for your lawn!

**Pet Waste:** Carry a bag, and remember to use it.

**Sand and Salt:** After the snow piles have melted, sweep up extra sand and salt. Excess sand can fill in lakes and streams, cover up habitat for aquatic life and carry pollution.

**Chemicals:** When working with chemicals be sure to clean up spills and dispose of used oil, paint, or other chemicals at your local household hazardous waste collection site.

**Re-Direct Downspouts:** Make sure downspouts from your roof are not only directed away from your foundation, but onto your lawn and not your driveway or sidewalk. You can collect the water from your

