



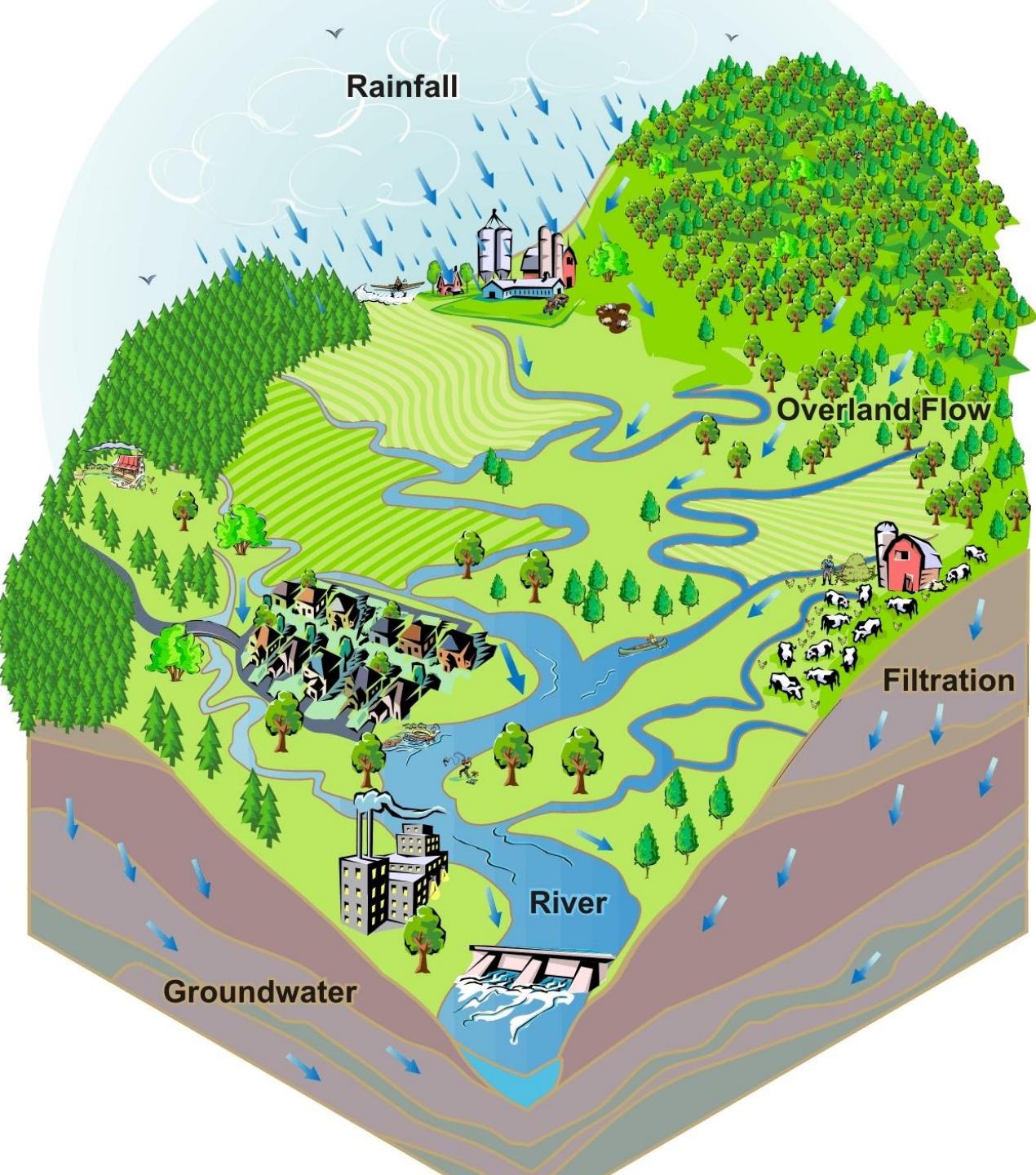
Where does the water flow?

Reducing stormwater pollution within our community

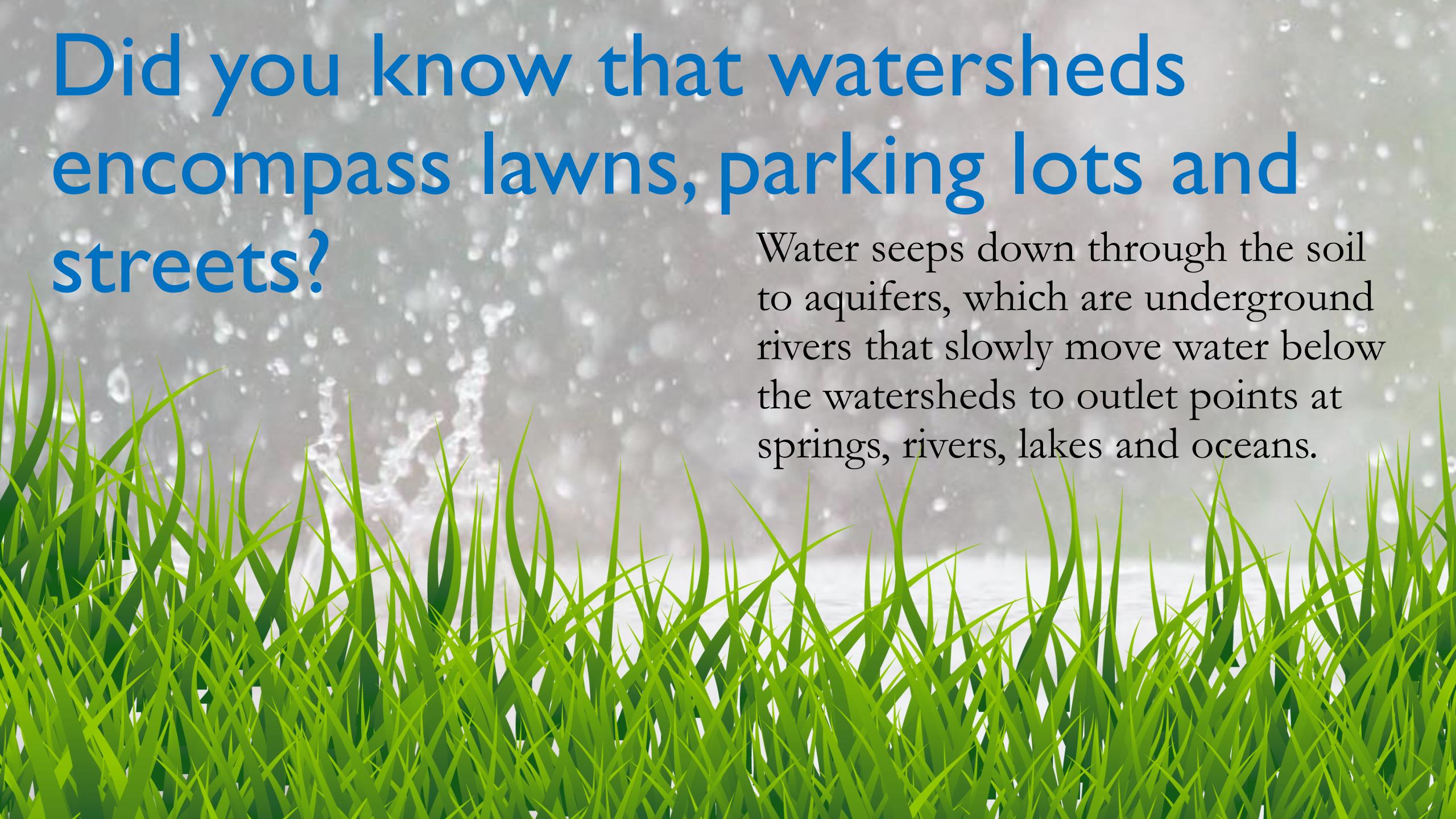
Watershed

What is a watershed?

A watershed is a an area of land in which all surface and ground water flows downhill to a common point, such as a river, stream, pond, lake, wetland or estuary. An estuary is a partly enclosed coastal body of water in which river water is mixed with seawater. Despite the differences in size, all watersheds share common properties. They all perform the same function of transporting water over the earth's surface. We all live in a watershed. If your feet are on the ground, you're in a watershed.



Did you know that watersheds encompass lawns, parking lots and streets?



Water seeps down through the soil to aquifers, which are underground rivers that slowly move water below the watersheds to outlet points at springs, rivers, lakes and oceans.

Many Human Activities Have Effects on Watersheds.

Construction projects like dams can limit the flow of water; construction of roads and buildings can divert and even increase the flow of water.

Agricultural fertilizer can run off of crop fields and inadvertently harm microorganisms in rivers and lakes, having an adverse effect on water quality and marine life. The irresponsible disposal of household and industrial chemicals can be harmful because these chemicals travel through the watershed, poisoning life and damaging the ecosystem.



Did you know that watersheds can also have an effect on human life?

Many communities use rivers and streams as their source drinking water. Water treatment prepares this water for human consumption, but if the water is laden with chemicals and microorganisms, it can be difficult to treat effectively.



Floods are a major event in a watershed...

Homes built on flood plains, low lying areas adjacent to rivers, are susceptible to flooding conditions when heavy precipitation exceeds the watershed's capacity to absorb water.

Rivers, streams, and lakes overflow, threatening human lives, and damage or destroy roads, buildings and flood control measures.



Watersheds can also become dry...



When a watershed becomes dry due to a lack of precipitation, this can cause a water shortage for those who depend on their lakes and rivers for drinking water.

Did you know that stormwater produces water for our watersheds?

What is stormwater and why does it matter?

Stormwater is any precipitation that falls from the sky including rain, hail and snow. In natural landscape without development, stormwater is absorbed into the ground or falls into bodies of water. This gives needed water to plants and animals; and it replenishes reserves of surface and groundwater.



Stormwater runoff is generated in more urban developed areas...



In developed urban areas, stormwater falls onto impervious surfaces (surfaces that do not absorb water) such as roads, sidewalks, rooftops, or parking lots and is not soaked up by the ground. As a result the falling water is swept across the surface as runoff; finding its way into a local waterways or it is directed into a local waterway through a storm drainage system.

Why is stormwater runoff a problem?

Stormwater can pick up debris, chemicals, dirt and other pollutants and flow into a storm drainage system or directly to a local waterway. Anything that enters the storm drainage system flows directly into our waterbodies we use for swimming, fishing and providing drinking water...



Polluted stormwater runoff can have many adverse effects...



- Sediment can cloud the water and make it difficult or impossible for aquatic plants to grow. Sediment can also destroy aquatic habitats.
- Excess nutrients can cause algae blooms. When algae die, they sink to the bottom and decompose in a process that removes oxygen from the water. Fish and other aquatic organisms can't exist in water with low dissolved oxygen levels.

Pollutants on land can reach waterbodies that are miles away...

- Bacteria and other pathogens can wash into swimming areas and create health hazards, often making beach closures necessary.
- Debris – plastic bags, six-pack rings, bottles and cigarette butts that wash into our waterways can choke, suffocate, or disable aquatic life like ducks, fish, turtles and birds.



Common household products can have an adverse effect on our waterways...



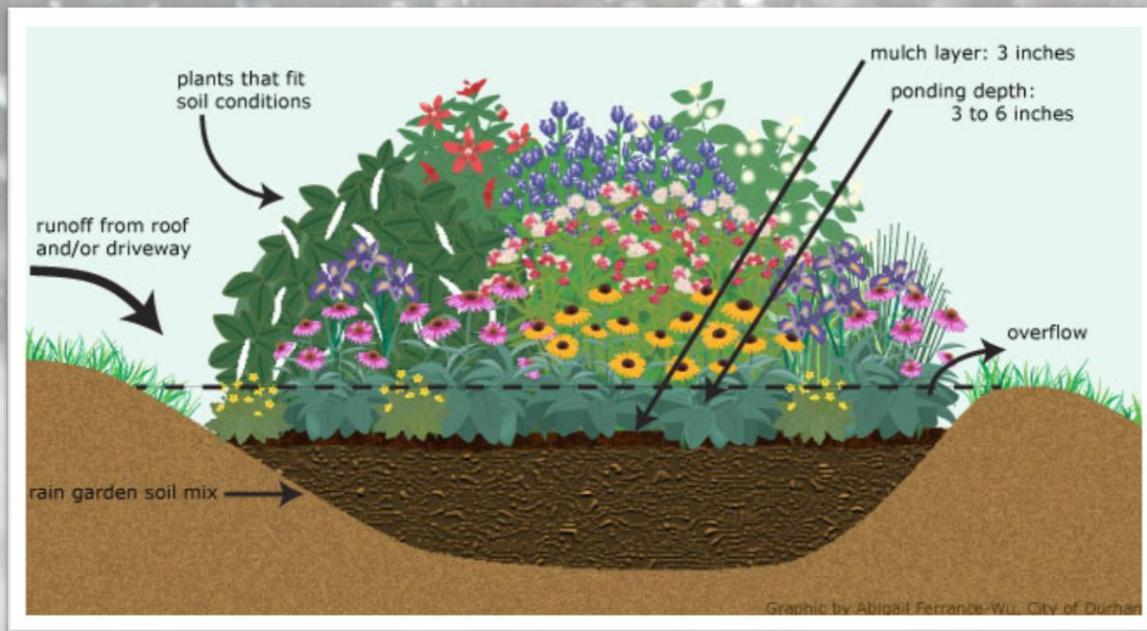
- Household hazardous waste like insecticides, pesticides, paint solvents, used motor oil, and other auto fluids can poison aquatic life. Land animals and people can become extremely ill from eating diseased fish, shell fish or ingesting polluted water.
- Polluted stormwater often affects drinking water sources. This, in turn can affect human health and water treatment costs.

Here are a few ways you can be the solutions to water pollution!

- Properly dispose of household products containing chemicals. Don't pour them onto the ground or into storm drains!
- Instead of washing your car at home, take it to a car wash. A commercial carwash treats or recycles the wastewater.



- Plant a rain garden and provide a natural place for stormwater to soak into the ground.
- When walking your furry friends be sure to pick up the waste and dispose of it properly.



It is up to all of us to protect our lakes, rivers, streams and waterways from polluted runoff.

