

Partners for Healthy Watershed Annual Training Fact Sheet

Your business is doing its part to keep your local watershed healthy and clean. But what does that mean, and what is your role? Keep reading for answers to your watershed questions.

What is a watershed?

A **watershed** is an area of land where all of the water that falls on the ground drains to one body of water like a lake, stream or river. For example, after it rains much

of the area in Richland County flows to the Congaree River; this area is considered part of the Congaree River Watershed. Large watersheds are made up of smaller watersheds. The Congaree River watershed includes the Gills Creek watershed, the Rocky Branch watershed, and many others.

What is stormwater?

Stormwater is water that falls on the ground, primarily from rain, but also from other sources such as irrigation or car washing. In a natural setting, most of the water soaks into the soil. Unfortunately, urban and suburban settings have too many hard, or **impervious**, surfaces such as roads, parking lots and roofs which don't allow the water to soak into the soil. Even lawns frequently have compacted soils that are too hard for very much water to soak in.

With so many hard surfaces, most of the water that falls runs off the land and either into **storm drains** or directly into ditches and streams. Anything that is on the ground, including trash, oil from cars, fertilizer, pet waste, and other pollution, gets picked up and carried with it to streams and rivers. If streams, ditches, and storm sewers are too small to handle the amount of water coming from an area, or become clogged with trash and leaves, flooding can occur.

What is a storm drain?

Storm drains are the grates or openings on the sides of the road and in parking lots and lawns that take away storm water. Pipes, called **storm sewers**, carry water from storm drains to a nearby stream, pond or ditch.

What is the difference between a storm sewer and a sanitary sewer?

- **Sanitary sewers** take away water from toilets, sinks and showers. This water is taken to a treatment facility, where it is cleaned up and harmful bacteria and contaminants are removed.
- **Storm sewers** take away water from roads, parking lots and lawns. This water goes to nearby streams and ponds. It is not treated, and contaminants and pollution are not removed. Only rain water should ever go down a storm drain.

Pollutants in Stormwater

- **Fecal Bacteria** Germs from human and animal waste. These cause disease and pose a hazard to human health.
- **Sediment** Loose dirt from construction activities, erosion, and areas with bare soils. Sediment makes water cloudy and destroys habitat for fish and aquatic life.
- Nutrients Found in chemical and organic fertilizers, as well as in human and animal waste. Excess nutrients can lead to algae blooms which cause oxygen levels in water to drop. This can result in fish kills.
- **Toxic Contaminants** Motor oil, gasoline, pesticides, household cleaners, and other toxic materials that end up on the ground or in storm drains.
- Litter and Debris Trash, junk, leaves and yard waste can clog storm drains, causing flooding. Litter can also be harmful to wildlife who may eat it or become entangled in it.
- Thermal Pollution Hard surfaces like parking lots and roofs heat up in the sun, causing water runoff to be too warm. This can be stressful for fish and aquatic life.

Pollution Prevention Steps for Employees

By each doing our part we can:

- Make our streams cleaner
- Reduce flooding
- Make local waters more attractive for recreation and tourism
- Make local waters an asset for our businesses, not a liability

Parking lots and outdoor areas:

Anything that goes on the ground outdoors will be carried by water to streams and rivers. Keep outdoor areas tidy and free of pollution.

- Mark all storm drains with a "no dumping" message.
- Pick up litter from the property.
- Keep storm drains clear of litter and debris (including pinestraw, leaves, etc.).
- Clean up leaks from vehicles with absorbent materials, not water.
- Keep dumpster areas clear of litter and debris. Ensure dumpsters do not leak and have lids that stay closed.
- Provide an outdoor receptacle for cigarettes.

Cleaning and chemical use:

Storm drains go to streams and rivers. Only rain should go down the storm drain!

- Don't pour mop or other wash water on the ground or down drains that go to storm sewers.
- Don't pour out cleaning products and other chemicals on the ground. Use them all up, or collect for a hazardous waste disposal event.
- Store chemicals in their original containers, properly labeled.
- Don't store chemicals outdoors where they are exposed to stormwater.
- Reduce pesticide use in and around the building with integrated pest management.
- Wash cars, equipment, floormats, etc. where water will drain to sanitary sewers, not to storm sewers.

Indoor water systems:

Our drinking water comes from a treatment plant that draws it from lakes and rivers. When we are finished with it, it goes to another treatment plant before it can go back into local rivers. Be a responsible water user in the workplace.

- Monitor the water bill to detect leaks, and check toilets, sinks, etc. regularly.
- Never pour fats, cooking oil or grease (FOGs) down a sink. Fogs can clog sanitary sewer pipes and cause them to overflow. Put them in the trash or recycle them at local recycling centers.
- Don't put chemicals, cleaning products or medications down the sink. They can be hard for treatment facilities to process. Go to <u>www.richlandonline.com</u> for collection dates.

Landscaping:

Pesticides, herbicides and bare soil can be washed away by rain and excess irrigation into storm drains and ditches.

- Use native or hardy plants that are drought and pest resistant.
- Use ground cover plants or mulch to prevent erosion and help plants retain moisture.
- Use drip or microspray irrigation.
- Water landscaping early in the morning.
- Irrigate only as needed.
- Get a soil test to determine what type of fertilizer you need for your plants or grass.
- Minimize herbicide and pesticide use.
- Direct downspouts onto lawn and landscaped areas to let water soak back into the ground.

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