PURDUE

### **PURDUE EXTENSION**

FNR-255

Don't litter!

Be sure not to dump paper, wrappers, cigarette butts, or other small items on the ground. Even pet waste should be cleaned up to prevent bacteria pollution. These can all be carried by storm water straight into rivers and lakes.

Challenge yourself to do one of these. Many of us follow at least one of these already, whether it is not littering or not simply pouring motor oil down a drain. You do not even have to do all of these to help the environment; every little bit helps. Once one of these becomes part of your regular routine, try another. Remember, protecting the environment begins with you!

### **Additional Information**

The Planning with POWER program can assist you in learning more about polluted runoff and what you and your community can do to minimize impacts to water and other natural resources. To learn more, contact:

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www.planningwithpower.org



### **Other References**

Non-point Education for Municipal Officials (NEMO), University of Connecticut www.nemo.uconn.edu

U.S. Environmental Protection Agency Office of Water www.epa.gov/OW/index.html

Department of Environmental Quality, Pima County, AZ, Storm Water Management Program www.deq. co.pima.az.us/water/storm.html

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Land Use



#### PURDUE UNIVERSITY

### What is storm water runoff?

Storm water is all the water that runs off hard surfaces — such as rooftops, driveways, and parking lots during rainstorms. This water does not seep into the ground during storms; instead, it runs straight down the slope, or gradient, into streams, rivers, and lakes.

### Why is storm water a problem?

There are many reasons why storm water can be harmful. Most neighborhoods have storm drain systems that drain streets directly into these larger water bodies, including neighborhood retention ponds. In other areas, however, storm water is not absorbed into the ground and detoxified by natural processes, such as microbial breakdown, into naturally occurring compounds. Instead, water flows to streams, rivers, lakes, or retention ponds. Storm water can pick up and carry harmful chemicals (motor oil, antifreeze, pesticides etc.) and sediment and carry them directly into bodies of water. This is known as non-point source pollution.

### Is storm water the same as sewage?

No. Storm water should not be confused with water that we use in our toilets, sinks, and bathtubs. Sewage is usually treated by properly functioning on-site septic systems or at municipal wastewater treatment facility. However, during frequent storm events, the combined sewer overflow systems can release raw untreated sewage with storm water into our streams, rivers, and other bodies of water. Storm water is not treated at all before going back into nature!

# Why should I care about non-point source pollution?

Many experts including the Environmental Protection Agency (EPA) now believe that the biggest form of pollution today is non-point source. Most factories



and businesses are regulated; therefore, most of the pollutants in our water come from our everyday activities. Fertilizers on our lawns, fluids from our cars and toxic household chemicals all have direct impacts on our waterways.

These chemicals cause harm to natural systems in many ways. Fertilizers can cause algae or plant growth that can lead to fish kills. Many other chemicals are harmful to fish, aquatic birds, and mammals. Chemicals can also make their way into ground water sources and potentially affect drinking water supplies. Non-point source pollution can hurt fish, wildlife, and people. It can affect drinking water and natural water resources.



### **PURDUE EXTENSION**



# How can I prevent non-point pollution?

### Conserve water.

When watering your lawn, use just enough water for your lawn. If water begins flowing down the street, you've used too much. Also, don't hose down sidewalks or driveways, just sweep them. The more water people use, the more potential there is for polluted runoff.

### Limit use of pesticides and lawn fertilizers.

Follow the manufacturer's directions when applying chemicals, making sure to only apply the amount needed. Don't apply chemicals before it is going to rain. If you do not allow enough time for absorption, rain will wash the chemicals away, polluting the water and wasting your money.

#### Take your car to a car wash.

While washing your car yourself may save a little bit of money, the soaps and wax you use will be washed down the storm drain and into a river, lake or stream. Car washes dispose of the waste water and pollutants properly. Besides, it'll save some time.

### Dispose of household hazardous waste properly.

Paint, car fluids, solvents, and batteries should never be poured down the drain. Most communities have a waste facility for these products.