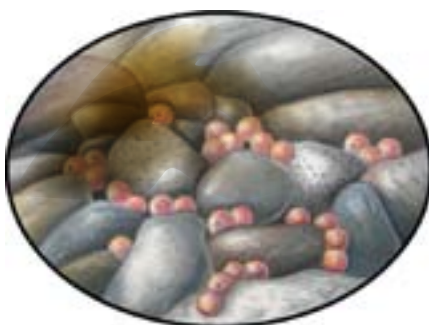


Hi folks! I'm Lily, the Pacific chorus frog, and I help the City of Eugene teach people about stormwater in our community. My wildlife friends in the streams and wetlands live in water. We rely on you to help keep dirt in stormwater from polluting our homes!

## The Dirt on Muddy Water

**Y**ou may have heard about pollutants such as motor oil and pesticides that are harmful to our rivers and streams. But did you know that loose soil from places like building projects or areas tilled for gardens also threatens plants and fish?

A small amount of soil in the water is normal, as some loose particles are carried by gentle rains. However, when large areas of loose soil are exposed—for instance when an area of a yard is dug up or when loads of soil are brought in to fill an area—a heavy rain can pick up and carry a stream of mud over driveways and streets to our storm drains which in turn lead to our natural waterways.



This brown or clay colored runoff creates a muddy mess when it reaches our streams and rivers. Soil particles displace oxygen from the water, making it harder for fish to breathe. Many fish lay their eggs in the gravel beds in streams. When the gravel is covered by soil these eggs may be smothered. When soil collects on underwater plants, they are no longer able to receive the sunlight they need for photosynthesis.

Sediment deposits, over time, can make a stream more shallow. When streams become more shallow, they are more likely to flood. The shallow water is also heated more by the sun, causing water temperatures to rise, forcing fish to seek out cooler areas to live and breed.

Even a few small muddy projects can make a mess as they flow downstream. The best way to keep rivers healthy is to prevent soil from leaving our yards. Some simple solutions include covering up dirt piles and sweeping dirt off of sidewalks, driveways and streets. Remember, every little bit helps!



*Rain carries loose soil from a construction project into the stormwater system. This muddy mess will make life difficult for salmon eggs (left) and other creatures downstream.*



**Teachers:** The City of Eugene has free curriculum kits for **SPLASH! Stormwater Learn and Share** (grades K-8), and **Salmon and the Ecosystem** (5-12). Additional copies of **Stormwater Connections** may also be available for classroom use. Call 541-682-2739 for more information.

**Promote stormwater awareness in your workplace.** The City of Eugene has produced a series of educational posters about stormwater-related environmental topics that are available free for display in public areas. Each poster is 13 x 37 inches, and topics include Salmon (right), the Willamette Watershed and Stormwater Pollutants. Visit [www.eugene-or.gov/happyrivers](http://www.eugene-or.gov/happyrivers) to view the series and order yours.

**SALMON**

*a keystone species*

Photo credit to the artist and field

When heavy rain falls, it can wash a lot of dirt and debris into our streams and rivers. This is called sediment. Sediment can clog up the stream and make it harder for fish to breathe. It can also cover up the gravel beds where fish lay their eggs. This can smother the eggs and make it harder for them to hatch. To help protect our salmon, we need to keep our streams clean by preventing sediment from getting into them.

When it rains, the water flows down the street and into the storm drain. The storm drain carries the water to the stream. If there is a lot of dirt and debris in the storm drain, it can clog up and make it harder for the water to flow. This can cause the water to overflow and flood the street. To help prevent this, we need to keep our storm drains clean by sweeping up dirt and debris.

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