



Lily, the Pacific green tree frog, is the mascot for the City of Eugene's Stormwater Management Program.

Lily's Page - Oil Spills and Our Environment

Oil is one of the most common pollutants in water. In February 1999, the New Carissa, a 600-foot freighter, became grounded off the Oregon coast near Coos Bay. It began leaking fuel, which was seen from the air as an oily sheen on the ocean. As ducks and other waterfowl swam in the water, oil began sticking to their feathers. Wildlife experts spent hours and hours removing oil from the birds.

Birds don't have the ability to remove oil from their feathers. If they try to clean their feathers and swallow some of the oil, they can get stomach ulcers. When oil coats their feathers, their bodies are unable to stay insulated from the cold and they can die. The only way to save an oily bird is to scrub the bird the way you would scrub a greasy pan. This method is time-consuming and expensive and isn't always successful.

Oil spills don't just happen in the ocean. Our local creeks and rivers can be polluted with oil too. Have you seen oily spots in the street or parking lots? Most of that comes from cars or trucks that leak oil and other fluids. When it rains, oil and other pollutants are carried with stormwater into storm drains that empty directly into local waterways like Amazon Creek and the Willamette River. Stormwater is not filtered or cleaned along the way so any pollutants that enter the river can harm fish and wildlife.

Although oil spills are not always as big as the spill from the New Carissa, they still need to be cleaned up. Locally, clean-up crews use the same methods for big and small oil spills. How hard do you think it is to clean up an oil spill? This simple experiment will allow you to try some of the methods used by professional clean-up crews. **Parents and teachers: younger children will need your help with this experiment.**



When oil spills into a local waterway, booms are used to contain it so it doesn't spread. The oil can then be soaked up with absorbent material.

Did you know...used motor oil from a single oil change can ruin a million gallons of fresh water - a year's supply for 50 people!

A Slippery Clean-up

Materials:

- one large bowl
- one measuring cup
- water
- cooking oil
- different dishwashing detergents
- paper towels or piece of cotton cloth
- sponges
- string

Procedure:

1. Fill half the bowl with water
2. Measure 1/4 cup of oil and pour into the water
3. Gently shake the bowl to create "waves." Did the oil and water mix?
4. Now try to clean up the oil.
 - Use a paper towel or the cloth to soak up the oil.
 - Use a piece of string to make a border around the oil and try to drag the oil to one side of the bowl
 - Use a sponge to soak up the oil
 - Mix the different detergents into the water to clean up the oil.

Questions:

- Which method worked best to clean up the oil?
- What happened to the oil when detergents were added to the water?

What can I do?

- List five things you can do, starting today, to keep oil from entering storm drains.
- Take a field trip to a local stream and see if you can find any oil slicks.

For more information about what you can do to reduce stormwater pollution, call the Stormwater Education Program at 682-2739. Kids — visit the SPLASH! website at www.ci.eugene.or.us/splashweb.



Oil that leaks from cars and trucks washes down storm drains like this one and is carried directly into local waterways. This oil spill may look small, but it only takes one pint of oil to create a slick the size of a football field!



Stormwater Connections is published by the City of Eugene Public Works Department to enhance awareness of stormwater and related surface water management issues.



City of Eugene
Public Works
Stormwater Management
Program
858 Pearl Street
Eugene, OR 97401
kathy.a.eva@ci.eugene.or.us
(541) 682-2739

Printed on recycled paper

