

How well do your students understand local water systems?



How well should they?

Connect your students to the local environment with **SPLASH!**

Curriculum written to State science benchmarks with additional language, math and art components.

Do you know...

When it rains, sediment, oil, grease, toxic chemicals from motor vehicles, pesticides from lawns, and bacteria from pet waste all run into city storm drains and flow untreated into local rivers.

Nationally, about 44 percent of assessed stream miles are not clean enough to support uses such as fishing and swimming.

Fresh water is a finite resource. Teaching young people about local water systems prepares them to be informed stewards for the future.



SPLASH! units were developed to complement grade-specific teaching objectives while focusing on local and regional water concerns. Many are only a few pages long, so are easy to add to existing lesson plans.

SPLASH!
Stormwater Pollution:
Learn and Share

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A Local Water Quality Curriculum for Grades K-8
City of Eugene Public Works
Stormwater Management Program

Lily, the Pacific chorus frog
Daigie, the dragonfly
Rex, the kingfisher
Patty, the popcorn flower

It's Water that makes Wetlands!

Water before wetlands all wetlands have water above and below the ground surface. Wetlands are not dry, or intermittently flooded during the wet season. It is the presence of water that leads to the development of plants and animals that are not found elsewhere for a long enough time to create an unchangeable, long-occupied state in the soil. The plants that grow in wetlands are so called hydrophytes and hydrophytes have long adapted to living in both soils and waterlogged conditions, rock and mud.

Water Level
Ground Surface
Soil

Above the ground's surface
Water Level and Ground Surface
Soil

At the surface
(wetland filter is a sponge)

Wetland plants with horizontal roots and stems

Ground Surface
Soil
Water Level

Just below the surface
(where plant roots can reach)

The soil of the wetland has large air spaces inside that help oxygen to the roots. These air spaces mean that water can move in and out faster than other soils. The right amount of air allows the roots to get oxygen. But the air spaces also make the roots light enough to float.

SPLASH!

SPLASH! K-8 Topics

Kindergarten: What is water? Why is water important? Where does water come from and how do we use it everyday?

1st Grade: Water forms. What animals live in or near water? What happens when water gets polluted?

2nd Grade: What is stormwater pollution? What are pollutants? How do pollutants harm people, fish, and animals? Can soil filter pollutants from water?

3rd Grade: What happens when precipitation hits the ground? Can plants filter pollutants from water? Can too many pollutants harm plants?

4th Grade: What is the water cycle? What are Eugene's three water systems? What is the stormwater system? Learn about personal water use and good water use habits.

5th Grade: What is an ecosystem? What are wetlands? Where are wetlands located in Eugene? How does stormwater pollution affect wetlands?

6th Grade: Calculate stormwater runoff. What pollutants are carried with stormwater into local waterways?

7th Grade: Impervious surfaces at home. What effect does runoff from impervious surfaces have on local water quality?

8th Grade: What is a watershed? Why are wetlands important? What is the history of wetlands in the Willamette Valley?

Salmon and the Ecosystem

Curriculum for Grades 5-8: The history of salmon in the region, food chains and webs, types and effects of pollution, discussion of environmental choices and consequences.

Curriculum for Grades 9-12: All of the above with additional discussion of abiotic and biotic elements; water sampling, mapping and research activities.

SPLASH! K-8 and Salmon curriculum kits include color handouts and supplies for activities to use in your classroom (see back page for details).



Preview or use these units online at happyivers.org>Classroom Materials



What goes down the Storm Drain?



What goes in here...



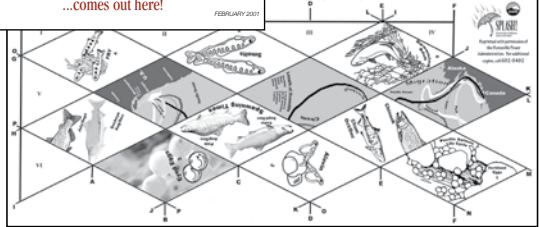
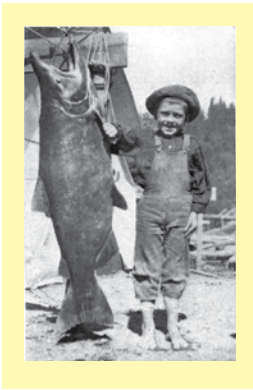

Yuck! Would you want to swim in this?




...comes out here!

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Most materials are online at happyivers.org>Classroom Materials

Curriculum kits that include color copies of the handouts, grade-specific supplies, and a cool reusable bag are free to Eugene teachers.*

Call 541-682-8482 to request a kit. Be sure to leave your name, school name, grade level, number of students, and whether you would like a SPLASH! or Salmon kit (or both if teaching grades 5-8).

If you use SPLASH! or Salmon materials in your classroom, please be sure to let your principal know. Your participation is important to both our funding sources and our program goals.

Already using SPLASH! in your classroom?

Thank you! Call for refills on activity supplies—we are happy to restock for you!



* SPLASH! and Salmon materials are funded through City of Eugene stormwater utility fees and are part of the stormwater education and outreach program. Online materials are available to everyone, but kits are limited to Eugene teachers.