**Posters for Puget Sound**

**Service Learning / Community Service Activity**

Overview

This project provides students an opportunity to increase public awareness of stormwater pollution by creating and displaying educational posters in public places. The posters represent simple actions residents can take to reduce stormwater pollution in their own neighborhoods. This activity is an extension to the Lost and (Puget) Sound video project produced by the City of Seattle with funding from The Washington State Department of Ecology ([www.seattle.gov/restoreourwaters](http://www.seattle.gov/restoreourwaters)). Messaging and artwork also links to information and templates on the Puget Sound Starts Here (PSSH) website [www.pugetsoundstartshere.org](http://www.pugetsoundstartshere.org) .

Grade Level: 3-12

Time Required: Variable: 1-2 class periods for set up and small group strategy. Art work can be assigned as home work..

Background

What we do in our own backyards and neighborhoods has a direct impact on the health of Puget Sound. Indeed, most of the pollution in Puget Sound originates from people - our homes, yards, and cars. Although we don’t always think about it, many of our everyday products and practices leave behind pollutants.

In most cities and towns, there are two separate drain systems, the storm drains and the sanitary drains. The sanitary system collects wastewater from sinks, toilets, etc. These wastes go to the wastewater treatment plant. The storm drain system is made up of a network of pipes, gutters and inlets that remove rain water from our neighborhoods and connect to nearby waterways. As rain and melting snow flow over streets, roofs, and parking lots, it collects pollutants such as litter, automotive fluids, and pet wastes. This runoff flows into local water bodies and ultimately Puget Sound. Whether soapsuds from washing our cars in the street, bacteria from our pet’s waste, oil leaking from our cars, or toxic chemicals sprayed on our yard or garden, each pollutant, drip by drip, contributes to the declining health of our local waters.

The urbanization of our region has created more and more impervious surfaces. Most cities are about 60% impervious. Runoff from cities and towns is not only dirtier, there is more of it. Because rainwater can’t soak in as it once did, water moves faster over paved surfaces, consequently scouring and eroding the creeks it passes through.

Research has shown that many people are not aware that their everyday practices impact Puget Sound. The good news is that everyone can make some simple behavior changes to reduce this source of pollution. The posters created in this activity will illustrate some simple actions residents can take to reduce stormwater pollution.

Inquiry/Critical Thinking

* How does stormwater pollution affect the health of Puget Sound?
* How can people reduce stormwater pollution in Puget Sound?
* How do you inspire people to adopt habits that reduce stormwater pollution?

Objectives

* Understand that stormwater directly enters streams and lakes through street drains without being treated.
* Inspire and educate citizens to adopt habits that help reduce stormwater pollution into Puget Sound.
* Name two simple actions people can do to help reduce stormwater pollution.

Key Concepts

1. Stormwater is the largest source of pollution in Puget Sound.
2. There are simple behavior changes people can make to reduce stormwater pollution into Puget sound.
3. Kids can educate and inspire others to take action to reduce stormwater pollution.

EALRs

**Gr 2-3**: APPA, APPD, ES2A, LS2A LS2B, LS2C, LS2D, CIV1.4.1, ESE2, ESE3;

 **Gr 4-5**: SYSC, SYSD, APPC, APPF, ES2C, LS2A, LS2D, LS2E, LS2F, CIV1.4.1, ESE2, ESE3;

**GR 6-8**: APPD, APPE, LS2A, LS2D ESE2, ESE3

Science Kit Connections

Ecosystems (STC) Grades 4-6

Land and Water (STC) Grade 5

Water Planet (FOSS) Grades 3-6

Solutions & Pollution (SEPUP) Grades 6-8

Materials Needed/Preparation

* Art Supplies –paper, crayons, markers (or posters can be designed and produced electronically).
* Poster tape/sticking clay/way to hang Planning Worksheet (below).
* Poster templates with Puget Sound Starts Here logo – optional (below).
* Sample outreach materials (if available) and posters (download and print from [www.pugetsoundstartshere.org](http://www.pugetsoundstartshere.org)).
* Link to PSSH website
* Puget Sound satellite photo or regional watershed maps (see Resources).
* Contact local businesses or public venue to arrange display, enlist parent/adult community to hang posters or include in school event/science fair.

Activity

1. Watch the Video or explore Puget Sound Starts Here web site. [www.pugetsoundstartshere.org](http://www.pugetsoundstartshere.org)
2. Review the Puget Sound Watershed Maps and background materials. Have students find and trace their local waterbodies to Puget Sound.
3. Ask the students what the kids in the video observed that made them concerned and if they have ever noticed and can describe any of those things from their community/ neighborhood. Make a list of ideas.
4. Review the kids project from the video and brainstorm other ideas for activities that kids can do to help reduce stormwater pollution. Tell them they are going to do a public outreach campaign (making posters) to help educate people in their community about stormwater pollution.
5. Go back through the list of polluting behaviors and discuss what might be good targets for the poster campaign (e.g. pet waste, car washing, yard car, car leaks, litter).
6. Introduce the **planning worksheet** and tell students they will work in small groups to strategize where the posters will go (ask an adult you know to put it up at work, ask to hang in your apt building, hang them at school, local library or community center, coffee shop), how they will ask or get permission to hang them, what size shape will work, what the message will be.
7. Break up students into small groups based on topics. Distribute brochures or background info if available ,(you can download posters from Puget Sound Starts Here as examples) and planning forms. Have groups report out and discuss potential challenges (permission, space, politeness, respect, safety, strangers, visibility, effectiveness)
8. Use the coloring templates provided or have students design their own artwork.
9. If possible keep a list of where the posters are placed and how many. Discuss outcomes and challenges they encountered (see student reflections form). Please send reflections, photos and examples of work and any community reactions to restoreourwaters@seattle.gov
10. Advanced alternate ideas:
11. Create virtual posters through Glogster, and then link it to Facebook, MySpace, or other social media, and direct ‘Friends’ to it.
12. Use Prezi.com to create an interactive presentation, link it to Facebook or Myspace, and share with friends and family, youth groups, and community.
13. Create a team of poster hangers
14. Make presentations to other classrooms in your school.

Extensions

* Share your project at www.pugetsoundstartshere.org, your stormwater utility, or share it with *Bert the Salmon* on Facebook.
* Design and conduct a survey for school members or your community to find out what they know about stormwater pollution.
* Stencil storm drains: Contact your local stormwater utility (see **Resources**).

Resources/Links

[www.pugetsoundstartshere.org](http://www.Pugetsoundstartshere.org) Accessible information about stormwater and links to local municipalities where you can get maps and storm drain stenciling kits for your location.

[www.seattle.gov/restoreourwaters](http://www.seattle.gov/restoreourwaters) Lost and (Puget) Sound, a 27-minute movie on stormwater and Puget Sound for 3rd-9th grade classrooms, helpful graphics and more K-12 activities that link to Puget Sound as well as information on Seattle watersheds, pollution prevention and volunteer opportunities.

<http://www.psp.wa.gov/SR_map.php> Information, maps and links for Puget Sound watersheds and the Puget Sound Action Agenda, as well as local EcoNet groups.

 **More Information**

Produced through a grant from the Washington State Department of Ecology to the City of Seattle in partnership with Seattle Public Schools, Everett Public Schools and the City of Tacoma. For more information contact: beth.miller@seattle.gov.





**Stormwater Poster Project**

**Planning Worksheet**



Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Teacher: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What is the pollution problem you are trying to solve?**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Who is causing this problem (audience)? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What does your audience need to know, and how will you convince them to change?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What’s the best place to put the posters so they will see them?

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How will your poster get there? Do you need to ask someone else to put it out, or get permission? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Describe the materials you will need (pens, markers, paint, computer, etc.).

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**Share photos or samples of your project at** **Pugetsoundstartshere.org**

**Thanks!**



