

Puget Sound Belongs to All of Us: Teacher's Guide to Activities

Lesson 15

Examining a Real Environmental Problem

Resource: Ecosystems Teachers Guide Pgs.160–172



Section 1

Resource: Living Estuary Poster/Map

Learning Objectives

Students understand the size, shape, and major geographic features as well as the diversity of habitats in Puget Sound. Students learn about where they live in the Puget Sound region.

Activity

Have students use the Living Estuary poster/map to locate and discuss the following:

- Ocean water comes into Puget Sound from the Strait of Georgia and the Strait of Juan de Fuca. Where are these two bodies of water?
- Most of the ocean water that enters and leaves Puget Sound goes through Admiralty Inlet. Look for it near the town called Port Townsend. Does ocean water get into Puget Sound at any other point you can find?
- There are many different kinds of animals on the poster. Some live on land, some in the water, and some on the beach. How many animals can you find on the poster? What is the home or habitat for those animals? What connects all those habitats?

- Where do you think most of the people around Puget Sound live? Name some of the cities where you think a lot of people live. Find your city on the poster.
- How many rivers can you find on the map? Do all the rivers go directly into Puget Sound or do they connect to other rivers? Have you visited any of these rivers?



Section 2

Resource: Seattle Public Utilities Map

Learning Objectives

Students see the connection between the freshwater watershed and Puget Sound. They learn what and where local watersheds are and what watershed they live in. They understand where their water comes from, how it is distributed to people, and where it goes after use. Students begin to see the multiple uses and competing demands for water and learn how they can conserve water.

Activity

Have students locate their home, school, and other familiar areas on the map. Ask them to read, answer, and discuss questions about the conservation information at the bottom of the map.





Section 3

Resource:

Puget Sound Book pgs. 5–12

Learning Objectives

Students understand that people are the problem and the solution. They learn what each of us can do on an individual basis to protect the Sound.

Activity 1

Students compare what they have seen and learned from pollutants in their ecocolumns with what happens when pollution enters an ecosystem like Puget Sound.

Oil, gas, and other chemicals from cars and other vehicles contaminate the muddy sand bottom in Puget Sound. Toxic chemicals from oil and gas have been found in some Puget Sound fish and shellfish that people eat. Fertilizers washed off lawns and gardens, and phosphorous from detergents also end up in the Sound where they cause rapid plant growth that can use up the oxygen that fish and other animals need to stay alive.

Resource:

**Washington Beaches Curriculum
from the Seattle Aquarium
pgs. 27–52**

Learning Objective

Students learn what plants and animals live in two major Puget Sound habitats.

Activity 2

Have students use the pictures and key to find and identify plants and animals in each habitat.



Section 4

Resource:

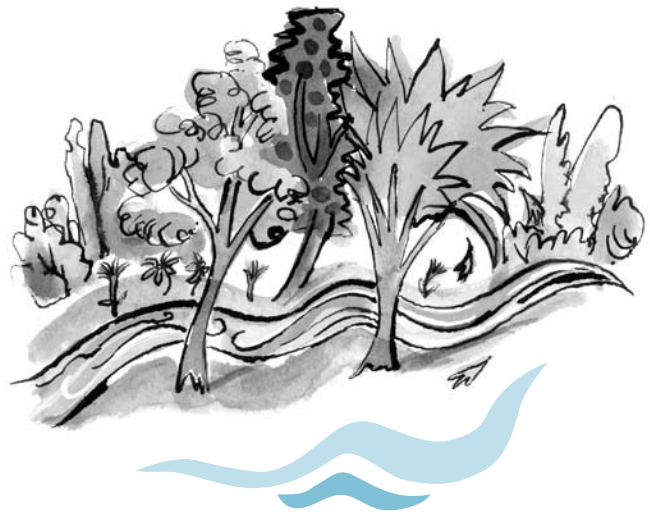
Seattle Public Utilities Map

Learning Objective

Students understand the impact of deforestation in the Puget Sound region. They see where trees have been cut and what has replaced them.

Activity

Students look for forested areas, note distribution of buildings, and consider the effect on wildlife. They find wildlife, noting proximity to spreading development. Then they find dams on rivers, and discuss the effect of dams on salmon migrating up rivers.



SEATTLE AQUARIUM

