

# WHAT IS A WATERSHED?

## Subject

Geography, Science

## Objectives

The student will (1) be able to define and explain what a watershed is, (2) label the watershed diagram with the appropriate "natural" features, and (3) identify "human" land uses in watersheds and add these to the illustration.

## Materials

*Students for Salmon Journal*  
Art Supplies

## Size/Setting/Duration

Whole class/classroom/~1hour

## Background

The entire earth is a watershed. A watershed is a basin that consists of all the water and land areas between ridges that drain to a particular outlet. The outlet could be a river, lake, or the ocean. A watershed is drained by a system of tributaries, streams, and rivers. As the streams increase in size within a watershed, the amount of water and suspended sediment also increases. The place where two watersheds connect is called a divide.

When cities and counties have to decide how to manage their watersheds, it is important to take into consideration all the factors that affect the watershed directly. These factors are: soil, vegetation type, rural and urban land uses, forest practices, and roads.

## Activity

1. Make sure that *The Water Cycle* worksheet from the *Student Journal* is complete prior to starting this activity. It is very helpful in understanding where water comes from and how it is exchanged between the land, oceans, and clouds.

2. When introducing watersheds to your students, ask them if they know which direction water flows. When they say down, explain that this is the most important thing to remember when studying watersheds. Water runs downhill.

3. The *What is a Watershed?* Worksheet in the *Student Journal* (page 5) gives the definition of a watershed for the students. You can expand on this with the background information given.

The illustrated watershed on page 6 is an example of what a watershed looks like, on a very simple scale. With the words given on page 5, have the students fill in the appropriate box with the correct word. The words given are the most important words in comprehending watersheds. These are the "natural" features of a watershed. For example, the word "basin" describes the entire land and water region between two ridgelines. The word "bedrock" is assigned to the illustration because it is the support for the landscape over which water flows.

5. Once the illustration is completed with all the "natural" features of a watershed, discuss with your students the human land uses that affect the watershed. A list is given on page 5 in the *Student Journal*.

6. Have the students draw in these human land uses on the watershed illustration. While doing this activity the students should understand that all of these human impacts affect the watershed directly. Other human influences that students can think of should be written on the board and also drawn on the watershed illustration.

**EALR Information****What is a Watershed?**

<b>Component</b>	<b>Benchmark</b>	<b>Assessment</b>
<b>1.2 Geography</b> Recognize spatial patterns on the earth's surface and understand the processes that create them	Locate major physical features on the map	Students will work independently to complete the worksheet in the <i>Student Journal</i> on page 6 with physical features of a watershed
<b>2.2 Geography</b> Describe the patterns humans make on places and regions	Observe and describe the human characteristics of the local area	Students will orally communicate human impacts on the watershed
<b>3.1 Geography</b> Identify and examine people's interaction with and impact on the environment	Identify different ways that people use the environment	Students will draw human impacts on the watershed illustration
<b>1.5 Science</b> Understand that interactions among and within systems cause changes in those systems	Explain a watershed and the components that comprise it	Students will work independently to complete the worksheet in the <i>Student Journal</i> on page 6

## What is a Watershed?

A **WATERSHED** is a basin that includes all the water and land areas between ridges that drain to an outlet. The outlet could be a river, lake or ocean.

First, label the "Watershed" on the following page with these words:

- Basin
- Bedrock
- Estuary
- Floodplain
- Foothills
- Forest
- Headwaters
- Meander
- Mountain
- Ridge
- River
- Soil
- Stream
- Sun
- Tributary
- Wetland

Second, now that you know the natural features of a watershed, add and draw in these human land uses:

- Boats
- Cars
- Cows
- Factories
- Farms
- Horses
- Houses
- Parks
- Roads
- Stores

Add others if you can think of more!

# Watershed

