



Watershed Model

Target Grade: Any

Students will learn about downstream pollution and how it affects local waterways through this interactive model.

Format & Requirements

- A table or floor space will be required. Dimensions are approximately 2 x 2.5 feet.
- Demonstrating the Watershed Model generally takes 30 –45 minutes.
- The Watershed Model can be reserved as a conservation capsule.
- Hazardous Waste, Wetlands, Groundwater, and Landfill specific models are available upon special request.
- Model should be washed and thoroughly dried immediately after use.

Activities & Resources

- Conservation Capsule format includes an Enviroscape Handbook with lesson plan.
- All necessary elements are included.

Standards of Learning

Science

K.4 The student will investigate and understand that water is important in our daily lives and has properties. Key ideas include:

- a) Water has many uses;
- b) Water can be found in many places;
- c) Water occurs in different phases; and
- d) Water flows downhill.

K.11The student will investigate and understand that humans use resources. Key ideas include:

- a) Choices we make impact the air, water, land, and living things.

1.8 The student will investigate and understand that natural resources can be used responsibly.

2.7 The student will investigate and understand that weather patterns and seasonal changes affect plants, animals, and their surroundings Key ideas include:

- a) Wind and weather can change the land; and
- b) Changes can happen quickly or slowly over time.

2.8 the student will investigate and understand that plants are important natural resources. Key ideas include:

- a) Plants can help reduce the impact of wind and water.

3.8 The student will investigate and understand that natural events and humans influence ecosystems. Key ideas include:

- a) Human activity affects the quality of air, water, and habitats; and
- b) Water is limited and needs to be conserved.

4.8 The student will investigate and understand that Virginia has important natural resources. Key resources include;

- a) Watersheds and water.

6.8 The student will investigate and understand that land and water have



roles in watershed systems. Key ideas include:

- a) A watershed is composed of the land that drains into a body of water;
- b) Virginia is composed of multiple watershed systems which have specific features;
- d) Natural processes, human activities, and biotic and abiotic factors influence the health of a watershed system.

LS.9 The student will investigate and understand that relationships exist between ecosystem dynamics and human activity.

ES.8 The student will investigate and understand that freshwater resources influence and are influenced by geologic processes and human activities. Key ideas include:

- c) Weather and human usage affect freshwater resources, including water locations, quality, and supply; and
- e) Stream processes and dynamics affect the major watershed systems in Virginia, including the Chesapeake Bay and its tributaries.

BIO.9 The student will investigate and understand that there are dynamic equilibria within populations, communities, and ecosystems. Key ideas include:

- d) Natural events and human activities influence local and global ecosystems and may affect the flora and fauna of Virginia.