

Lesson 24

Riparian Wear

What does a healthy river bank look like?
What does an unhealthy bank look like?
What can be done to prevent erosion?

GOAL To understand that riparian banks are indicators of health of stream

OBJECTIVES Students will:

- ✓ draw a picture of a healthy stream bank
- ✓ draw a picture of an unhealthy bank
- ✓ measure turbidity
- ✓ write a poem or paragraph about the importance of water

MATERIALS construction paper, markers, pencils, small clear, plastic container with cover, flashlight

CORE CURRICULUM CONTENT STANDARDS

- Science 1(2,4,7), 7(3,4,7), 8(6)
- Social Studies 9(1-3), 10(3,4), 11(4, 6-8)
- Arts 2(3)

VOCABULARY riparian, erosion, turbidity

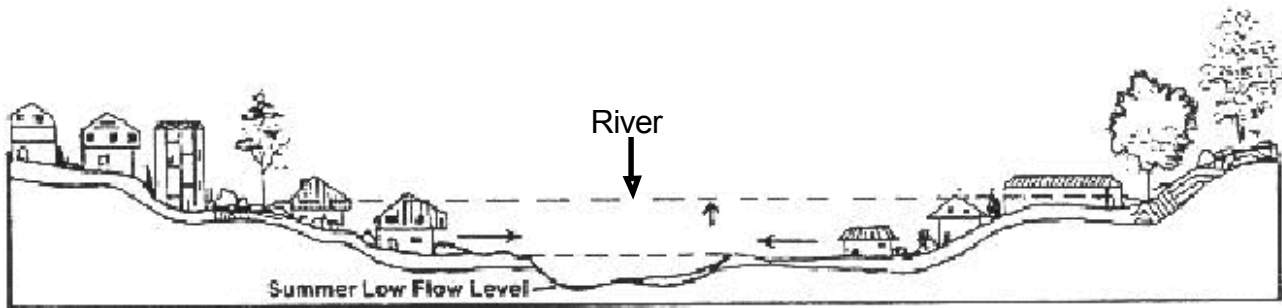
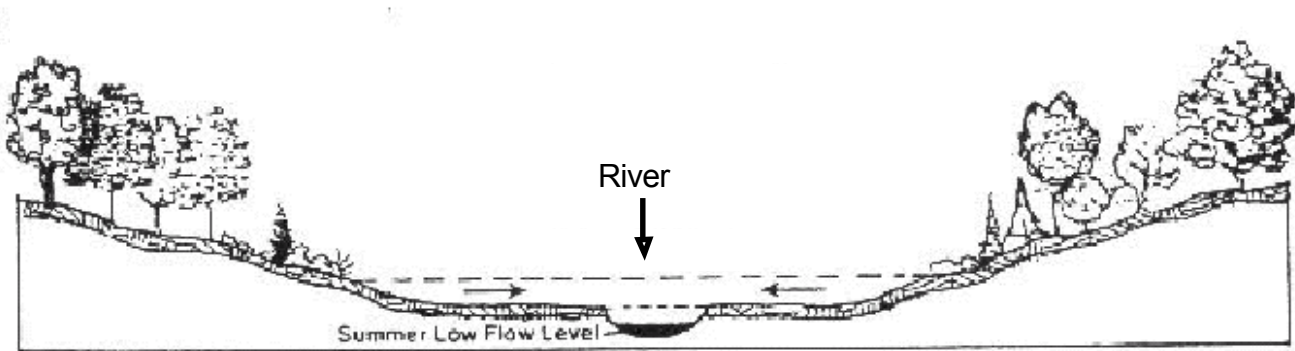
PROCEDURES

1. Explain that river edges or banks are in riparian zones or river areas. Buffer zones are areas that absorb water to prevent flooding, etc. Buffer zones are especially important on the sides of rivers to prevent erosion from going down the river.
2. Have students imagine they are sitting on the edge of a forest close to a river. Have them think of what characteristics would make this a good buffer zone. (trees, grass, and plants growing). Ask students what a healthy river bank looks like. Discuss.
3. Have students draw a healthy riparian area. Compare to unhealthy area. (roots of trees, lots of soil erosion) Draw a comparison picture.
4. Distribute small, clear, plastic containers. Add water to containers and soil. Place cover and shake. Hold container up to light. Shine flashlight through container. Explain to students that this is considered turbidity. How clear is the water with soil in it? Compare this to river erosion.
5. Ask students how they are able to prevent erosion in their yards or schoolyards.

EXTENSIONS

1. What types of projects is the Farmington River Watershed Association participating in to prevent erosion of the banks?

2. Show the pictures below (or draw your own) and ask the following questions:
Which riparian buffer area do you think would absorb more water? Why?
Which riparian buffer area do you think would have more erosion? Why?



GLOSSARY

- erosion** - the group of natural processes, including weathering, dissolution, abrasion, corrosion, and transportation, by which material is worn away from the earth's surface
- riparian** - of, on, or relating to the banks of a natural course of water
- turbidity** - having sediment or foreign particles stirred up or suspended; muddy