Rivers and Us

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Promoting Geographic Knowledge Through Literature Summer 2002

Overview Rivers have been vitally important throughout history and still are today.

Grade Level 3-5

Geographic Theme Movement, Human Environment Interaction

National Geography Standard

Environment and Society # 14 How human actions modify the physical environment. #15 How physical systems affect human systems.

Human Systems #12 The processes, patterns, and functions of human settlement.

Connection to Curriculum Social Studies (geography and history) and Language Arts

Objectives

The Student will:

- 1. Explain ways people use a river.
- 2. Describe types of river transportation.
- 3. Locate rivers on a home state map.
- 4. Draw a map of the state where they live, locate and label one or more rivers in the state and several cities located on the river.

5. Understand how pollution can affect a river and how a polluted river can affect a community.

Procedure

- 1. Have students respond in their social studies journal to the question, "Have you ever been to a river? What did you do there?"
- 2. Discuss responses.
- 3. Using a dictionary of geographic terms or an atlas define the term river and compare it to other bodies of water.
- 4. Go over the handout What is a River System. (attached)
- 5. Activity- In journal, label a page River Transportation. In writing or drawing gives forms of transportation used on a river. Label a second page Ways We use a River, give examples of how people use and enjoy a river. Label a third page Ways We Pollute a River, draw a scene.
- 6. Share and discuss ideas.
- 7. Introduce and read A River Ran Wild by Lynne Cherry
- 8. Go back into journal and add to any of the lists.
- 9. Familiarize students with the San Antonio River and the River Walk.
- 10.Go to the internet site and tour the River Walk. www.sanantonio.com
- 11. Activity-Using an Illinois state road map(use map of your state) locate rivers and cities on the rivers of Illinois. Discuss why cities locate near rivers, size of river cities, where they are in relation to where we live, etc..
- 12. Activity-Give each child a large sheet of white paper, have them tear or cut it into the shape of their state. As a group locate a common point as a reference point. Then students should locate and label one or more rivers of the state and cities located on the river.
- 13.Go back and add information to their journal.
- 14. Finish lesson with a journal writing "Tell what you now know about rivers".

Materials social studies writing journal, dictionary of geographic terms or atlas, story A River Ran Wild, information on San Antonio Texas, road maps of your state, art supplies

Time 4-5 class periods

Evaluation Teacher evaluates running journal entries and final entry

State map river and city project

Teacher observation of student participation

Extension

Read extension materials offered

Poetry

Bring in personal materials that relates to their experiences with a river

Reference

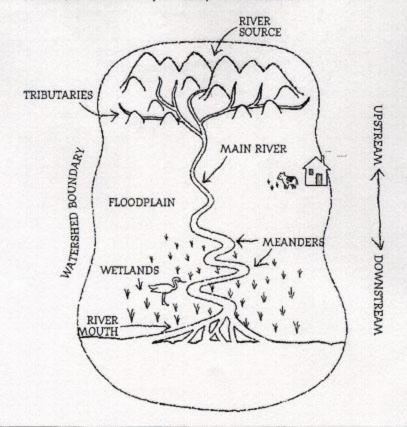
Cherry, Lynne A River Ran Wild 1992 Harcourt, Brace, Jovanovich Lee, Sally San Antonio 1992 Dillon Press Locker, Thomas Where the River Begins 1984 Dial Books

Communities: Adventures in Time and Place (ch.5 less.1) 1997

Macmillan McGraw Hill

WHAT IS A RIVER SYSTEM?

Every river is part of a larger system—a watershed, which is the land drained by a river and its tributaries. Rivers are large natural streams of water flowing in channels and emptying into larger bodies of water. This diagram shows some common characteristics of a river system. Every river is different, however, so not all rivers may look exactly like this illustration.



The river source, also called the headwaters, is the beginning of a river. Often located in mountains, the source may be fed by an underground spring, or by runoff from rain, snowmelt, or glacial melt.

The **river mouth** is the place where a river flows into a larger body of water, such as another river, a lake, or an ocean.

Upstream is in the direction of or nearer to the source of a river.

Downstream is in the direction of or nearer to the mouth of a river. Wetlands are low-lying areas saturated with water for long enough periods to support vegetation adapted to wet conditions. Wetlands help maintain river quality by filtering out pollutants and sediments, and regulating nutrient flow.

A fully-developed fleodplain is relatively flat land stretching from either side of a river, which may flood during heavy rain or snowmelt. Built of materials deposited by a river, floodplain soil is often rich in nutrients and ideal for growing food.

A tributary is a smaller stream or river that joins a larger stream or main river. A watershed boundary, also called a drainage divide, marks the outer-most limit of a watershed. A watershed is a tract of land drained by a river and its tributaries. Anything that affects a watershed may eventually impact its tributaries and river as well as the water body at the mouth of the river. People's actions within a watershed can affect the overall quality of its rivers.

The main river is the primary channel and course of a river.

A meander is a loop in a river channel. A meandering river winds back and forth, rather than following a straight course.

You can find an interactive version of this river system at www.nationalgeographic.com/geographyaction.