OBJECTIVES

The student will do the following:

- 1. Compare and contrast facts about the development, history, and importance of several rivers in the state.
- 2. Throughly research the history and development of one particular river.
- 3. Describe deltas and their formation.

SUBJECTS:

Language Arts, Science (Physical Science, Earth Science), Social Studies (History, Economics, Geography)

TIME:

1-2 class periods plus research time

MATERIALS:

school or local library

BACKGROUND INFORMATION

Rivers have played a vital role in the development of this country and others; this importance is reflected in the references to rivers in literature and history, both national and personal. Today rivers need protection, and one way to fuel an interest in preserving a river is to have students become familiar with their local rivers so that they feel an ownership to them. Writing a biography of a river is one way for students to combine research, interview skills, creative writing, history, and science into a single project. Keep this project fun and allow for creativity; however, set limits on what material is acceptable. If the writing is based on factual information, the project will be more realistic. If there are not enough rivers or waterways within the state, use neighboring rivers or famous rivers.

Terms

cinquain: a poem of five lines as follows:

First line One word, giving title
Second line Two words, describing title

Third line Three words, expressing an action Fourth line Four words, expressing a feeling Fifth line One word, a synonym for the title

epitaph: a short composition in prose or verse, written as a tribute to a dead person

ADVANCE PREPARATION

Obtain a list of state rivers and waterways. A student could complete this list for extra credit.

PROCEDURE

- I. Setting the stage
 - A. Begin a general discussion of familiar rivers. Ask:
 - 1. What are the rivers in our state?
 - 2. Who has ever seen/visited any of the rivers?
 - 3. What did you do there?
 - 4. Have any of your grandparents or parents told family stories about experiences on the rivers of this state?
 - 5. Who has knowledge of other rivers in the U. S.?
 - 6. How did rivers help in the development of this country?
 - 7. In what ways are rivers important?
 - B. Explain that important people have biographies written about them. That is what students are going to do for the rivers of the state.

II. Activity

- A. Assign each student (or pair, small group) a major river/waterway located within the state.
- B. The river biography should include the following:
 - 1. Birth information: This includes how the river was formed geologically, approximate time period, original course.
 - 2. Location and description: Include a drawn or copied map of the river noting the major cities and describe the land uses along its route, its aquatic life, and

other characteristics.

- 3. Century report: Beginning with 1700 through the present, write a report to include:
 - a. Historical events related to or occurring near the river.
 - b. Important people related to the river or locations near the river.
 - c. Contributions/uses of the river (industry, transportation, recreation, security, agriculture)
 - d. Changes to the river and surrounding area.
- 4. Personal interviews: If possible, interview two people who have had personal experiences with the river. Write about their thoughts, remembrances, experiences, and other information about the river and its importance or role in their lives.
- 5. Death announcement: Research what could cause the "death" (no longer exists or no longer supports life) of the river. Write a fictional account of the events leading up to the death and the consequences of this death for the state.
- 6. Epitaph: Write an epitaph for the river in the form of a cinquain.
- C. Place all the information in a folder or report and illustrate the cover.

III. Follow-up

- A. Ask each student or small group to give a five-minute presentation about his/her river sharing the most significant facts and pointing out its location on a state map.
- B. Have students be responsible for reading the biographies of at least two other rivers and write a comparison paper comparing their river with these two.
- C. Research what makes a National Scenic River.

IV. Extensions

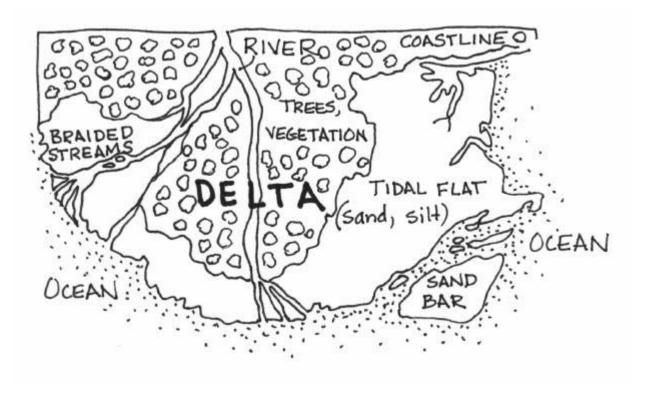
A. Research the role of rivers in cultural stories and myths.

- B. Read descriptions of rivers in literature such as in <u>Huckleberry Finn</u>, the writings of J. Wesley Powell, the River Styx, and Cleopatra and the Nile. Compare these rivers with local rivers.
- C. Have students research any songs written about their rivers or compose one themselves.

RESOURCES

- Carrier, Jim, "The Colorado A River Drained Dry," <u>National Geographic</u>, Washington, D. C., June, 1991.
- Ellis, William, "The Mississippi: River Under Siege," <u>National Geographic</u>, Washington, D. C., November, 1993.
- Jackson III, Harvey H., "Rivers of History, Life on the Coosa, Tallapoosa, Cahaba, and Alabama," University of Alabama Press, 1995.

Yates, Steve, Adopting a Stream - A Northwest Handbook, The Adopt-A-Stream Foundation, 1988.



THE DELTA

BACKGROUND INFORMATION

The sketch below shows a view of a coastal feature that is seldom seen from this angle. This is an aerial "shot" of a delta. If you were to see it from ground level, you would not be able to describe the shape unless you walked around the edges as well as across it.

This delta is built up from sand and silt sediments. The plants on it started growing after the sediments began to accumulate. Some of the larger trees would probably be over a hundred years old. Notice that in the right side of the sketch, the delta appears to have been growing faster, and a sand bar has formed. Most of the sand and silt was carried down from the river.

The ocean tides, currents, and wave action help to shape a delta. Ocean currents and wave action coming from about the same direction, like those responsible for causing the lopsided appearance of this delta, are at work along all coasts. Sometimes the currents flow parallel to the shore, and at other times they curve in or out. Usually they go in one general direction for months and months. At other times, they may change speed or direction. On the other hand, waves usually approach the shore at an angle that changes with the

Ask students:

- 1. What is a delta?
- 2. What causes deltas to form?
- 3. What forms the shape of a delta?

Not all forms of pollution are bad. Deltas are important. Water, picking up dirt and moving it around, formed such important land masses as the Mississippi Delta and the Nile Delta. Sediment also formed the fertile lands on either side of the Nile River. Think of other agriculturally important places that depend on this process.

