

DISCOVERING *Alabama*

Suggested Curriculum Areas

History
Geography
Social Studies

Suggested Grade Levels

4–12

Key Concepts

River-Community Connections
Environmental-Cultural Relationships
Cost-Benefit Assessments

Key Skills

Map Skills
Research & Reference Skills
Communication

Teacher's Guide

Black Warrior River

Synopsis

We frequently find rivers of the world such as the Nile and the Ganges highlighted in textbooks. Certainly, these great rivers have cradled the development of human culture and society for thousands of years. Meanwhile, we often fail to appreciate the historical importance of other rivers such as those found in Alabama, including one of this country's most naturally diverse rivers—the Black Warrior River.

The Black Warrior River has been prominent in the history and development of southeastern societies since the emergence of prehistoric cultures many thousands of years ago. In fact, the river's name was taken from the famous Native American Chief Tascaluça (derived from the words *tasska* and *luska*, meaning **black warrior**) who encountered Hernando de Soto's expedition in 1540.

This video overviews the history of the Black Warrior River from the time of early human settlements to the present. We examine the river in terms of both its environmental role and its economic importance, with special focus given to the river's changing status since the construction of a series of dams and locks completed earlier this century.

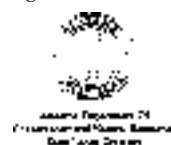


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Discovering Alabama is a production of the Alabama Museum of Natural History in cooperation with Alabama Public Television. For a complete list of titles in the *Discovering Alabama* series, as well as for information about ordering videos and accompanying Teacher's Guides, contact us at either: *Discovering Alabama*, Box 870340, Tuscaloosa AL 35487-0340; phone: 205-348-2036; fax: 205-348-4219; or email: orders@discoveringalabama.org. Also visit our website: www.discoveringalabama.org.

This program was produced with support from the following organizations:



Before Viewing

1. Locate one or more rivers, towns, or other features in your region that have names derived from Native American words. Discuss the meaning of these names and what your part of the state was like when the names were first used. Numerous place names in Alabama have their origins in the languages of the American Indians.

2. Ask the class to think for a moment about how these local features have changed since European settlement. If you can find any old drawings or photos of the area, you might want to pass these around to stimulate thinking. Next, place students in small groups and have each group work cooperatively to compile a list of all the positive and negative aspects that have come with this change. As each group reports its completed list to the class, record these items on the blackboard. Then review all of the listed items with the class to see which might be considered economic, environmental life-style, or other categories of change.

3. Conduct a brief class discussion of the pros and cons of changes that have resulted in your area and introduce the video by explaining that the Black Warrior River is a geographical feature that has experienced both positive and negative changes.



While Viewing

As you introduce the video, ask the class to pay close attention and note the pros and cons associated with changes over time along the Black Warrior River.

Video Mystery Question: An elevator is to a multi-story building as _____ are to the Black Warrior River. (Answer: Locks and dams. The lock and dam systems constructed on the Black Warrior act as “water elevators,” raising and lowering boats from one lake level to the next.)

After Viewing

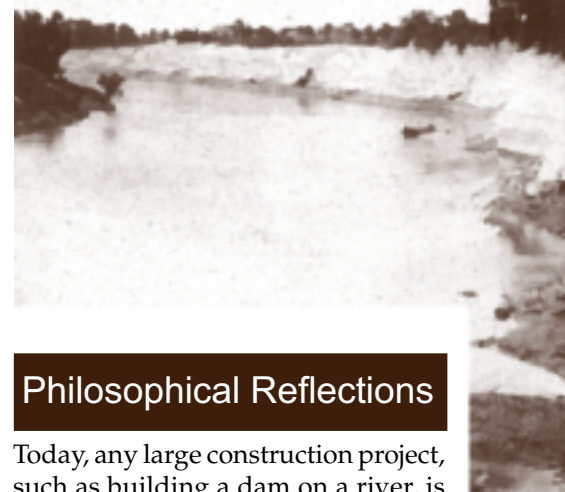
1. Surprise the class with a video **quiz!** Give each student a copy of the quiz printed on the last page of this guide. For added challenge, allow them only **five** minutes to answer as many questions as they can. Afterwards, review the quiz questions and discuss the answers.

2. Return students to the small groups and have each group develop a similar quiz with questions pertinent to the local features that were discussed before viewing the video. Then allow the groups to share their quiz questions and compare for differences in group perspective. For example, one group might reflect a very positive attitude about changes to the area, while another group might be less positive. Work with the class to combine group quizzes into a complete list of questions which the class might use to conduct further research and learn about the local area and community.

Extensions

1. View other *Discovering Alabama* programs featuring rivers, for example, “Locust Fork River” or “Cahaba River Watershed.” Compare the status and characteristics of these streams with that of the Black Warrior River.

2. Use the Alabama River map (see **Additional References and Resources** below) to locate impounded waterways, i.e., bodies of water dammed and held in reservoirs, in the state. Which impounded stream is closest to your community? Invite knowledgeable speakers to visit your class and discuss economic and environmental concerns associated with the waterway.

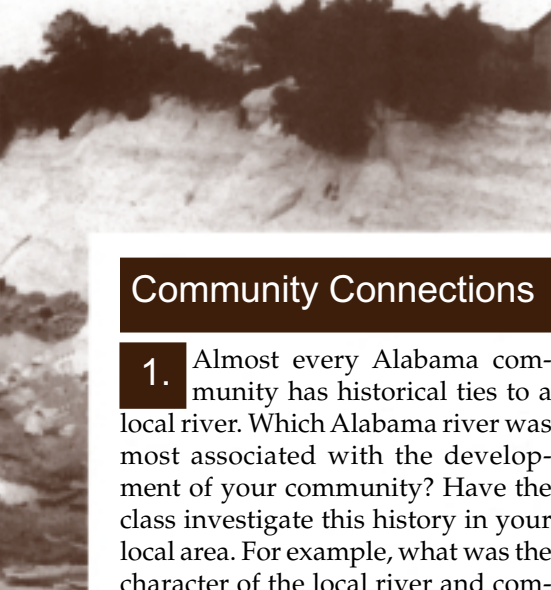


Philosophical Reflections

Today, any large construction project, such as building a dam on a river, is likely to undergo an intensive “cost-benefit” assessment before work can begin. Often such an assessment is a measure primarily of **financial costs** for project design and construction versus anticipated **economic benefits** from new commerce, jobs, or taxes following project completion. What assumptions might underlie a cost-benefit assessment that deals only with these kinds of measures? Are there other important concerns that ought to be considered? For example, what cost-benefit considerations might apply if a rare animal species will be harmed by the project? What additional assumptions are related to a cost-benefit analysis that includes this type of consideration?

Nature in Art

The role of art is to provide insight, to broaden perspective, and to stimulate thought. Sometimes art serves this role while also documenting the changing landscape. For example, photographs often record vanishing cultural and natural features. Such pictorial collections are far more than quaint portrayals of yesteryear because they can help us appreciate our past. But their greatest value may be in helping us to consider our future. Perhaps your class would enjoy producing a photographic essay of changes affecting a river or other natural features in your area.



Community Connections

1. Almost every Alabama community has historical ties to a local river. Which Alabama river was most associated with the development of your community? Have the class investigate this history in your local area. For example, what was the character of the local river and community: a) around the time of de Soto's expedition through Alabama in the 1540s, b) during the period of the Creek Indian War in the 1810s, and c) when the first locks and dams were constructed on the Black Warrior River in the late 1800s and the early 1900s?

2. Have the students locate old pictures, interview senior citizens in town, and conduct other research to develop a story about their community's river-related history. Check with the local newspaper or other sources to arrange publication of students' stories, along with additional commentary about their concerns for the future of local rivers and communities.

Complementary Aids and Activities

Aquatic Project WILD, Grades 3–12, "Deadly Waters." Available through Alabama Department of Conservation and Natural Resources, 64 N. Union St., Montgomery AL 36130; 334-242-3623.

Alabama Water Watch, BIO-ASSESS Bug Card Game and BIO-ASSESS Manual. Available through the Department of Fisheries and Allied Aquacultures, 203 Swingle Hall, Auburn AL 36849; 334-844-4785 or email: wdeutch@ag.auburn.edu.

Surf the **World Wide Web** for information on water in Alabama. A good starting point is to access the web site for the United States Geological Survey at: <http://www.usgs.gov>, then click on **water**. Also contact their office at 800-426-9000 for free water-related posters and fact sheets, which contain activities.

Additional References and Resources

"**Harnessing the Black Warrior River**" by Kenneth D. Willis in *Alabama Heritage*, Summer 1994, no. 33. Order through *Alabama Heritage*, University of Alabama, Box 870342, Tuscaloosa AL 35487-0342; 205-348-7467.

"**Alabama's Water Resources**," map and student activity guide. Available from Legacy: Partners in Environmental Education, P.O. Box 3813, Montgomery AL 36109; 800-240-5115.

NatureSouth, vol. 3, no. 1 and vol. 4, no. 4. Both issues contain articles relevant to river and water research in Alabama. Order through Alabama Museum of Natural History, University of Alabama Museums, Box 870340, Tuscaloosa AL 35487-0340; 205-348-9826.

Indian Place Names in Alabama by William A. Read (1984). The University of Alabama Press, Box 870380, Tuscaloosa AL 35487-0380, (800-825-9980).

Geological Survey of Alabama, Educational Series. Available through the Geological Survey of Alabama, Publication Sales Office, Box 869999, Tuscaloosa AL 35486. For additional educational information, contact the Geological Survey librarian at the address above or call 205-349-2852.

Effects of Impoundments on Freshwater Mussels...in the Main Channel of the Black Warrior River and Tombigbee Rivers in Western Alabama by James D. Williams (1992). The University of Alabama Press, Box 870380, Tuscaloosa AL 35487-0380, (800-825-9980).

Parting Thoughts

The video concludes with the thought that we should seek a balance between economic and environmental values, but this is easier said than done. Almost 70% of Alabama's fresh surface water is behind impoundments. In other words, the great majority of our rivers are no longer true rivers. Their original free-flowing qualities have disappeared, flooded by lakes that result from damming. Granted, continued economic growth will require an ample water supply, and new impoundments can provide a ready water source. However, are we achieving a balance when, after having already lost so much of our native river habitat, we continue plans to dam other free-flowing Alabama streams?

Oh yeah, I almost forgot. You might wish to become involved with other Alabama river issues or maybe join the Alabama Rivers Alliance, 205-322-5326. Don't be like the many folks who look for answers only after a problem reaches their own backyard.



Happy outings,

D. Long



DISCOVERING
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Activity/Information Sheet

Black Warrior River

1. "Tuscaloosa" is derived from the Indian words *tasska* and *luska*, which mean _____ and _____.
2. The Black Warrior River proper begins at the juncture of the river's three upper forks: the _____ fork, the _____ fork, and the _____ fork.
3. When de Soto traveled through Alabama in the 1540s, the Black Warrior River had another name, the _____.
4. The Black Warrior River served as a buffer zone between these three Indian nations: the _____, the _____, and the _____.
5. Early boat travel on the Black Warrior River was difficult because of the _____ at places along the river.
6. The organic resource _____ was a primary reason for the construction of dams on the Black Warrior River.
7. The first dams were built near the town of _____.
8. In 1825, the town of _____ became the capital of Alabama.

9. Dams for the Black Warrior River were originally designed by Major _____.
10. At one point, there were a total of 17 dams on the Black Warrior River. Today, there are _____ dams.
11. The part of a dam that enables boats to pass from a higher part of the river to a lower part is called a _____.
12. The Indian uprising that brought new attention and new settlement to Alabama was called _____.
13. A major reason for early human settlement around places such as Birmingham, Tuscaloosa, and Demopolis was _____.
14. The century following the demise of prehistoric Indian peoples along the Black Warrior River is called the Century of _____.

15. Environmental problems that have affected the Black Warrior River include _____, _____, _____, _____, and _____.
16. Some species of mussels serve to remove _____ from the river.
17. _____ was a major cause for the decline of invertebrate species such as snails and clams in the Black Warrior River.
18. The Black Warrior River is both an economic and _____ resource.
19. Two agencies mentioned in the video that have an important role in how the Black Warrior River is managed are _____ and _____.
20. The Black Warrior River is one of two rivers systems in Alabama that _____.



All photos of the Black Warrior River courtesy Alabama Museum of Natural History