

## Navigating the Niger

### KEYWORDS

Niger River, Niger Delta, Geographic Perspective

### GRADE LEVEL 6-8

### OVERVIEW

The Niger River is 2,600 miles long and is the third longest river on the continent of Africa, after the Nile and the Congo. Considered to be the principal river of West Africa, it flows through the countries of Guinea, Mali, Niger, Nigeria and Benin. For centuries this great river has supported life and trade in the region. In fact, the ancient city of Timbuktu is located only a short distance from its banks. Although millions of West Africans rely on the river, it is, like many rivers, under threat. Overfishing, agriculture, pollution, invasive species and the construction of dams threaten the very health of a river that so many, for so long, have depended upon. Oil production in the Niger Delta, however, is probably the single greatest threat to both the river and the region.

In this lesson students will research the Niger River from a variety of perspectives: spatial, physical, environmental, ecological, cultural and historical. They will pay particular attention to the Niger Delta and consider how the ecology of the river is being compromised, and what possible affects this may have, both regionally and globally.

### CONNECTIONS TO THE CURRICULUM

Social Studies, Science, Geography, History

### CONNECTIONS TO NATIONAL GEOGRAPHY STANDARDS

- Standard 1: How to use maps and other geographic representations, tools, and technologies to acquire, process, and report information.
- Standard 7: The physical processes that shape the patterns of Earth's surface.
- Standard 14: How human actions modify the physical environment.
- Standard 15: How physical systems affect human systems.
- Standard 16: The changes that occur in the meaning, use, distribution, and importance of resources.
- Standard 18: To apply geography to interpret the present and plan for the future.

### CONNECTIONS TO OTHER NATIONAL STANDARDS

#### National Council for Social Studies Standards

[<<http://www.socialstudies.org/standards/strands/>>](http://www.socialstudies.org/standards/strands/)

- People, Places and Environments
- Global Connections
- Power, Authority, and Governance

#### National Science Education Standards << <http://newton.nap.edu/html/nses/>>>

- Life science
- Earth and space science
- Science and technology

TIME

Four Hours

### MATERIALS REQUIRED

- Computer with Internet access
- Writing materials
- Poster board or large pieces of construction paper
- Colored pencils or crayons
- [map of the world <http://www.nationalgeographic.com/xpeditions/atlas/index.html?Parent=world&Rootmap=&Mode=d&SubMode=w>](http://www.nationalgeographic.com/xpeditions/atlas/index.html?Parent=world&Rootmap=&Mode=d&SubMode=w)
- [map of Africa <<http://www.nationalgeographic.com/xpeditions/atlas/index.html?Parent=africa&Mode=d&SubMode=w>>](http://www.nationalgeographic.com/xpeditions/atlas/index.html?Parent=africa&Mode=d&SubMode=w)

### KEY VOCABULARY

- **delta:** the sediments that collect at the mouth of a river
- **flood plain:** flat land which stretches from either side of the river and is susceptible to flooding during heavy rain
- **invasive species:** a type of plant or animal that is not indigenous to a particular area
- **mouth:** the place where a river empties into a larger body of water
- **river system:** the tributaries, mouth, source, delta and flood plan of a particular river
- **source:** where a river originates
- **tributary:** a smaller river, stream or creek that empties into a larger river

### GUIDING QUESTION

How has oil production in the Niger Delta compromised the ecological health of the river, and what current and future consequences may this have on the region, the continent and the world?

### OBJECTIVES

Students will:

- draw a map of the Niger River system
- research the connection between people and the environment as it applies to the Niger River
- research oil production in the Niger Delta
- describe the environmental, ecological and political impacts of oil production in the Niger Delta
- make predictions regarding how continued oil production will impact the region and the world

## GEOGRAPHIC SKILLS

- Acquiring Geographic Information
- Organizing Geographic Information
- Answering Geographic Questions
- Analyzing Geographic Information

## SUGGESTED PROCEDURE

### • **Opening**

Explain to students that rivers and river systems are an integral part of our planet and an important natural resource. People, and other animals, rely upon rivers for their very existence. Pose the following questions to your class:

- In what ways do people rely upon rivers?
- What can rivers provide?

Go on to explain that human reliance on rivers dates back to ancient times when the first human settlements were found along the banks of rivers. Using a large wall map show students:

- Mesopotamia (Tigris and Euphrates Rivers)
- Egypt (Nile River)
- Indus Valley (Indus River)
- Huang He (Yellow River)

Continue by explaining that modern cities are also located along rivers for many of the same reasons that ancient ones were. Have students brainstorm a list of major cities, either in the United States or in the world that are located near rivers. Have them locate these places on maps. Next, pose the following question to your class:

- What sorts of things do you think can damage the health of a river?
- What impacts do these things have on human populations?
- Whom do you think suffers more from an unhealthy river system: a wealthy country or a poor country?

Finally, tell students that the Niger River and the surrounding area was once home to many great civilizations of the past, and that currently millions of Africans still rely on the river for survival.

- Have students do a Google Image search using the key words: *Niger River*. On a separate sheet of paper have them list all of the ways they see people using the river. Regroup and discuss as a class.

### • **Development**

Write the following questions on individual index cards and place the cards in a basket:

- What is the geographic location of the Niger River?
- Through what countries does it pass?
- Where is its source?
- Where is its mouth?
- In what country is the Niger Delta?
- What is the current population of the Niger Delta?
- Describe the cultural/ethnic make-up of the people who live on the Niger Delta?
- What kinds of animals rely on the Niger River?
- Describe the ways in which the people rely upon or use the river.
- What is the major ecological threat to the Niger Delta?

- What invasive species threatens the Niger River? Explain.
- Describe some of the consequences of oil production in the Niger Delta.
- How have local people responded to the environmental threats in their region?
- How might the problems on the Niger Delta affect the African continent, especially the counties that border Nigeria?
- Explain how people benefit from oil production on the Niger Delta.
- Who consumes or profits most from the oil produced on the Niger Delta?
- How does what happens on the Niger Delta impact the rest of the world, especially the United States?
- If the current situation does not improve, describe what might happen ecologically, environmentally and politically.

Divide your class into three groups, and have each group draw six of the questions. Have the groups conduct research to answer the questions they selected. Then have the students regroup or jigsaw so that at least one person from each group joins together to form a new group. Have the new groups share answers to the questions they researched in their first groups. Then have the new groups work to produce the following:

- A map of North West Africa which includes: all countries, capitols and important cities. The map should also include the Niger River, and identify its source, mouth, delta, floodplain, tributaries, and direction of flow.
  - A more detailed map of the Niger Delta.
  - Information on population, natural resources and industry in the Niger Delta.
  - Information on animal species that live in or rely upon the Niger River.
  - Information on the ecological, human and political impacts of oil production in Niger Delta.
  - A prediction regarding what future impacts may be if current methods remain the same.
- **Closing**  
After the groups have fully researched the issues surrounding the use and health of the Niger River system and the people who live nearby, have students participate in a debate. One side should argue in favor of oil production in the Niger Delta; and another group should argue against this issue.

#### **SUGGESTED STUDENT ASSESSMENT**

Assess students based upon their participation in the debate, or have students write letters to their local senator or congressperson in which they explain the current situation in the Niger Delta and offer an opinion on what should be done to improve the situation.

#### **EXTENDING THE LESSON**

- **Inquiry Extension:** Have students research the Mississippi Delta to discover how it is being compromised and what steps are currently being taken to protect it.
- **Cross-Curricular Extensions for Further Explanation:** Have students research the ancient city of Timbuktu. Ask them to pretend that they are a time traveler and write a travelogue for contemporary people about what it was like to visit this ancient city. (Language Arts)

- **Try This At Home:** Have students investigate a river that is close to where they live to find out about its importance to the community and its ecological health.

#### ADAPTATIONS

- Provide ELL students with the vocabulary a few days prior to the lesson.
- Use large index cards to write relevant vocabulary words and post them in the classroom.
- Use photos or illustrations to accompany the new vocabulary words.
- Allow students to give a verbal assessment of the situation to another class in the school.
- Select one important concept from the lesson and assess ELL students on that single concept.

## RELATED LINKS

- [Interactive River System](http://www.nationalgeographic.com/geographyaction/gaO5.html)  
<<http://www.nationalgeographic.com/geographyaction/gaO5.html>>
- [The Niger Delta Project](http://nigerdelta.aaas2.org/impact.shtml) <<http://nigerdelta.aaas2.org/impact.shtml>>
- [African People And Culture](http://www.africaguide.com/culture/tribes/tuareg.htm) <<http://www.africaguide.com/culture/tribes/tuareg.htm>>
- [Invasive and Nuisance Aquatic Plants And Fish](http://www.fao.org/DOCREP/006/X7580E/X7580E07.htm)  
<<http://www.fao.org/DOCREP/006/X7580E/X7580E07.htm>>
- [National Geographic People And Places Directory](http://plasma.nationalgeographic.com/places/index.html)  
<<http://plasma.nationalgeographic.com/places/index.html>>
- [Niger Delta Human & Environmental Organization](http://www.essentialaction.org/shell/HERO.html)  
<<http://www.essentialaction.org/shell/HERO.html>>
- [All Africa](http://allafrica.com/sustainable) <<http://allafrica.com/sustainable>>
- [Friend of Earth — Nigeria](http://www.eraction.org/index.php) <<http://www.eraction.org/index.php>>
- [Urhoho Historical Society](http://www.eraction.org/index.php) <<http://www.eraction.org/index.php>>
- [Climate Justice](http://www.climatelaw.org/gas.flaring/report) <<http://www.climatelaw.org/gas.flaring/report>> aring/report>
- [Nigeria Environmental Issues](http://www.eia.doe.gov/emeu/cabs/nigenv.html) <<http://www.eia.doe.gov/emeu/cabs/nigenv.html>>
- [Niger Delta Swamp Forests](http://www.nationalgeographic.com/wildworld/profiles/terrestrial/at/at0122.html) <<http://www.nationalgeographic.com/wildworld/profiles/terrestrial/at/at0122.html>>
- [Niger River Delta](http://www.worldwildlife.org/wildworld/profiles/g200/g155.html)  
<<http://www.worldwildlife.org/wildworld/profiles/g200/g155.html>>
- [Niger Delta Fund Initiative](http://www.earthrights.net/nigeria/news/definition.html)  
<<http://www.earthrights.net/nigeria/news/definition.html>>
- [Niger Delta Maps](http://www.waado.org/niaerdelta/Maps/MapsPage.html) <<http://www.waado.org/niaerdelta/Maps/MapsPage.html>>
- [The CIA World Factbook](http://www.odci.gov/cia/publications/factbook/index.html)  
<<http://www.odci.gov/cia/publications/factbook/index.html>>

## RELATED ACTIVITIES

- [Timbuktu <http://edsitement.neh.gov/view\\_lesson\\_plan.asp?id=508>](http://edsitement.neh.gov/view_lesson_plan.asp?id=508)
- [Rivers: Lifelines of the Land <http://www.nationalgeographic.com/expeditions/lessons/14/g68/tgrivers.html>](http://www.nationalgeographic.com/expeditions/lessons/14/g68/tgrivers.html)
- [Killifish and Pollution <http://www.sciencenetlinks.com/sci\\_update.cfm?DocID=123>](http://www.sciencenetlinks.com/sci_update.cfm?DocID=123)
- [Seeing the Human Impact on Africa: What You Can Learn From A Plane <http://www.nationalgeographic.com/expeditions/lessons/01/g68/africaplane.html>](http://www.nationalgeographic.com/expeditions/lessons/01/g68/africaplane.html)
- [Trekking to Timbuktu — The Geography of Mali <http://edsitement.neh.gov/view\\_lesson\\_plan.asp?id=500>](http://edsitement.neh.gov/view_lesson_plan.asp?id=500)
- [On the River to Timbuktu <http://www.nationalgeographic.com/adventure/0301/photo\\_1.html>](http://www.nationalgeographic.com/adventure/0301/photo_1.html)

## BACKGROUND INFORMATION

The Niger Delta is a volatile area and conflicts between local people, corporations and governments have led to violence. Students will, no doubt, encounter this in their research so it will be important for you to explain that violent conflict among people can be one of the consequences of struggles over the production and distribution of natural resources. Students will also encounter strong opinion regarding the United States, which is not always positive. Again, students need to understand that for many the U.S. is a perceptual region and that what people think of a region is influenced by foreign policy and economic interests that may have had a negative impact on them. While this may be disturbing to some students, it is also an opportunity to speak directly to the necessity of a global community working together to meet energy needs by using responsible methods.

## TEACHER AND STUDENT HANDOUTS

None