



LESSON PLAN

Then and Now



RELATED FROM-THE-FIELD ESSAY

“The Skeleton of the Isle de Jean Charles”

BY ELIZABETH RUSH



Class: 60 minutes

Key Idea

Development and other human activities often have unintended consequences that affect ecosystems and the people who live in or rely on them. These consequences can be exacerbated by climate change.

Background

This story focuses on a tiny island community off the Louisiana coast that is literally losing ground. For over 150 years, Isle de Jean Charles has been home to a small band of Native Americans who have made their living from fishing and farming. But in the last 50 years, 90 percent of this once lush island has been swallowed up by water; it is now just a quarter-mile-wide sliver covered with dead trees. Most of the island’s residents have been forced to leave, as they can no longer support themselves there.

Several factors have contributed to the island’s disappearance. Starting in the 1930s, oil companies carved canals in the surrounding marshlands to access their oil rigs. The canals brought in salt water, eroding the island and killing plant life. In addition, flood control dams and dikes on the Mississippi River prevented the natural flow of silt that historically helped rebuild the island. And, with climate change, the rising sea level due to melting polar ice is covering more land. As the island continues to shrink, so does the community that has depended on it for its livelihood. (For additional background, see the news video listed in Resources below.)

Connections to National Standards

Common Core English Language Arts. RH.11-12.2. Determine the central ideas or information of a primary or secondary source; provide an accurate summary that makes clear the relationship between the key details and ideas.

College, Career, and Civic Life (C3) Framework for Social Studies State Standards. D2.Geo.5.9-12. Evaluate how political and economic decisions throughout time have influenced cultural and environmental characteristics of various places and regions.

SUBJECT AREAS

HIGH SCHOOL

- Anthropology
- Environmental Science
- Modern World Studies

COLLEGE

- Cultural Anthropology
- Environmental Studies
- Geography
- Sociology

THEMES

- Cultural displacement
- Effects of environmental change
- Environmental justice
- Unintended consequences

MATERIALS

- Photographs of Isle de Jean Charles (from “Before and After: 50 Years of Rising Tides and Sinking Marshes,” listed in Resources below)
- Map of the United States
- Printed copies of the story, one per student
- Highlighter pens
- Student journals or plain paper



Then and Now

Next Generation Science Standards. HS-LS2-7. Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.

Lesson

SETTING THE STAGE

Introduce the story to the class by explaining that they will be examining changes in a landscape and culture over time. Point out Isle de Jean Charles on a U.S. map, and ask students what they might surmise about the island or its culture from its location. Show students photos of the island from 1963 and 2012. What differences do they notice in the photographs and what do they think may have caused the changes?

ENGAGING WITH THE STORY

Assign students to read the article as homework, pointing out that they will be talking about it in class the next day. Encourage them to pay attention to changes in the landscape and to the people living on the island.

Delving Deeper

1. Divide the class into pairs or small groups, and assign each group a focus, such as land changes, water changes, plant and animal changes, or community changes.
2. Have pairs or groups reread the article with their focus in mind, using highlighter pens to mark places in the article where they find that kind of change.
3. Draw a chart on the board with the headers, “Then,” “Now,” “Changes,” and “Causes,” and direct students to copy it into their journals or on plain paper. Instruct pairs or groups to fill out the chart using the information they highlighted in the reading.
4. Pair up groups that focused on different kinds of changes, and have them identify connections between their two groups’ findings.

PREPARATION

- Access the photographs of Isle de Jean Charles and prepare to show them to students either on screen or as prints.
- Make copies of the story.
- Students will read the article as homework.



Then and Now

5. Call the class together to discuss the story, asking such questions as:
 - What connections did your group identify between land, water, plants and animals, and the community and culture of Isle de Jean Charles?
 - The oil industry has altered the environment of Isle de Jean Charles, but also brings jobs to the region. What other trade-offs of positive and negative consequences are apparent in this story?
 - Louisiana is planning to spend \$50 billion over 50 years to restore the coast and construct a new levee system. However, the state has decided to leave Isle de Jean Charles outside of the new levees because including it would cost hundreds of millions of dollars and help only a few dozen people. Do you think that is a fair decision? What criteria would you use for prioritizing what to save?
 - As climate change causes greater melting of polar ice, many more islands and other coastal areas will likely be engulfed by rising sea levels. What does this story tell us about the changes we might expect and how to address them?

Reflecting and Projecting

Give students one of the following reflective writing prompts to demonstrate their understanding of the story:

1. Referring to the declining shrimp in the area, Isle de Jean Charles resident Burt Knight says, “You don’t need to kill all the chickens, just break all the eggs.” What does he mean by this? How might this expression apply to the Isle de Jean Charles landscape or the residents themselves? (CCSS.ELA.RH.11-12.2)
2. The author says that one solution to living in diminishing coastal communities like Isle de Jean Charles may be to try to make do with less. Another possibility is for residents to relocate. What are the pros and cons of each of these reactions? Can you think of other solutions? (NGSS.HS-LS2-7)



Resources

(Photo essay) "[Before and After: 50 Years of Rising Tides and Sinking Marshes.](#)" PBS NewsHour, June 1, 2012.

(News video) de Melker, Saskia. "[Native Lands Wash Away as Sea Levels Rise.](#)" PBS NewsHour, June 1, 2012.

(Community website) "[Isle de Jean Charles, Louisiana.](#)"

Update [May 2016]

Chris D'Angelo, "[A Louisiana Tribe is Now Officially a Community of Climate Refugees.](#)" Earth First!, February 16, 2016.

Coral Davenport and Campbell Robertson, "[Resettling the First American 'Climate Refugees.'](#)" *The New York Times*, May 3, 2016.