



LESSON PLAN

A Vanishing Island



RELATED FILM

Isle de Jean Charles

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A Vanishing Island

Key Idea

Coastal areas are drastically impacted by the effects of climate change. Communities are witnessing rising sea levels, stronger storms, and coastal erosion, forcing residents to leave their homes.

Background

This film highlights lifelong residents who live on a tiny island community off the Louisiana coast that is sinking into the sea. For over 150 years, the Isle de Jean Charles has been home to a small band of Native Americans who have made their living from the island's surrounding waters. 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 due to the destruction of their homes from storms, the inability to rebuild, and the loss of jobs on the island.

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. The island is experiencing an increase in severe hurricanes during the Atlantic hurricane season, active from June to November each year, which threatens to wash their home away. According to the National Oceanic and Atmospheric Administration, more than 50 percent of the U.S. population live in coastal counties. As the island continues to shrink, so does the community that has depended on it for its livelihood.

Connections to National Standards

Common Core English Language Arts. SL.9-10.5 and SL.11-12.5. Make use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understandings of findings, reasoning, and evidence and to add interest.



Film: 9 minutes

Class: 60 minutes

SUBJECT AREAS

HIGH SCHOOL

- Anthropology
- Environmental Science
- Modern World Studies

COLLEGE

- Cultural Anthropology
- Environmental Studies
- Geography
- Sociology

THEMES

- Coastal living
- Connection to home
- Cultural displacement
- Effects of environmental change

MATERIALS

- Online access to the film
- Equipment for showing film

PREPARATION

- None



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College, Career, and Civic Life (C3) Framework for Social Studies State Standards. D2.Geo.2.9-12. Use maps, satellite images, photographs, and other representations to explain relationships between the locations of places and regions and their political, cultural, and economic dynamics.

Next Generation Science Standards. HS-ESS2-2. Analyze geoscience data to make the claim that one change to Earth's surface can create feedback that cause changes to other Earth systems.

Lesson

SETTING THE STAGE

Introduce the story by telling students that they will be watching a film about two lifelong residents who live on the Isle de Jean Charles, a tiny island community off the Louisiana coast vulnerable to hurricanes. Ask students if they, or any of their family members, have experienced a hurricane or natural disaster, such as a tornado or a flood. How can a hurricane affect the community it strikes? What can happen to homes and businesses in the community? Ask students to make a list. Examples include flooding, power outages, and shortages of food, gas, oil, and water.

Ask students: Which U.S. coastal cities do you think are vulnerable to hurricanes? Some include Tampa, Miami, New Orleans, and Virginia Beach, among others. Hurricane Katrina devastated New Orleans in 2005 displacing thousands of people in Alabama, Louisiana, and Mississippi. In 2012, Hurricane Sandy affected 24 states, including New York City, where the subway system flooded, hospitals closed, and thousands of vehicles were destroyed.

ENGAGING WITH THE STORY

Direct students to note as they watch the film how families living on the Isle de Jean Charles have experienced drastic changes in their lifetime. Due to rising sea levels, coastal erosion, and increasingly severe storms, the island could be underwater in less than 50 years. Some say the next major hurricane could destroy the island.



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The island's population has drastically declined over the years—out of the 350 who used to live on the island, only 30 remain. A once thriving community is about to vanish. What are some visual indications in the film that the island is shrinking? Ask students to observe the residents of the Isle de Jean Charles. What are some of the advantages and disadvantages of living on the coast?

Delving Deeper

After viewing the film, lead a discussion with such questions as:

- What are some advantages and disadvantages for living near the coast? What do the characters in the film like and dislike about living on the Louisiana coast?
- A real challenge, Chris Brunet says in the film, is not knowing if your home will be there when you return after a storm. What might this be like? How can one imagine a future in this environment?
- In 2012, Hurricane Isaac created a storm surge on the Island de Jean Charles. There was no way of getting out for the residents who did not evacuate. Do you think people should be forced to leave their homes during a hurricane? Why or why not?
- The people of the Isle de Jean Charles think they are quickly becoming climate refugees, people who must leave their homes because of the effects of climate change. If the Isle de Jean Charles goes underwater, what could be lost? What might the residents of the island lose if they became climate refugees?
- If you were in Edison Dardar's shoes, would you stay on the island? Why or why not?

Reflecting and Projecting

Give students one of the following reflective writing prompts to demonstrate their understanding of the story. (Note for teachers: Just as quotes from a book or text are used to prove an analytical thought, students use the film to justify their reasoning.)



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1. You are a journalist writing an article on the effects of hurricanes and global sea rise on coastal communities. As a resource, study the following aerial photos of the island as documented by PBS, "[Before and After: 50 Years of Rising and Sinking Marshes.](#)" What do you notice? For your piece, you will interview the residents of the Isle de Jean Charles. What would be some of your interview questions? What would you like to know from residents after seeing the island's dramatic changes? What kinds of questions would you ask regarding predictions or cautions for the future? (C3.D2.Geo.2.9-12)
2. Melting polar ice leads to global sea rise, causing islands such as the Isle de Jean Charles to become increasingly vulnerable to severe storms. If you lived in a coastal community, what would you do to prepare for sea level rise as an individual as well as a community? (NGSS.HS-ESS2-2)
3. Has your thinking about hurricanes changed? If so, in what ways? (CCSS.ELA.SL.9-10.5 and SL.11-12.5)

Resources

Elizabeth Rush, "[The Skeleton of the Isle de Jean Charles.](#)"
Global Oneness Project.

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

Katy Reckdahl, "[Losing Louisiana.](#)" The Weather Channel.

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

(Interactive map) "[Surging Seas: Sea Level Rise Analysis.](#)" Climate Central.

Bob Marshall, The Lens, Brian Jacobs and Al Shaw, "[Losing Ground.](#)"
ProPublica, August 28, 2014.

Update [May 2016]

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



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