

Website Lesson:

Katrina and Environmental Justice

Essential Questions:

- Did the Racial and Economic Composition of New Orleans Make it Vulnerable to a Natural Disaster?

Introduction:

Numerous reports have documented that Katrina had a disproportionately large impact on the poor and unemployed, particularly African Americans. The larger question is whether that impact was primarily accidental or the direct result of policy choices that disregarded the welfare of the poor and minorities. In the first part of this lesson, using maps and statistical data, students will attempt to quantify the effects of Katrina on different socioeconomic groups and neighborhoods. Students will then explore possible explanations for why these groups and neighborhoods bore the brunt of destruction. The lesson will focus on a series of in-depth reports written by analysts from a variety of institutions and foundations, including the Russell Sage Foundation, Brown University, and the Center for Social Inclusion. The lesson will conclude with a general discussion of the concept of “environmental racism” and analysis of whether or not this idea can legitimately be applied to Katrina.

Relevant Sections of the Film: Act 2, Chapter 1 – “Jeffersonia”

Act 2, Chapter 3 – “Brownie, You’re Doing a Heck of Job”

Act 3, Chapter 2 – “Polarized”

Act 4, Chapter 3 – “Where is My Government?”

Act 4, Chapter 5 – “A Signature Moment”

Act 4, Chapter 6 – “I am Mending”

Materials Used in the Lesson:

Books:

Craig Colten, *An Unnatural Metropolis: Wrestling New Orleans From Nature*, LSU Press, 2005. (Especially Chapter 3, “Inequity and the Environment,” pp. 77-107.)

Jed Horne, *Breach of Faith: Hurricane Katrina and the Near Death of a Great American City*, Random House, 2006. (Maps of hurricane damage, pp. viii-xi)

George Washington Cable, *The Creoles of Louisiana* (1884) (Reprint available from Pelican Publishing, 2005.)

Research Reports:

(Please note: these reports may either be downloaded from the Internet or ordered directly from the institutions producing them; see each entry for details.)

Manuel Pastor, Robert D. Bullard, James K. Boyce, Alice Fothergill, Rachel Morello-Frosch, and Beverly Wright, "In the Wake of the Storm: Environment, Disaster, and Race After Katrina," Russell Sage Foundation, 2006.

Available online at: <http://www.russellsage.org/news/060515.528528>

Also available from the Russell Sage Foundation, 112 E. 64th St., New York, NY 10021

"The Race to Rebuild: The Color of Opportunity and the Future of New Orleans," especially the section on "Before New Orleans' Levees' Failed," pp. 4-7, Center for Social Inclusion, August, 2006.

Available online at: <http://www.centerforsocialinclusion.org/PDF/racetorebuild.pdf>

Also available from The Center for Social Inclusion, 65 Broadway, Suite 1800, New York, NY 10006, 212-248-2785

John R. Logan, "The Impact of Katrina: Race and Class in Storm-Damaged Neighborhoods," Brown University.

Available online at: <http://www.s4.brown.edu/katrina/report.pdf>

Also available from John R. Logan, Professor of Sociology, Brown University, Director, Spatial Structures in the Social Sciences, 401-863-2267, John_Logan@brown.edu.

Online Resources:

Interactive Map of Katrina Flooding from the New Orleans *Times-Picayune*.

www.nola.com/katrina/graphics/flashflood.swf

Map of Flood Depths from the *Times-Picayune*

<http://www.nola.com/katrina/graphics/depths.swf>

Brown University Mapping System for Katrina

<http://maps.s4.brown.edu/website/hurricanekatrinaaa/viewer.htm>

Home Page, Coalition Against Environmental Racism

<http://gladstone.uoregon.edu/~caer/>

Introductory Activity:

Ask students to read the passage below from George Washington Cable's 1884 book, *The Creoles of Louisiana*, which describes in detail the impact of major flooding on New Orleans in the nineteenth century:



**Excerpt from The Creoles of Louisiana
By George Washington Cable (1884)**

It is difficult, in a faithful description, to avoid giving an exaggerated idea of these floods. Certainly, large portions of the city are inundated; miles of streets become canals. The waters rise into yards and gardens and then into rooms. Skiffs enter the poor man's parlor and bedroom to bring the morning's milk or to carry away to higher ground his goods and chattels. All manner of loose stuff floats about the streets; the house-cat sits on the gate-post; huge rats come swimming, in mute and loathsome despair, from that house to this one, and are pelted to earth from the windows. Even snakes seek the same asylum. Those who have the choice avoid such districts, and the city has consequently lengthened out awkwardly along the higher grounds down, and especially up, the river shore.

But the town is not engulfed; life is not endangered; trade goes on in its main districts mostly dry-shod, and the merchant goes and comes between his home and his counting-room as usual in the tinkling street-cars, merely catching glimpses of the water down the cross streets.

The humbler classes, on the other hand, suffer severely. Their gardens and poultry are destroyed, their houses and household goods are damaged; their working days are discounted. The rich and the authorities, having defaulted in the ounce of preventive, come forward with their ineffectual pound of cure; relief committees are formed and skiffs ply back and forth distributing bread to the thus doubly humbled and doubly damaged poor....

The hopeful in New Orleans look for an early day when a proper drainage system shall change all this, - a system which shall include underground sewerage and complete the levee, already partly made, which is to repeat on a

greatly enlarged scale, above and below the city and along the lake shore behind it, the old wall and moat that once surrounded the Spanish town in Canal, Rampart, and Esplanade Streets. The present system consists merely of a poor and partial surface drainage in open street-gutters, emptying into canals at whose further end the waters are lifted over the rear levees by an appliance of old Dutch paddle-wheel pumps run by steam. Even the sudden heavy showers that come with their singeing lightnings and ear-cracking peals of thunder, are enough, at present, to overflow the streets of the whole town, often from sill to sill of opposite houses and stores, holding the life of a great city water-bound for hours, making strange archway and door-way groups of beggar and lady, clerk, fop, merchant, artisan, fruit-peddler, negro porter, priest, tattered girl, and every other sort of fine or pitiful human nature.

An adequate system, comprising a thorough under-drainage, would virtually raise the city's whole plain ten feet, and give a character of soil under foot incalculably valuable for the improvement it would effect in the health and energies of the people. Such a system is entirely feasible, is within the people's means, has been tested elsewhere, extensively and officially approved, and requires only the subscription of capital.

Ask students to discuss the following:

1. How does Cable differentiate the effects of the flood on the wealthier and poorer residents of the city?
2. What parts of the city do the poorest residents live in, according to Cable?
3. How does Cable describe the relief efforts?
4. Overall, how similar to or different does Cable's description of the floods of the late 19th century seem to a description of New Orleans after Katrina?
5. Cable expressed optimism that an effective flood-prevention system for New Orleans was "entirely feasible" in 1884. How surprising it is that more than a century later, such an effective system has yet to be built?

Student Activities:

Depending on time and computer access, instructors may wish to begin this lesson with the optional web-based activity below, in which students use interactive maps to draw conclusions about the socioeconomic composition of the neighborhoods most greatly impacted by Katrina. The lesson can be successfully completed without this activity, but for those able to complete it, the web-based exercise may be extremely helpful in solidifying their overall findings, as well as learning how to manipulate a variety of mapping tools available on the Internet.

If you choose not to do the mapping investigation, please skip to the questions below.

OPTIONAL WEB-BASED MAPPING INVESTIGATION

1. Students must first familiarize themselves with the general layout of New Orleans and the effects of Katrina on individual neighborhoods. This can most easily be done by examining two maps produced by the New Orleans *Times-Picayune*. The interactive hurricane map is available at nola.com/katrina/graphics/flashflood.swf. A map of flood depths is available at www.nola.com/katrina/graphics/depths.swf. Be sure students locate the Lower Ninth Ward, Eastern New Orleans, Lakeview, Gentilly, Arabi, Broadmoor, and Mid-City.

2. Next, students will use maps to investigate the socioeconomic status of different neighborhoods affected by Katrina. The best way to do this is to use the interactive Brown University Mapping System for Katrina, available at <http://maps.s4.brown.edu/website/hurricanekatrinaaa/viewer.htm>. To use this site, students must begin by locating Orleans Parish on the map, and clicking on it several times until the outlines of the city fill the screen (they will probably have to click about 6-8 times, depending on the browser they are using). The left-hand side of the screen displays a series of categories that can be selected, including "Population and Immigration," "Race and Ethnicity," and several others. After selecting a category, students can then select a variable from the toolbar immediately below the categories. For example, if a student selects "Race and Ethnicity," s/he may select "percent minority," "percent black" and other variables. Once a student clicks on the desired category and variable, data will be superimposed on the map. A legend will appear in the lower left-hand corner of the screen. Now that students have a greater understanding of which areas of the city were most affected by Katrina (from question 1, above), they should spend some time exploring the demographic features of these neighborhoods, such as:

- Poverty level
- Education level
- Race
- Per Capita Income

3. After exploring these maps, ask students to draw overall conclusions about the demographic and socioeconomic characteristics of the populations in the areas most heavily impacted by Katrina. What data can they use to support their conclusions?

Lesson Activities:

1. If students have not already done so in the mapping investigation (above), they should first familiarize themselves with the general layout of New Orleans and the effects of Katrina on individual neighborhoods. Use the maps provided in the opening pages of Jed Horne's book, *Breach of Faith: Hurricane Katrina and the Near Death of a Great American City* (Random House, 2006). The map of "A City Submerged," pp. x-xi, labels different neighborhoods and floodwater levels. Ask students to identify which neighborhoods were hardest hit by Katrina.

2. Obtain a copy of the report written by Prof. John R. Logan of Brown University on “The Impact of Katrina: Race and Class in Storm-Damaged Neighborhoods.” (Available online at: <http://www.s4.brown.edu/katrina/report.pdf>)

Also available from John R. Logan, Professor of Sociology, Brown University, Director, Spatial Structures in the Social Sciences, 401-863-2267, John_Logan@brown.edu.)

Ask students to read the report and discuss:

- What conclusions does Logan reach about the impact of the storm on different socioeconomic groups?
 - What statistical evidence in his report do students find most compelling?
3. Have students read the excerpt from Craig Colten’s 2005 book, *An Unnatural Metropolis: Wrestling New Orleans from Nature* (Chapter 3, “Inequity and the Environment,” pp. 77-107. Note to the instructor: Please note that Colten emphasizes the following points in this chapter:
- In the late 19th century, white populations generally resided in neighborhoods with better drainage, near the Mississippi River, than African Americans, who generally resided in low-lying, poorly-drained areas.
 - A significant new drainage pumping system constructed in the early 20th century contributed to racial segregation, although Colten argues this was by no means the only factor leading to segregation.
 - As in many other southern cities, housing deeds restricted which neighborhoods African Americans could reside in.
 - The earliest drainage projects in New Orleans focused on the central business district and surrounding areas, though many African Americans lived in these areas.
 - Sewerage and general sanity conditions were far better in predominantly white neighborhoods than African American neighborhoods.
 - Drainage of lakefront neighborhoods that made them habitable for the first time in the 1920s (today’s neighborhoods of Lakeview and Gentilly) resulted in restrictive property deeds that allowed only whites to live in these desirable areas. (This is an important point in terms of Katrina, because it explains why these neighborhoods, which were among the most severely hit by Katrina because of their proximity to Lake Pontchartrain, were largely middle-class white neighborhoods.)
 - By the 1930s, the residential areas of the lowest ground in the “bottom of the bowl” in New Orleans had become predominantly African American.
 - Colten concludes the chapter by explaining that “Although the improved drainage system opened new areas to black residences, at the same time it contributed to segregation, reflecting established patterns of turning low-value land associated with environmental problems over the minority populations” (p. 107).
 - A series of excellent maps demonstrates the expansion of drainage systems, sewerage, and African-American residential patterns in early 20th century New Orleans.

Ask students to consider what factors in the historical development of New Orleans, particularly

in the building of flood prevention systems, might have led to a disproportionate impact on certain neighborhoods and groups. Why, for example, did many poor and African-American residents live in the lowest-lying parts of the city?

4. Ask students to read the section on “Before New Orleans’ Levees’ Failed,” pp. 4-7, from the report called “The Race to Rebuild: The Color of Opportunity and the Future of New Orleans,” produced by the Center for Social Inclusion in August, 2006 (Available online at: <http://www.centerforsocialinclusion.org/PDF/racetorebuild.pdf>

Also available from The Center for Social Inclusion, 65 Broadway, Suite 1800, New York, NY 10006, 212-248-2785.) What conclusions do the authors come to about the effects of suburbanization on New Orleans? How might the suburbanization of Greater New Orleans have left inner-city residents more vulnerable to natural disasters such as Katrina?

5. Ask students to read the Executive Summary of the Russell Sage Foundation’s report, “In the Wake of the Storm: Environment, Disaster and Waste after Katrina” (pp. iii-iv.) (Available online at: <http://www.russellsage.org/news/060515.528528>

Also available from the Russell Sage Foundation, 112 E. 64th St., New York, NY 10021.) The authors conclude that “the effects of Katrina were neither natural nor accidental.” What specific policies and decisions do they believe left the poorest residents of New Orleans most vulnerable? Students may wish to skim the remainder of this report to find further evidence to support their answers, and assess whether or not the conclusions of the author are justified and supported.

6. Ask students to research the terms “environmental racism” and “environmental justice.” What arguments can they identify for and against applying these concepts to the experience of Katrina?

Closure/Summative Discussion:

Many critics have speculated that FEMA and other government agencies might have responded more rapidly after Katrina if the affected populations had been whiter and wealthier. Likewise, they speculate that the financial resources devoted to building and maintaining the levee system might have been greater had the populations they were protecting been wealthier and more politically powerful. Can you find any hard evidence to back these assertions? Are there alternative explanations for why the victims of Katrina were largely poor and African American?

Enrichment Activities:

1. Much of the research on “environmental racism” concerns the disproportionate exposure of people of color to pollution and toxic materials. As New Orleans is rebuilt, numerous concerns have been expressed about the possible long-term environmental effects of the storm and flooding on the city and whether or not adequate protections will be in place to protect city residents as they return and rebuild. Ask students to research developments in this area. They may wish to begin with the following resources:

“Toxic Soup Redux: Why Environmental Racism and Environmental Justice Matter after Katrina,” by Julie Sze, October 24, 2005. understandingkatrina.ssrc.org/Sze

Robert Bullard, “Can Americans Trust the Government to Protect Them? – Lessons from the World Trade Center Ground Zero and the Aftermath of Katrina,” September 11, 2006. <http://www.commondreams.org/views06/0911-23.htm>

2. Have students conduct research comparing the effects of Katrina to effects of other natural disasters, such as the Chicago Heat Wave of 1995, on poor, minority, and vulnerable populations. They may wish to begin with the following excellent resource:

Eric Klinenberg, *Heat Wave: A Social Autopsy of Disaster in Chicago*. (University of Chicago Press, 2003).

Additional Resources:

Pierce F. Lewis, *New Orleans: The Making of an Urban Landscape*. 2003.

Congressional Research Service, *Hurricane Katrina: Social-Demographic Characteristics of Impacted Areas* (Nov. 4, 2005)

www.gnocdc.org/reports/crsrept.pdf