



e² design season three — New Orleans: The Water Line

Episode Summary

After the devastation of Hurricane Katrina, which hit the southern coast of the United States on August 28, 2005, the residents of the Lower Ninth Ward in New Orleans had to face a grim reality. Their entire neighborhood, which had days before been a vibrant, tightly knit, working class community where many had lived for generations, was destroyed. While many parts of New Orleans were devastated by the storm, the Lower Ninth Ward was unique in that the destruction was complete.

Patricia Jones was one of the first of the former Lower Ninth Ward residents to return and experienced first hand how difficult it was to get back into her home. She decided to set up an organization to help others who might be trying to return as well. She is now the Executive Director of the Lower Ninth Ward Neighborhood Empowerment Network Association (NENA). Her organization and others, including the Lower Ninth Ward Center for Sustainable Engagement and Development (CSED), are working together to provide support for those former residents who lost everything they had but desperately want to recreate the community that they lost. While community members like Patricia Jones and Pamela Dashiell, the President of CSED, are working very hard from inside the community, there are several organizations outside of New Orleans that are eager to help as well.

Although some saw the total devastation of the community as daunting, others saw it as a unique opportunity to rebuild a community from the ground up using a sustainable approach. In January 2007, after a year of meetings between community leaders and sustainability experts Bob Berkebile, Bill Becker, and Bill Browning, the Lower Ninth Ward Sustainability Plan was released. Simultaneously, Matt Petersen, the President and CEO of Global Green USA, an environmental organization, was developing a plan for their involvement as well. In December 2006, Global Green USA bought a site in the Lower Ninth Ward with plans to develop a mixed-use block using sustainable building techniques, including solar and geothermal power, to lower utility bills. When it is completed, there will be five single-family homes, an 18-unit apartment building, a corner store, a small bank branch, and a permanent visitors center.

After working with Global Green as the sponsor of an architecture competition, Brad Pitt, a well-known actor and activist, founded Make It Right (MIR) to further the sustainable development of the Lower Ninth Ward. Drawing on the expertise of fourteen world-renowned architecture firms that specialize in innovative, ecologically responsible design, MIR set out to build 150 new homes in the Lower Ninth Ward. While many



residents had owned their homes outright before the storm, most did not have flood insurance and received little or no compensation for their losses. Through the Make It Right project, residents may choose one of thirteen home designs and, because they will likely have trouble financing a new home, MIR will assist them with funding through forgivable loans.

While the future of the Lower Ninth Ward is still uncertain -- only about 2,000 of the former 17,000 residents have returned -- those who have returned are working to rebuild the community with a focus on sustainability so that they may weather any future storms.

To find out more about the Lower Ninth Ward Neighborhood Empowerment Network Association (NENA), visit www.lower9thwardnena.com

To find out more about Global Green USA, visit www.globalgreen.org

To find out more about the Make It Right Foundation, visit www.makeitrightnola.org

To find out more about Help Holy Cross, visit www.helpholycross.org



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PRE-VIEWING QUESTIONS

- 1) Write down anything that you remember about Hurricane Katrina. When did it happen? Where did it make landfall? Who was affected? What was the government's response?
 - 2) What is the government's responsibility when a natural disaster affects its citizens? How was the government's response to Hurricane Katrina viewed by the media and by the public?
 - 3) What makes a neighborhood a community? List some of the elements in your opinion that are essential to a community.
 - 4) What types of natural disasters have occurred or could occur in your community? In what ways are you prepared for the occurrence of a natural disaster in your community?
 - 5) If you were forced to leave your home because it was unsafe to stay, would you have a place to go? How long could you stay there?
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POST-VIEWING QUESTIONS

- 1) What does the word sustainable mean? What are some ways that architecture can be sustainable? Give specific examples from the episode and from your experience.
- 2) What are some possible reasons that the Lower Ninth Ward is not one of the 17 zones that the government has chosen to focus on while rebuilding New Orleans?
- 3) Following the storm, there was interest in the Lower Ninth Ward for industrial development. Why would community organizations want to have a say in the type of development that would occur in their former neighborhood?



- 4) Refer to the list you made in #3 of the pre-viewing questions. When describing the Lower Ninth Ward before the hurricane, what elements of community were present then? What elements of community do you think exist today in the Lower Ninth Ward? What elements still need to be restored to the area?

- 5) Why was New Orleans in particular so strongly affected by Hurricane Katrina? Were there systems in place to protect New Orleans? If so, what were they? Did those systems function as they should have?



NATIONAL STANDARDS FROM MCREL STANDARD

Career Education - Engineering Education

Standard 10.17 - Knows the components and functions of sanitary and storm sewer systems in a community.

Standard 21.5 - Knows elements of various preventative emergency programs (e.g., fire prevention plan, disaster drills).

Engineering Education

Standard 9.4: Understands the steps involved in designing construction projects (e.g., planning, generating layouts, developing drawings with measurements and details of construction considering constraints, selecting materials).

Standard 14.4: Understands how societal interests, economics, ergonomics, and environmental considerations influence a solution.

Standard 17.6: Understands tradeoffs among characteristics such as safety, function, cost, ease of operation, quality of post-purchase support, and environmental impact when selecting systems for specific purposes.

Geography

Standard 4.3 - Knows the locational advantages and disadvantages of using places for different activities based on their physical characteristics (e.g., flood plain, forest, tundra, earthquake zone, river crossing, coastal flood zone).

Standard 7.4 - Understands how physical processes affect different regions of the United States and the world (e.g., effects of hurricanes in the Caribbean Basin and the eastern United States or of earthquakes in Turkey, Japan, and Nicaragua; effects of desertification and soil degradation, flash floods, dust storms, sand movement, soil erosion and salt accumulation in dry environments).

Standard 14.1 - Understands how the concepts of synergy, feedback loops, carrying capacity and thresholds relate to the limitations of the physical environment to absorb the impacts of human activity (e.g., levee construction on a flood plain, logging in an old-growth forest, construction of golf courses in arid areas).



Standard 15.4 - Understands how people who live in naturally hazardous regions adapt to their environments (e.g., the use of sea walls to protect coastal areas subject to severe storms, the use of earthquake-resistant construction techniques in different regions within the Ring of Fire).

Standard 18.2 - Understands why policies should be designed to guide the use and management of Earth's resources and to reflect multiple points of view (e.g., the inequities of access to resources, political and economic power in developing countries, the impact of a natural disaster on a developed country vs. a developing country)

Technology

Standard 4.5 - Knows that since there is no such thing as a perfect design, trade-offs of one criterion for another must occur to find an optimized solution.

Standard 4.6 - Knows that a design involves different design factors (e.g., ergonomics, maintenance and repair, environmental concerns) and design principles (e.g., flexibility, proportion, function).

Standard 6.7 - Knows that construction design is influenced by factors such as building laws and codes, style, convenience, cost, climate, and function.

Standard 6.8 - Knows different requirements for structural design (e.g., strength, maintenance, appearance) and that these structures require maintenance.