

living with hurricanes

# KATRINA & beyond

A LOUISIANA STATE MUSEUM EXHIBITION

Humanity St



 experience design

MEDIA CONCEPTS BY



JANET A. KAMIEM  
MUSEUM CONSULTING



# Louisiana State Museum

- Founded in 1906 by the State of Louisiana
- An agency in the Department of Culture, Recreation, and Tourism, State of Louisiana
- Headquartered in New Orleans
- Properties include National Historic Landmarks: the Cabildo and Presbytere on Jackson Square, the Old U.S. Mint, and Madame John's Legacy



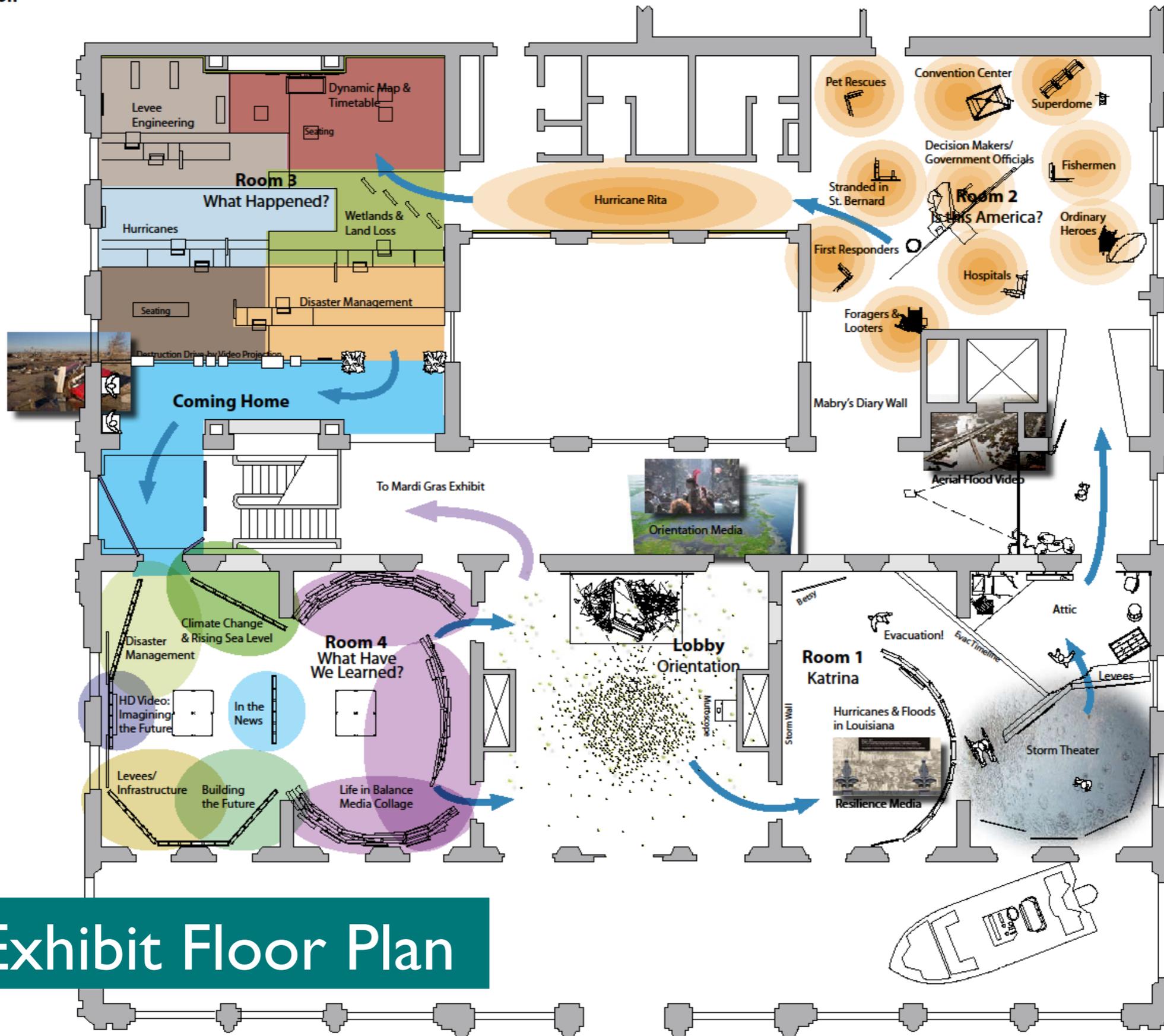
Presbytere on Jackson Square, location of exhibit

# *Living with Hurricanes: Katrina and Beyond*

- Artifact collection began immediately after Hurricane Katrina (August 29, 2005)
- Exhibition development began June 2006
- Funded by the National Science Foundation
- Opening October 27, 2010

## Exhibit Partners

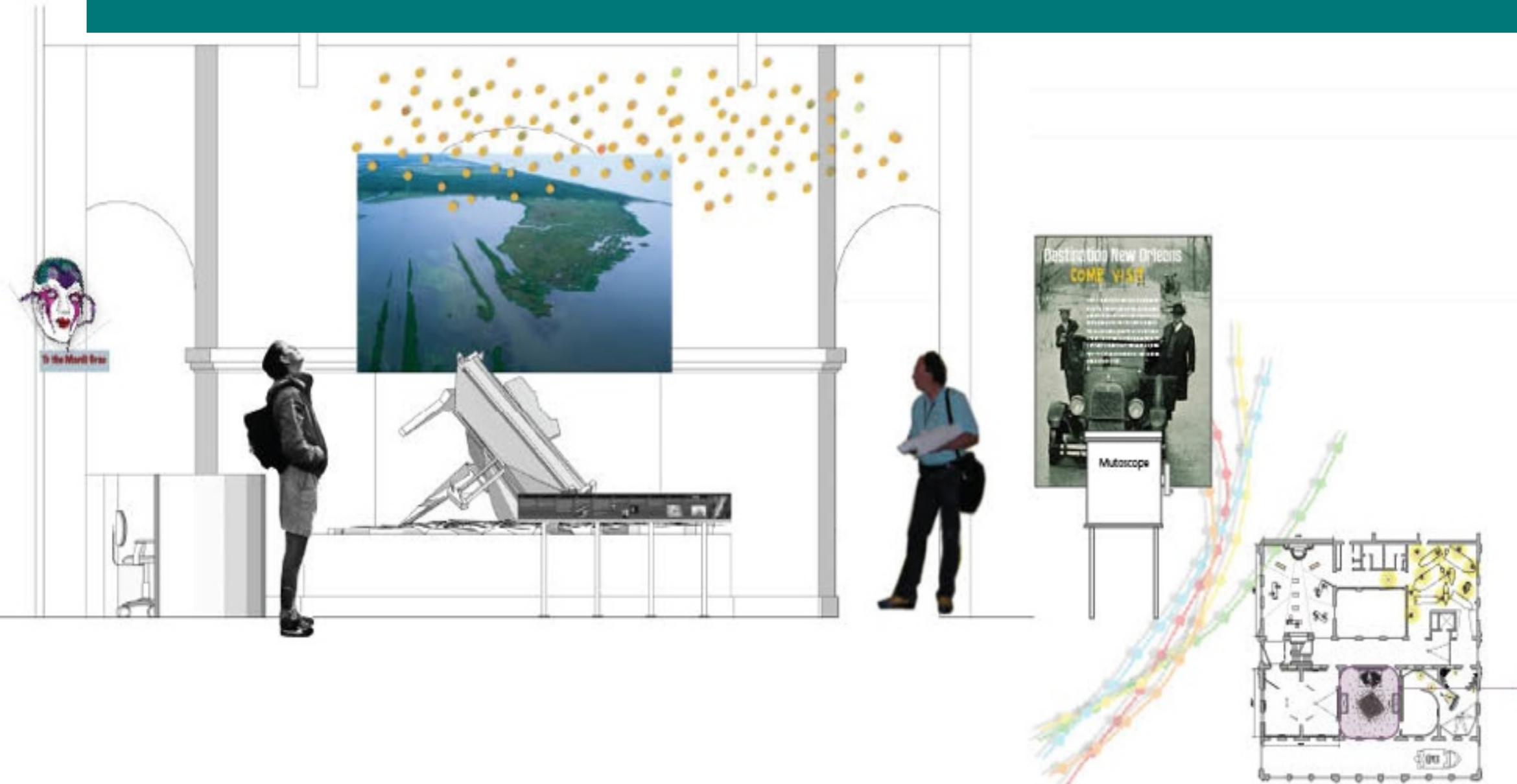
- Tulane/Xavier University Center for Bioenvironmental Research, with Dr. Douglas Meffert
- Office of Marine Programs, Graduate School of Oceanography, University of Rhode Island, for educational website





Boat used to rescue 400 people  
to be displayed in front of museum

# Exhibit entrance featuring introductory video and storm-damaged piano symbolizing cultural loss





Fats Domino's piano, at his Lower Ninth Ward home

**"JUNCO PARTNER," 1951**  
The sordid "Junco Partner" with its lyrics about liquor, meeter, and heroin, is pointed to by many as the root song of junker-style piano.

**PROFESSOR LONGHAIR**  
**"NA," 1953**  
Longhair's signature "Junkie's Blues" evolved musically from the work of pianist Champion Jack Dupree's washtub "Junker's Blues." It was Dupree, with Tuts Washington, who taught Longhair to play.

**FATS DOMINO**  
**"THE FAT MAN," 1949**  
"The Fat Man," based on the classic "Junker's Blues" was the first collaboration between Domino and Dave Bartholomew. Recorded at Cosimo Matassa's studio in 1949, it became the Imperial label's first national hit.

**"LITTLE" BOOKER (JAMES BOOKER)**  
**"DOING THE HAMBONE," 1954**  
Pianist James Booker was fourteen when he recorded this song, with Dave Bartholomew as the producer.



Fats Domino's piano, stabilized and now on display in music exhibit



Introductory media showing how Louisiana lives with water





# Room 1: Panel explaining history of the port and the geographical expansion of the city as swamps are drained



# History of Past Hurricanes and Flooding



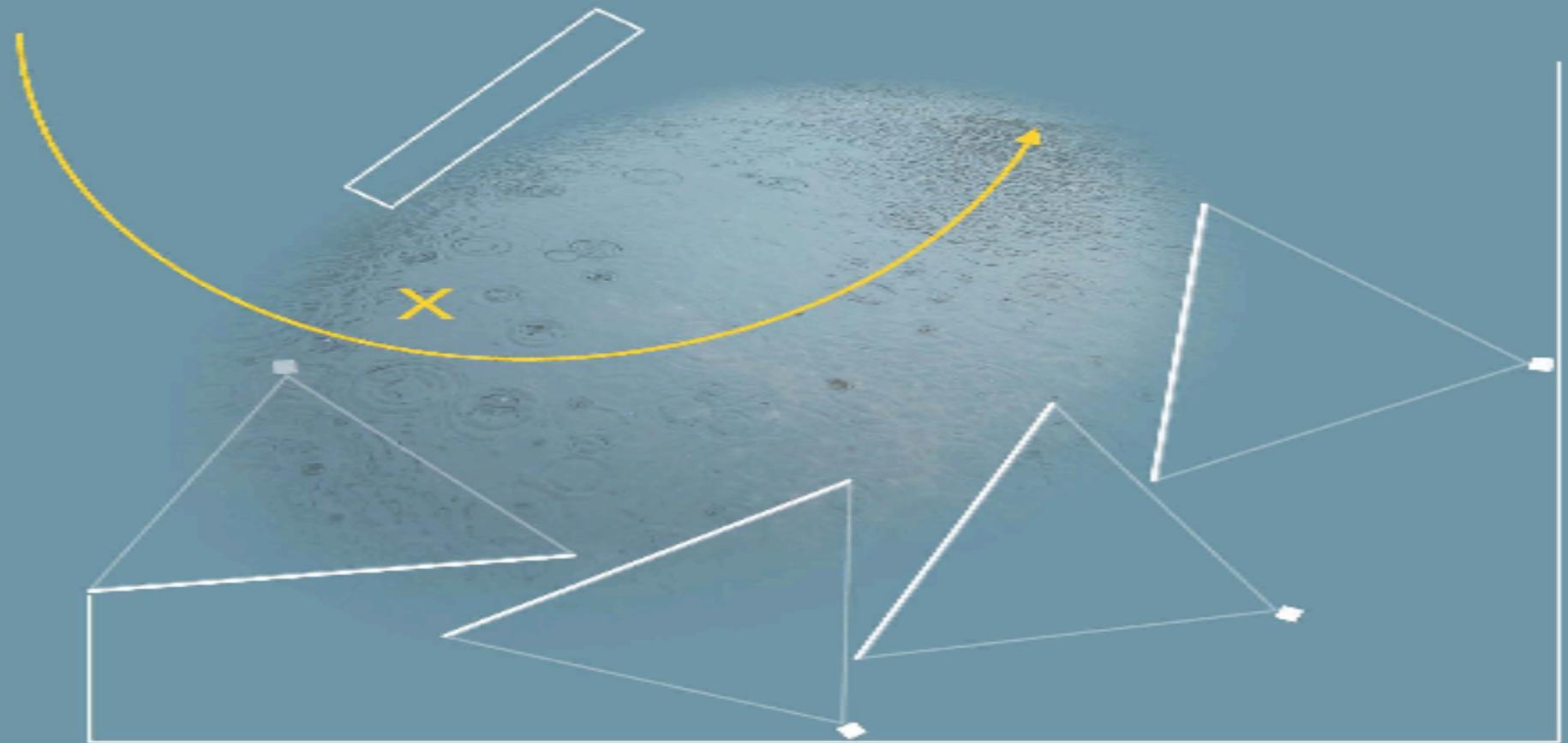
# Evacuation Timeline: visitors learn about how people made evacuation decisions

## Evacuation!

8.23.05 Tuesday	8.24.05 Wednesday	8.25.05 Thursday	8.26.05 Friday	8.27.05 Saturday	8.28.05 Sunday	8.29.05 Monday
<p>Tropical Depression II forms off the east coast of Florida (sustained circulation at the surface with a highest constant wind speed of 30 miles per hour.)</p> 	<p>National Weather Service upgrades storm to Tropical Storm Katrina (distinct rotary circulation with constant wind speeds between 39 and 75 miles per hour.)</p> 	<p>TS Katrina passes the Bahamas with 50 mph winds.</p> <p>2:00 p.m. TS Katrina upgraded to Category 1 hurricane (with 75 mph winds), and makes landfall in South Florida, north of Miami. (Category 1 hurricanes have winds of 74 to 95 miles per hour, damaging trees and mobile homes, and causing some coastal flooding. Saffir-Simpson Scale.)</p> 	<p>1:00 p.m. Governor Blanco declares a state of emergency, activates emergency operations center in Baton Rouge, and puts the National Guard on alert. 50 rigs in the Gulf begin to evacuate.</p> <p>10:30 a.m. National Weather Service projects a path for the Florida peninsula.</p> <p>11 a.m. Miscommunication between FEMA officials and emergency managers from Florida, Alabama, and Georgia. NHC director Max Mayfield warns that storm may grow over Category 3. (110 mph winds)</p> <p><b>NHC adjusts Katrina's path westward to New Orleans</b></p> <p>4 p.m. NHC issues a forecast shifting Katrina's path further west, predicting a probable Category 4 hurricane hitting the Mississippi Coast near the Alabama border with landfall Friday, August 25. (Category 4 hurricanes have winds between 131 and 156 mph. Expect major building damage, major erosion of beach and flooding in areas lower than 30 feet above sea level.)</p>	<p>Jefferson Parish announces voluntary evacuations. Plaquemine, St. Tammany and St. Charles Parishes announce mandatory evacuations. (map showing parishes)</p> <p>4 a.m. NHC upgrades Katrina to Category 3 Hurricane</p> <p>6 a.m. Department of Homeland Security and its FEMA sub-department prepare for possible major disaster scenarios in New Orleans. Later in the morning, President Bush, on vacation in Crawford, Texas, is briefed on the potential for catastrophic flooding in New Orleans.</p> <p>1:00 p.m. Governor Blanco requests President Bush to issue a complete disaster declaration for Louisiana. "I have determined that this incident is of such severity and magnitude that effective response is beyond the capabilities of the State and affected local governments, and that supplementary Federal assistance is necessary to save lives, protect property, public health, and safety, or to lessen or avert the threat of disaster."</p>	<p>11 a.m. President Bush briefed on the catastrophic flooding potential of the storm in teleconference call with Max Mayfield, FEMA Director Michael Chertoff, Homeland Security Director Michael Chertoff, Mayfield. "We were briefing them way before the landfall. ... It's not like this was a surprise. We had in the advance that the levees could be topped."</p> <p>8 a.m. Superstorm opened its special needs shelter-FEMA spokesman Marty Baltemore's arrival in New Orleans to set up operations center across from the Superdome.</p> <p>9:30 a.m. Major press conference in New Orleans: Nigh and Blanco issue first ever mandatory evacuation for Orleans Parish</p> <p>10 a.m. NHC increases storm surge forecast to 15-23 feet above normal tide levels and locally as high as 25 feet.</p> <p>11:30 a.m.: President Bush vows to help those affected by the storm.</p> <p>12 p.m. Nigh opens the Superdome as "shells of last resort" for the poorest populations. He establishes pick up areas for bus transportation to the Superdome.</p>	<p>6 a.m. Katrina makes landfall at New Orleans, LA as Category 3</p> <p>6:57 a.m. NB 58 buslines move on side surge of a 20' inundates eastern St. Bernard Parish</p> <p>7:15 a.m. Industrial Canal breach inundates the Lower 9th Ward and St. Bernard Parish</p> <p>8 a.m. the eye of the hurricane passes over New Orleans</p>
What?	What did you hear?	How do I get out?	Are the buses still running?	Where would I go?	What did you hear?	Who said that?



# Storm Theater





Attic room, featuring oral histories of people trapped in their attic

**Room 2:  
Features oral history  
audio, images, and  
artifacts**

Pet Rescues

Convention Center

Superdome

Decision Makers/  
Government Officials

Fishermen

Stranded in  
St. Bernard

**Room 2**  
Is this America?

Ordinary  
Heroes

First Responders

Hospitals

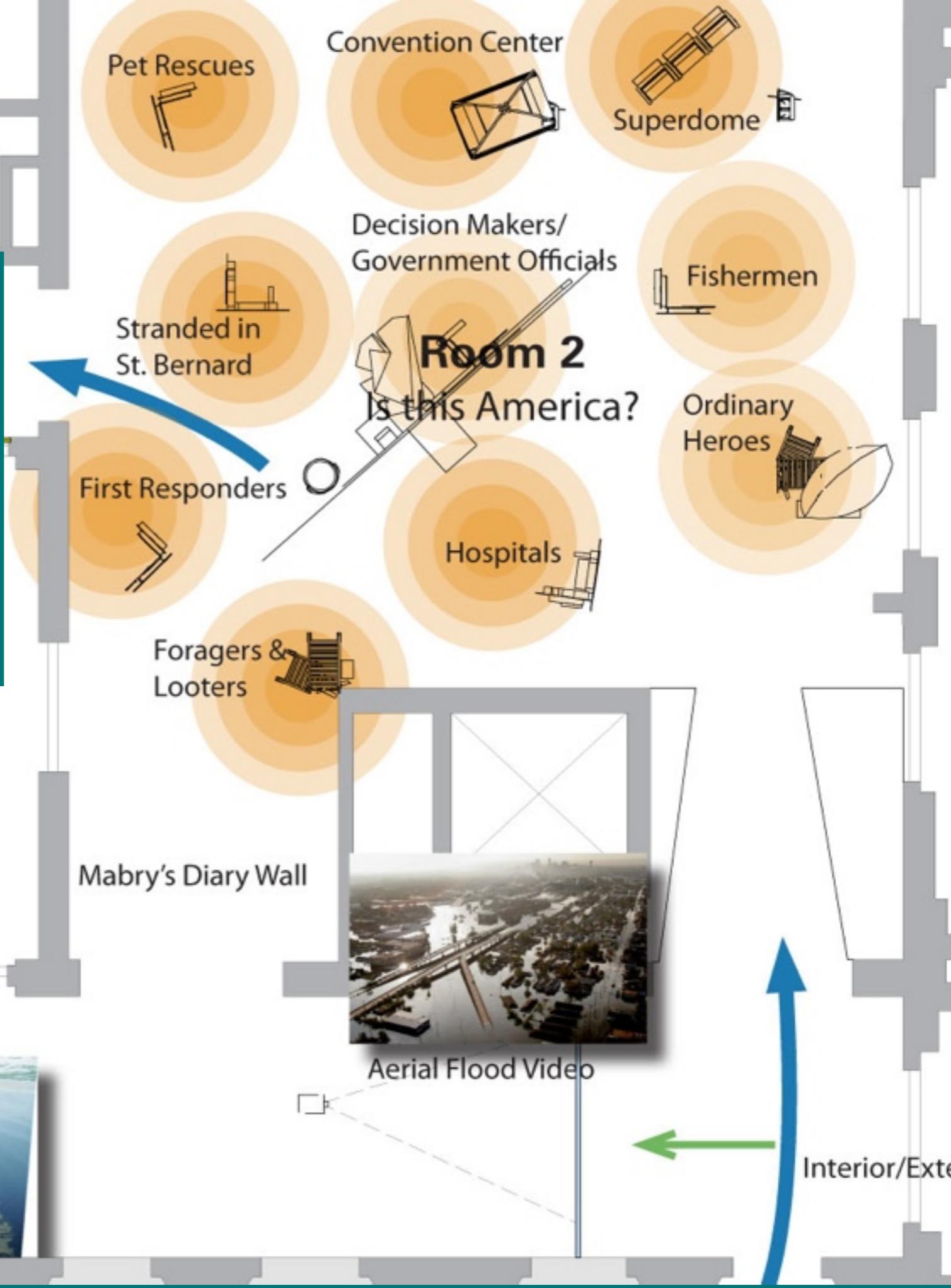
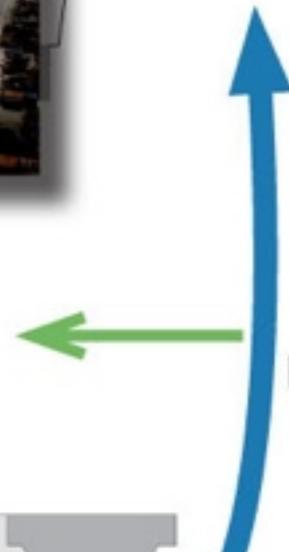
Foragers &  
Looters

Mabry's Diary Wall

Aerial Flood Video

Orientation Media

Interior/Exte



Elton Mabry kept a record of his thoughts and activities on this wall in the days after the storm.

Sunday -> 25 -> Cool, windy, cloudy

SICK MY MOUTH & THROAT IS SORT OF  
FUCKED UP; I HOPE IT AIN'T CANCER,  
GET DAM WHAT IS GOING TO  
HAPPEN NEXT? POLICE

RENTON, MY TONIC; JUST GIVE  
ME SOME FOOD AND WATER; NICE!  
JIM AND CALVIN BROUGHT  
FOOD AND WATER; THAT WITH  
THE RED CROSS; NICE.

Monday -> 26 MY THROAT IS STILL FUCKED UP  
JIM FROM RED CROSS; LET ME HAVE MORE FOOD,  
WATER; REAL NICE. I HAVE TO DOCTOR ON MY THROAT.

Tuesday -> 27 -> 30 I WANT TO BE KOOL, BUT YOU KNOW SHIT HAPPENS,  
ELLIS TALK TO ANY WAY; REWHAT BUREN THROAT FUCKED UP. NO STREET LIGHTS; DAM!  
LT PICTURE. JIM FROM RED CROSS -> COME TO SLIDELL, LA.

Wednesday -> 28 -> HOT AND STUFFY

MY THROAT STILL FUCKED UP...  
SAW THE O'CONNORS SR. & WIFE TODAY; ELLIS BRINGS  
AND STAY IN THE HOUSE!

Thursday -> 29 -> HOT, HOT! HOT  
MY THROAT STILL IS FUCKED UP -> HARD TO EAT TALK JIM HIS WIFE!  
SKINNY LOSING WEIGHT; BUT HOLDING ON...

Friday -> 30 -> THROAT STILL FUCKED UP; I HOPE IT  
AIN'T THYROID CANCER; DAM; DAM; DAM... NOT THAT?!...  
DUNCAN CAME BY FOR PICTURES; LEFT SNACKS, NICE!

OCTOBER

Saturday -> 1 -> THROAT STILL FUCKED UP?; BUT IT SEEM LIKE IT  
IS A LITTLE LESS SORE. LARRY & LI HEILIN STOP BY -> BUYS & WIFE...

Sunday -> 2 -> THROAT FEEL A LOT BETTER; NOT NORMAL  
SEEN FRANK & WIFE; I FOUND A BIKE ON S-RAMPART ST.; NEEDS  
LITTLE WORK ON IT; AND HARD PAINT.. SAW MILLER TOO!

Monday -> 3 -> STUFFY; HOT; THROAT FEEL MUCH BETTER  
NOT NORMAL YET... TALK TO PAM & PANDA WHITE, IQ!

Tuesday -> 4 -> HOT; TOO HOT; THROAT GETTING  
BETTER I, THINK..  
TALK TO MIM SKINNY & TEGNA BY PETE'S; 4 CORKERS ROUNDS!

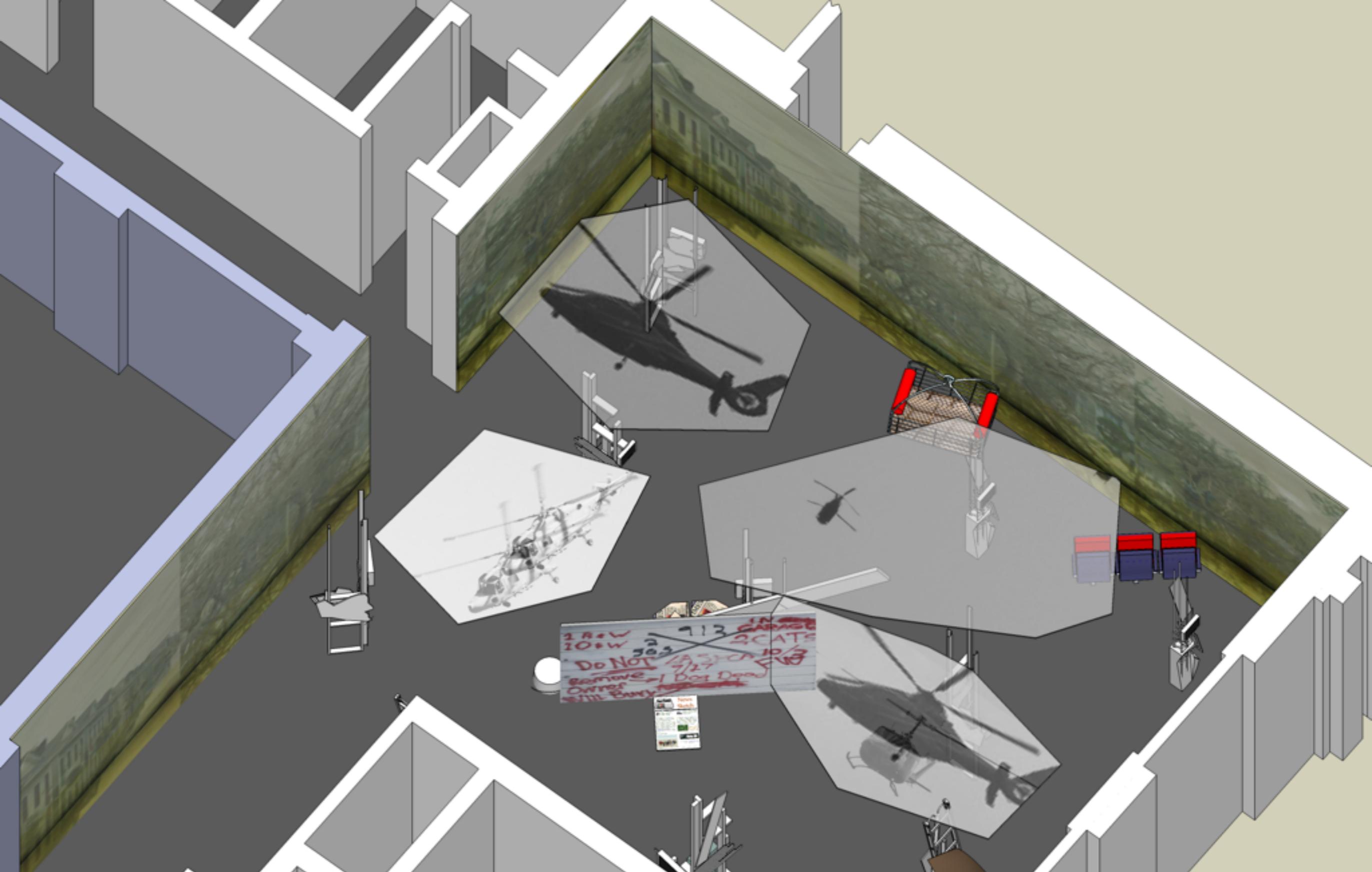
Wednesday -> 5 -> HANGOVER FROM BOURBON STREET  
LAST NIGHT -> COOL MORNING -> THROAT INSIDE A LITTLE  
SWOLLEN. TALK TO PAM, PAULS, HARRY AND DORA WHITE -> TODAY!

Thursday -> 6 -> FAIRLY START; THROAT FEELS BETTER  
TALK TO BARRY, COKE; BY 2-TALKS. NO TIME. WORK A LITTLE ROOF  
BY MR. HARRY WHITE HOUSE.

Friday -> 7 -> COOL, MORNING, SO FAR  
THROAT FEEL GOOD, BUT IT'S STILL EARLY.  
HAND -> OFFICER HAS TELL ME TO  
MOVE OUT. I TRY TO CLEAN THE OLD  
APARTMENT ON SECOND ST.  
I GOT TO MOVE. DAM; DAM; DAM; HOW MUCH  
CAN I STAY, FOLK.  
YES, I KNOW IT IS CITY  
PETER... HAY

Curators carefully remove Mabry's wall diary, which will be on display in Room 2. Shortly after the diary was removed, the B.W. Cooper Housing Development was demolished.





Overhead view of Gallery 2, "Is This America?"



Gallery 2, showing Coast Guard helicopter rescue basket and marked garage door.

# Coast Guard helicopter rescue basket



The next slide shows a garage door with international search and rescue symbols (the “X”).

The Louisiana Society for the Protection of Animals (SPCA) also marked the door with regard to animals at the house.

2 B+W

913

IN GARAGES

10 B+W

2

2 CATS

303

Do NOT

LASHCA

10/3

9/27

FW

Remove

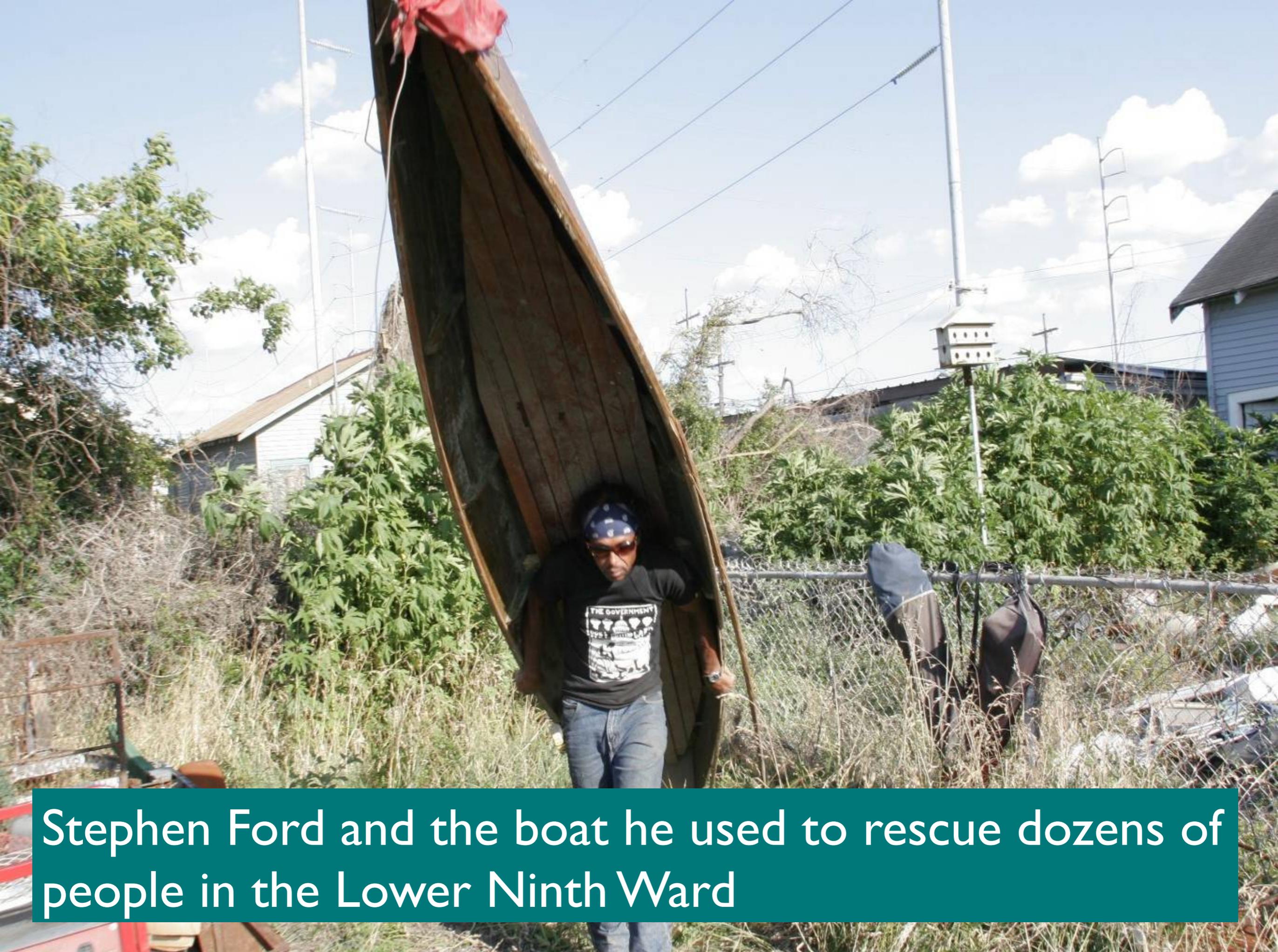


1 Dog Dead

Owner

~~Remove~~

Will bury

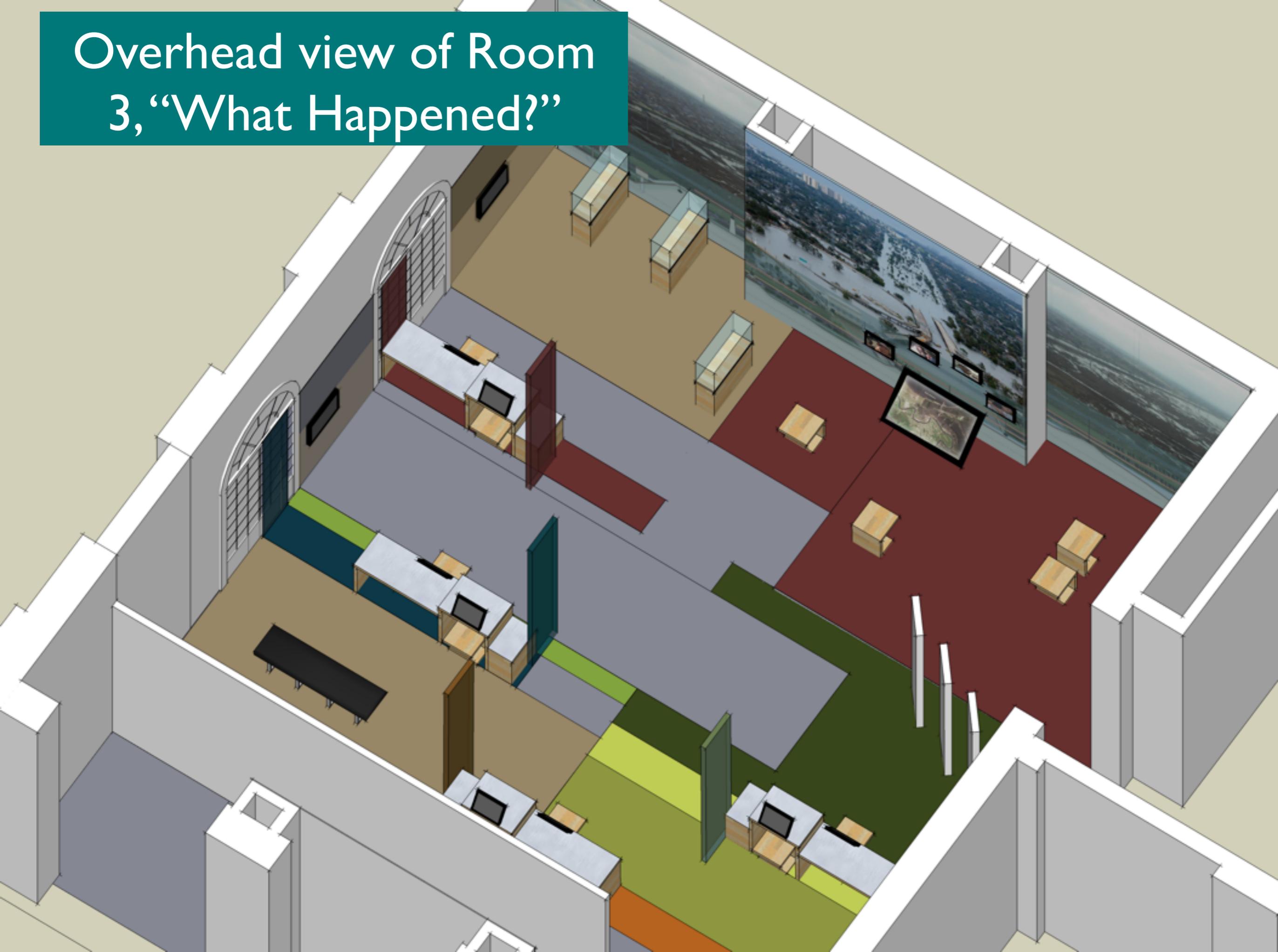


Stephen Ford and the boat he used to rescue dozens of people in the Lower Ninth Ward

Interior/Exterior View



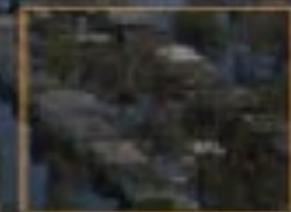
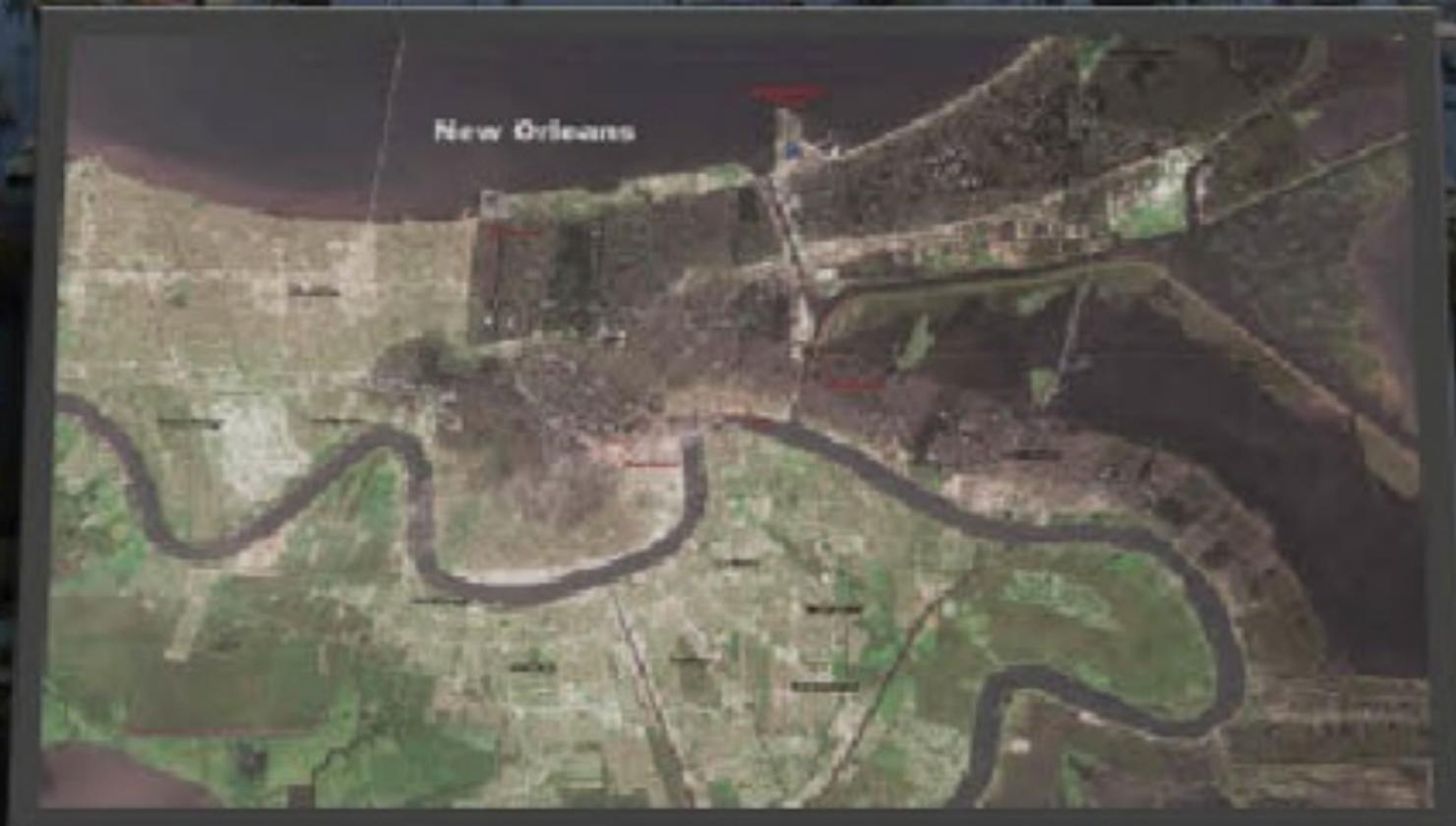
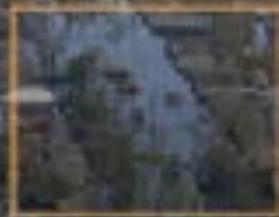
# Overhead view of Room 3, “What Happened?”





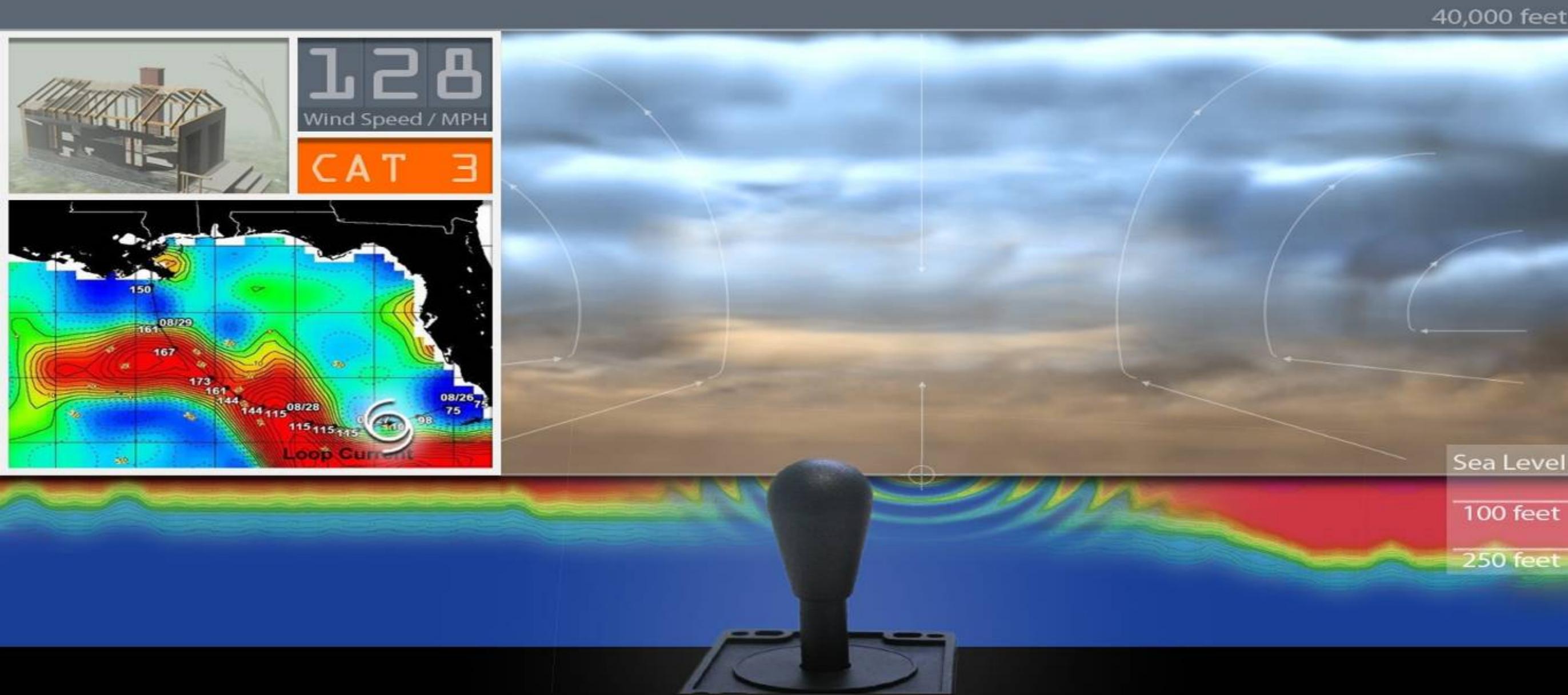
Visitors explore how the disaster happened

# Animated map to show levee failures and how the city flooded





# Hurricane Interactive



- Will show visitors how tropical storms strengthen over warm water

# LEVEES

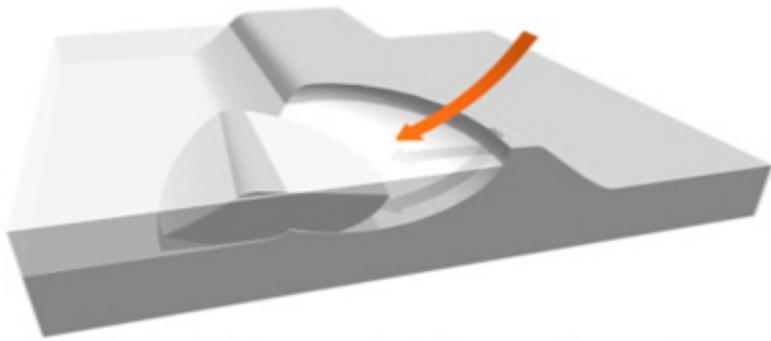
The International Commission on Large Dams (ICOLD) defines a dam as any structure built across a river or stream to impound water. The term "dam" is also used to describe a structure built across a river or stream to control the flow of water. The term "levee" is used to describe a structure built along a river or stream to prevent flooding.

Why the Levees Failed

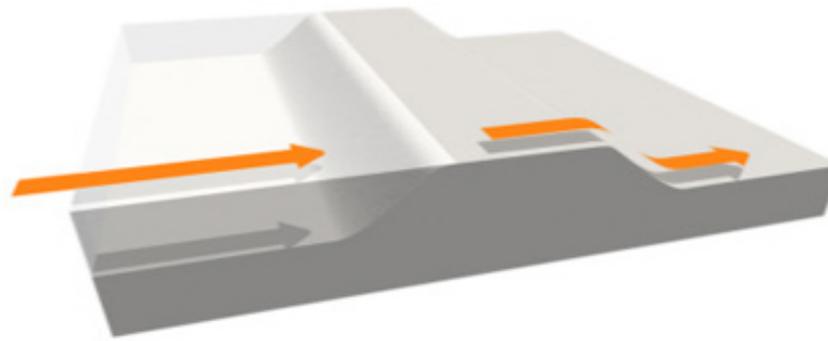


Visitors will use a touchscreen interactive to examine how levees failed.

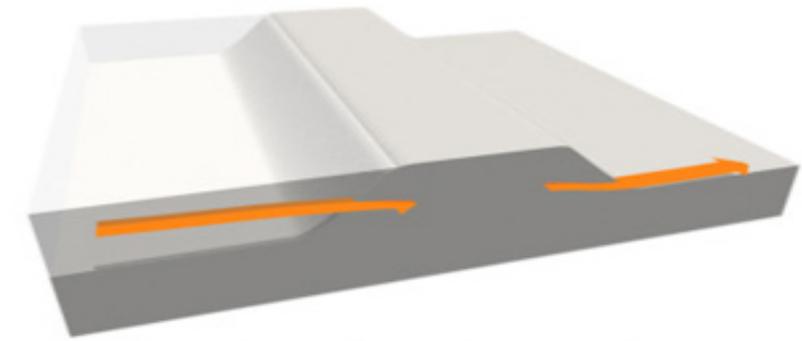




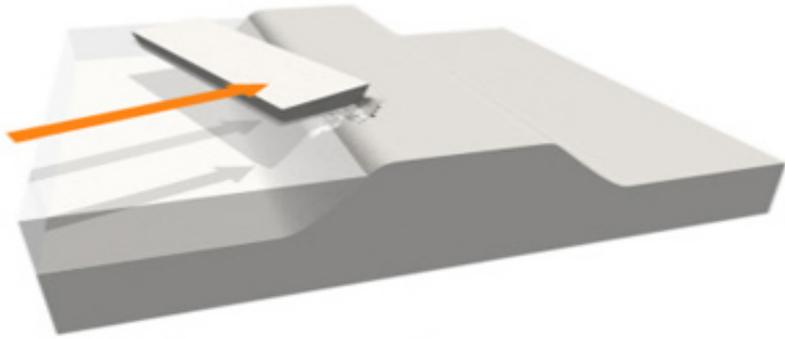
Lateral instability due to effects of water on soils



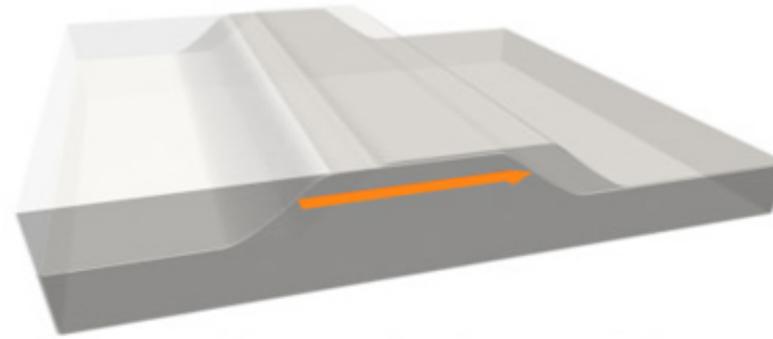
Water overtopping



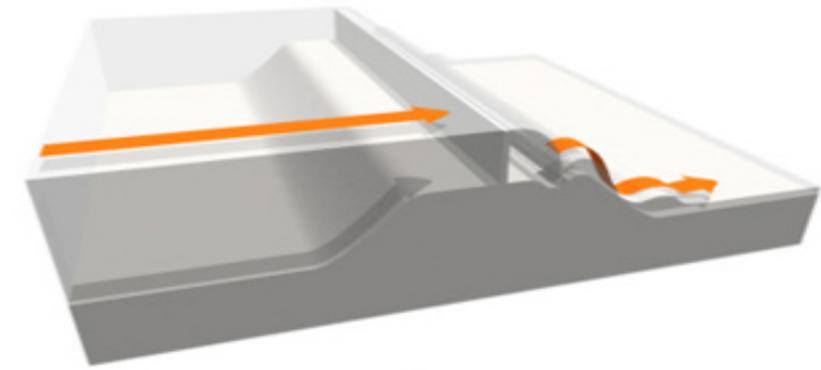
Erosion due to water coming through the levee



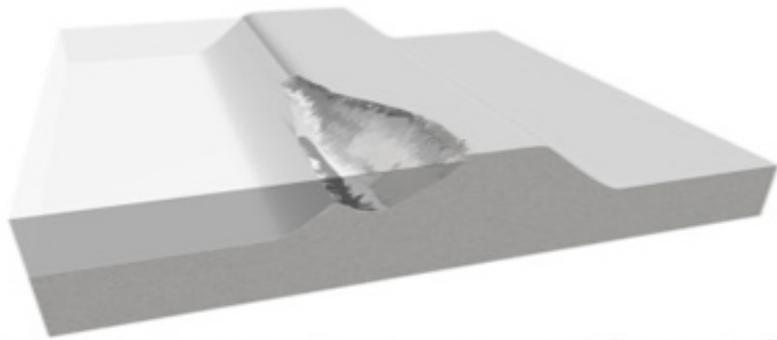
Local damage due to impact from floating objects



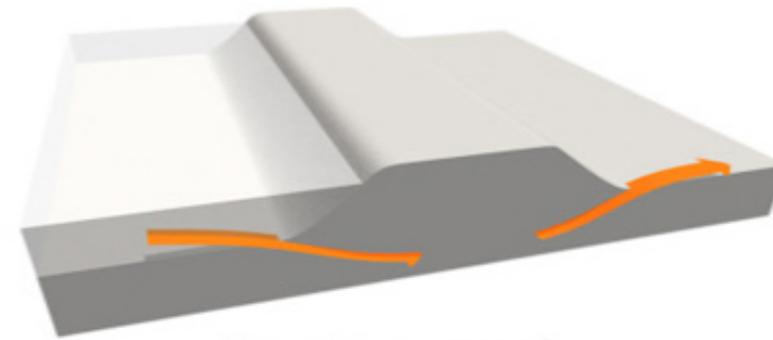
Lateral instability of the levee due to water force



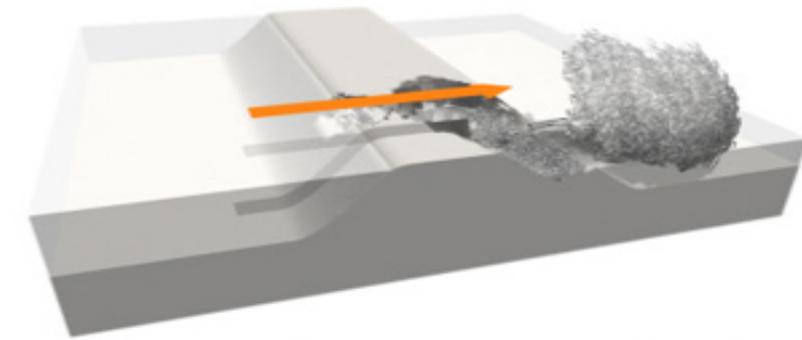
Erosion by water after overtopping



Current erosion on outboard levee and berm surfaces



Erosion and seepage under the levee

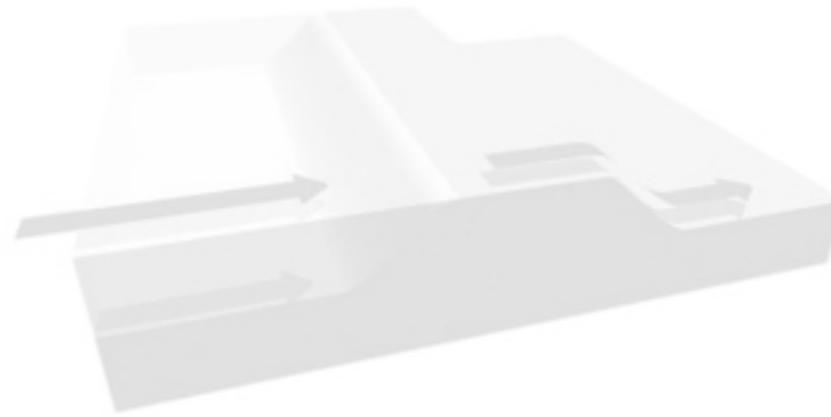


Damage by trees pushed over by wind and water

Touch-screen levee interactive



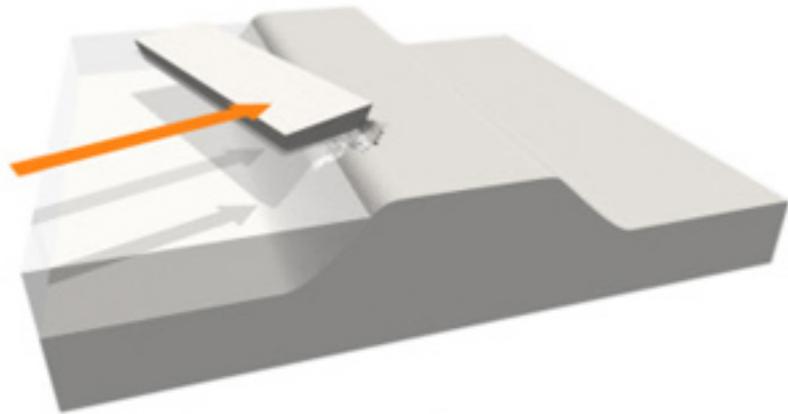
Lateral instability due to effects of water on soils



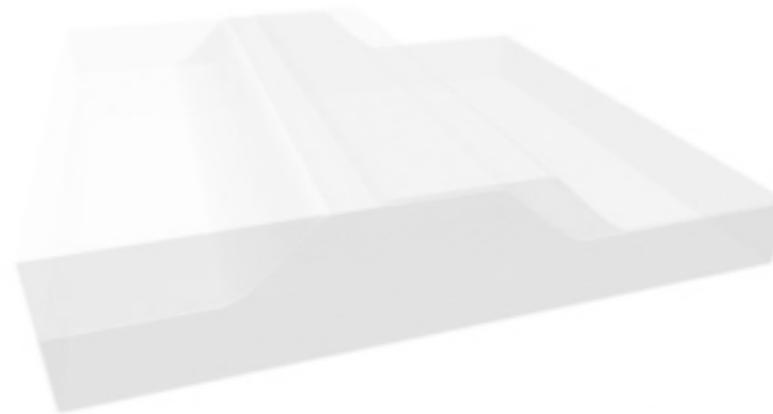
Water overtopping



Erosion due to water coming through the levee



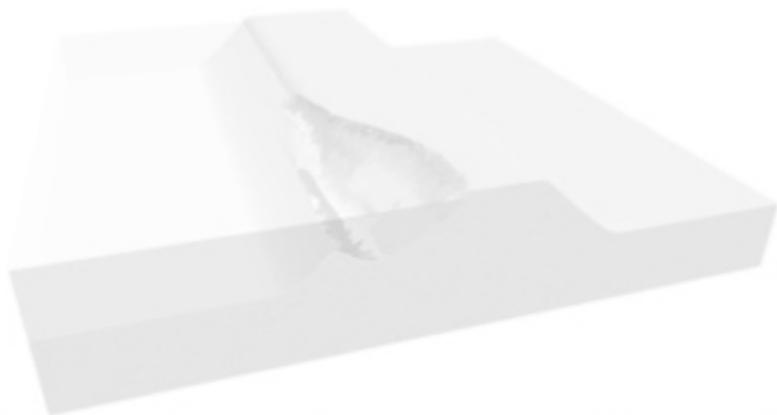
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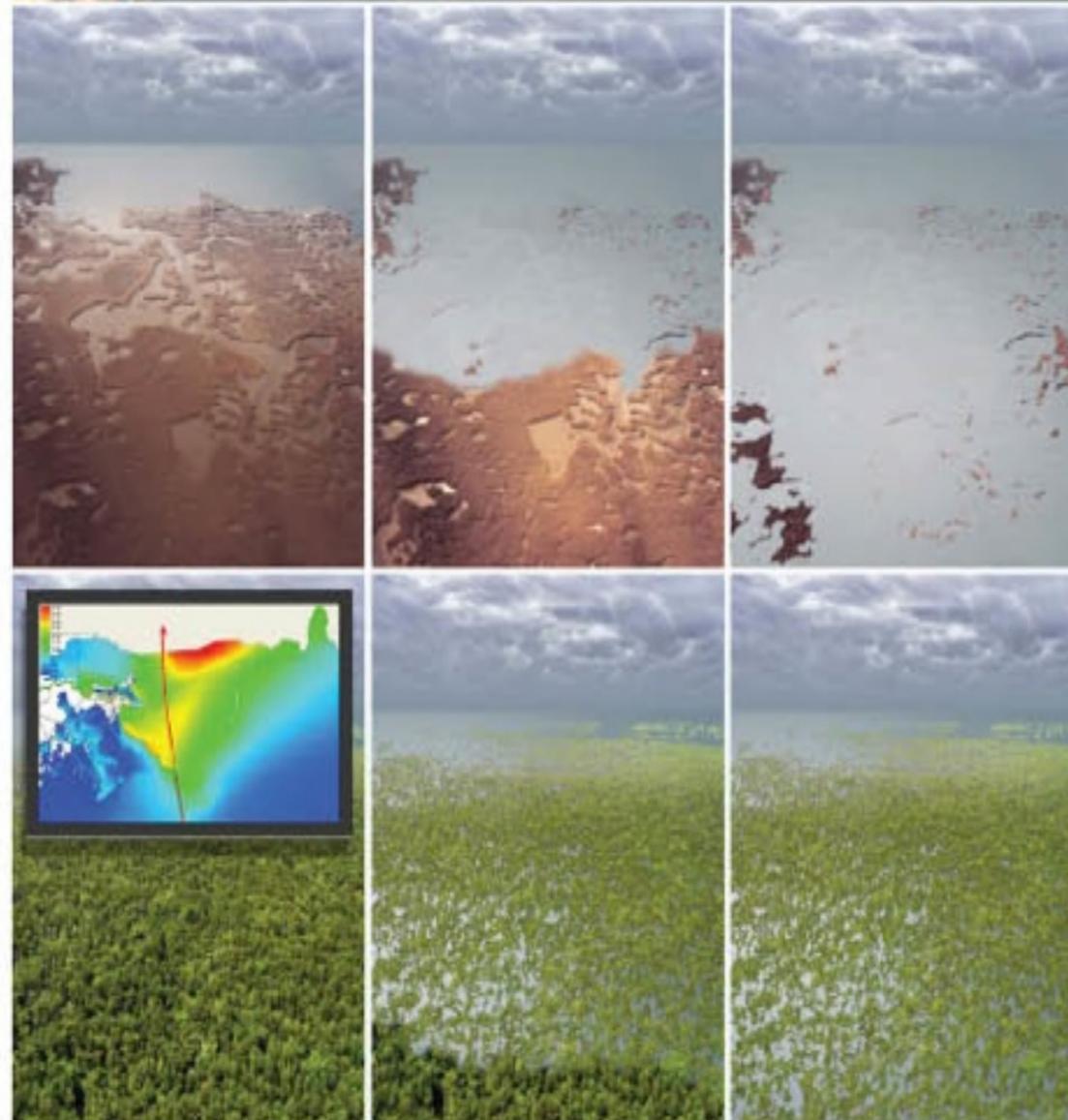
Damage by trees pushed over by wind and water







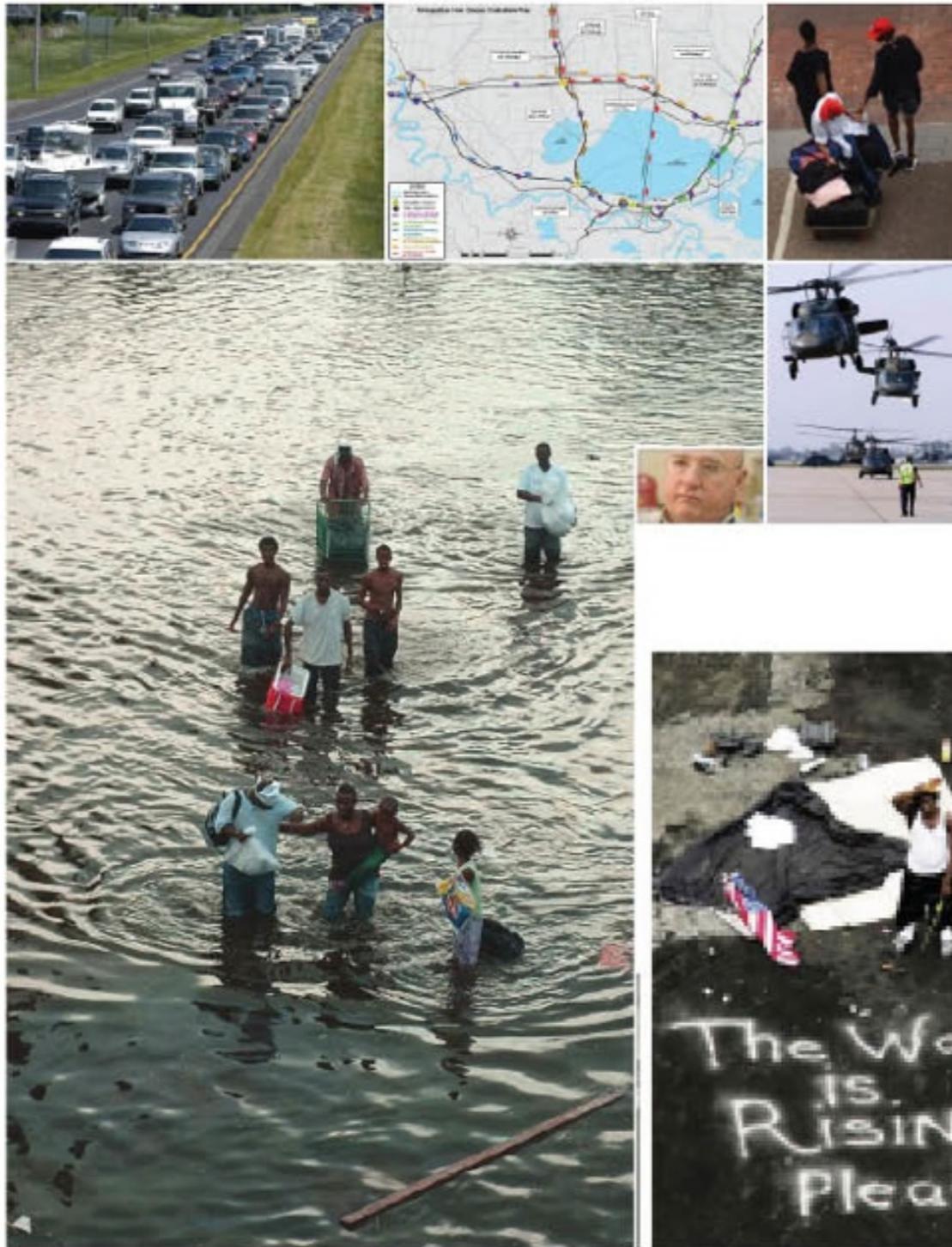
A video featuring a coastal scientist will explain land loss in coastal Louisiana.



A video will explain the science behind hurricane forecasting and how Hurricanes Katrina and Rita developed.



A video will analyze the failures of disaster preparedness and response for Hurricane Katrina.



Disaster Management

Destruction Drive-by Video Projection

# Coming Home

To Mardi Gras

This area shows the destruction and hardships people faced when they returned home.

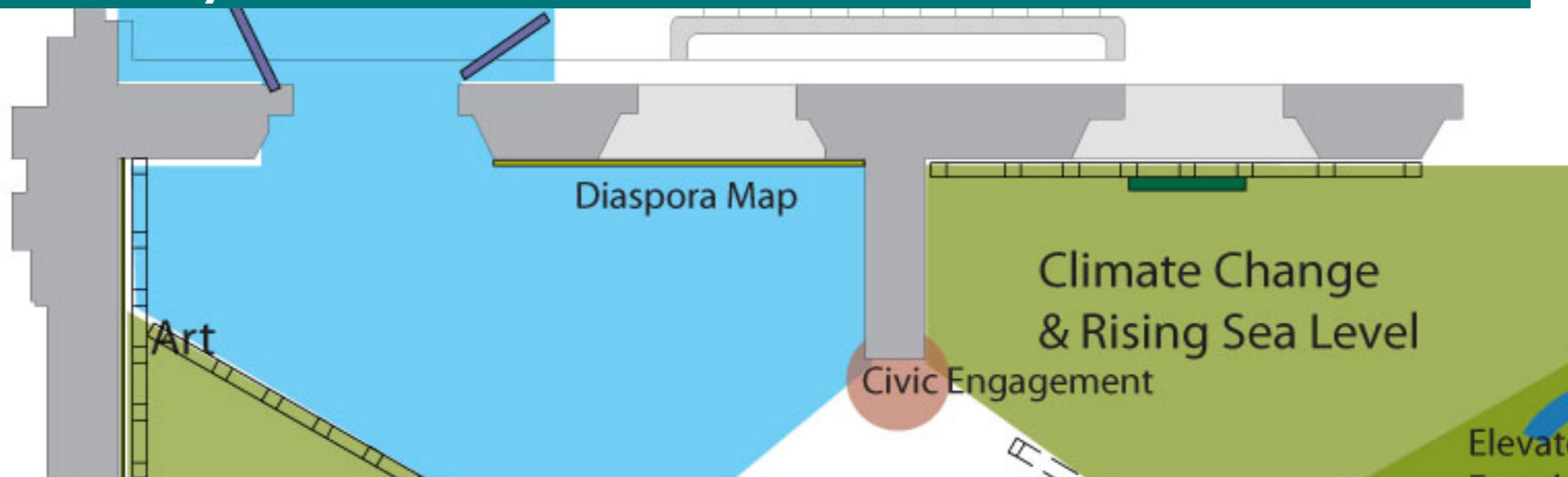
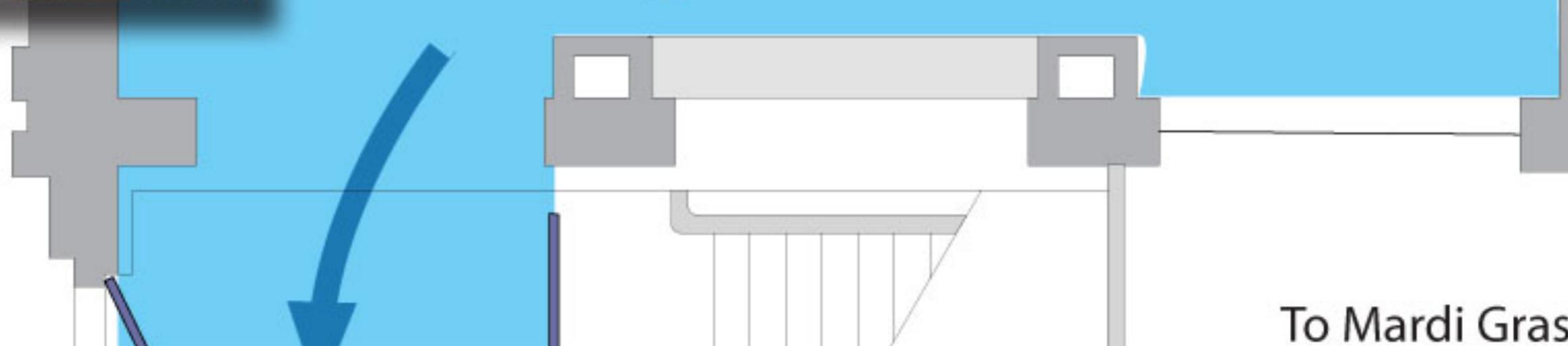
Diaspora Map

Climate Change & Rising Sea Level

Civic Engagement

Art

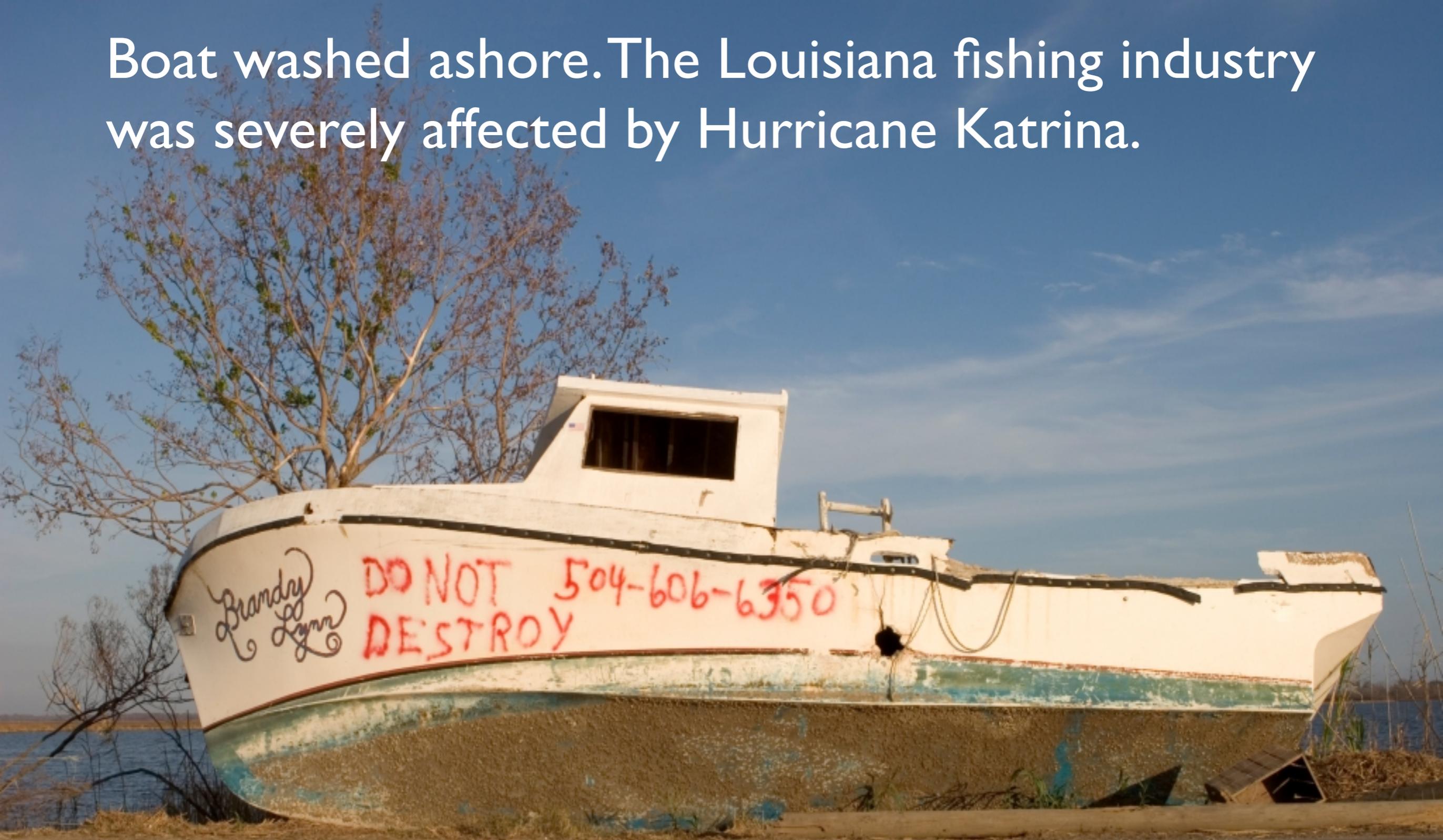
Elevate





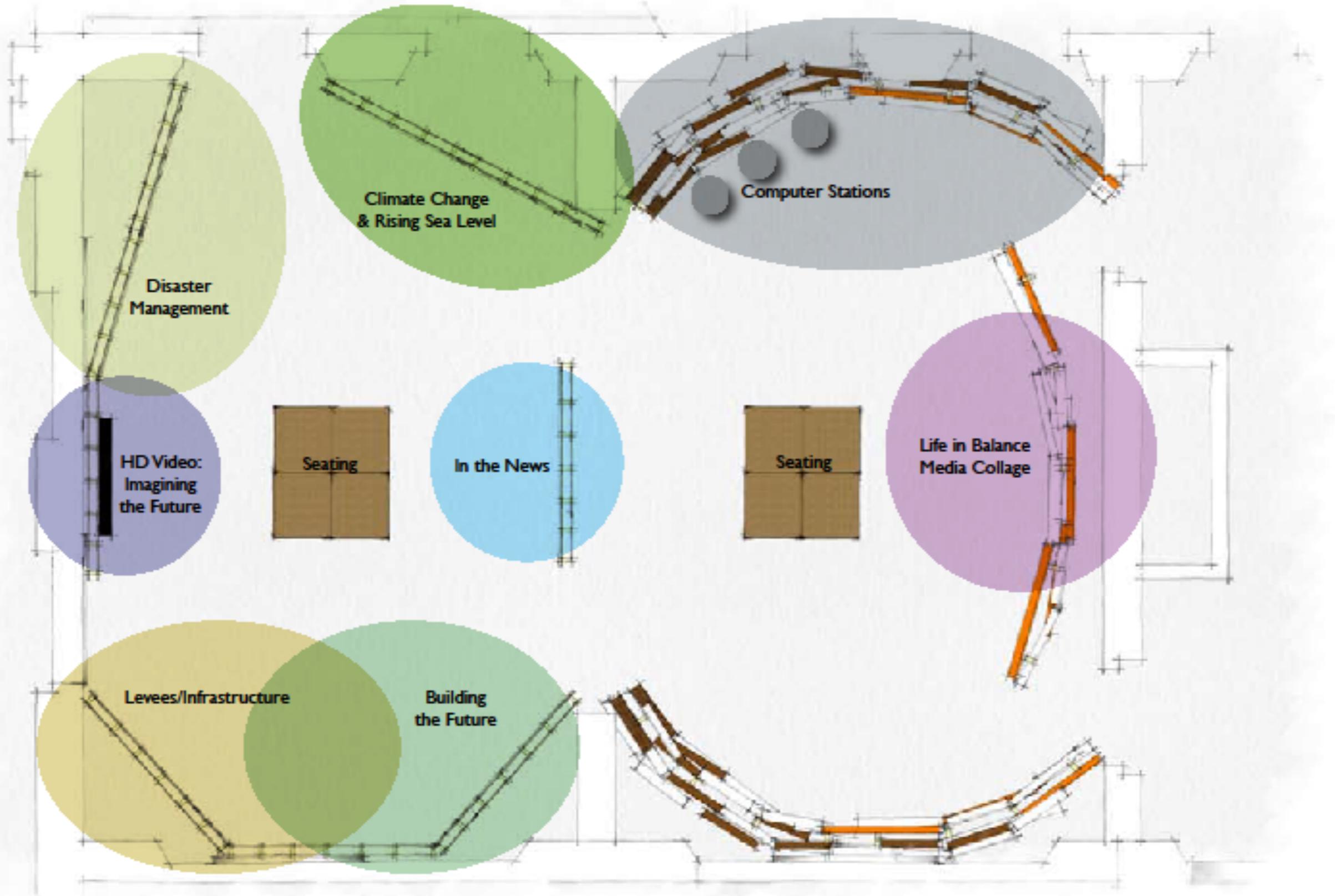
Renowned musician Gatemouth Brown's damaged fiddle. He evacuated before the storm to Orange, Texas, where he died from cancer less than 2 weeks after Katrina destroyed his home.

Boat washed ashore. The Louisiana fishing industry was severely affected by Hurricane Katrina.





# Final Gallery: Where Do We Go From Here?



Final gallery reviews looks at the future of disaster preparedness and mitigation in Louisiana and make connections to disasters elsewhere. The museum will update this section annually to show levee improvements and the status of coastal restoration.

The goal is to encourage Louisiana citizens and visitors elsewhere to consider the potential impact of disaster in their lives.

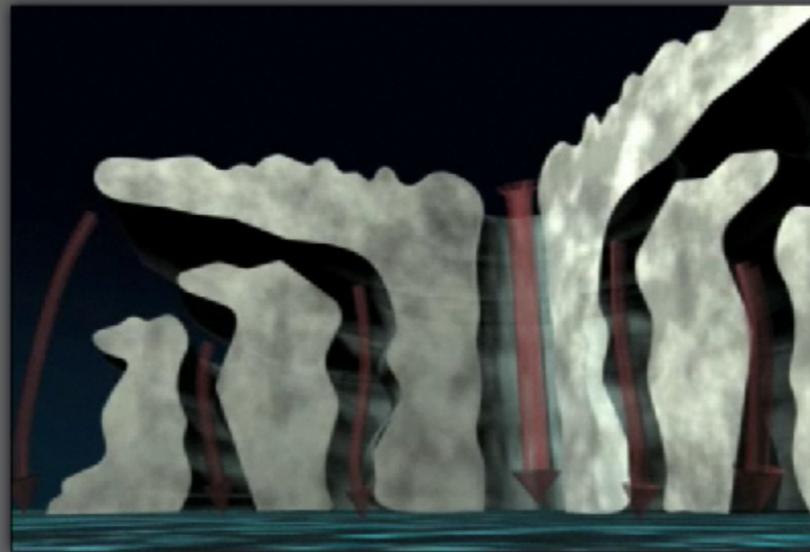
**Our partner, the Office of Marine Programs, University of Rhode Island Graduate School of Oceanography, is producing a comprehensive multidisciplinary educational website, *Hurricanes: Science and Society*.**

**Tailored for K-12 and university educators and students but also accessible to the general public, the site will enhance understanding of current scientific and technological advances and help visitors make good decisions prior to and during a hurricane emergency.**

# Hurricanes: Science and Society

[Home](#)[Resources](#)[Downloads](#)[Themes](#)[People](#)[Gallery](#)[Glossary](#)

## Video Overview of the Hurricane Website

[Open Description](#)[Watch the Intro Video](#)[Basic Physical Processes](#)[Hurricane Science](#)[Hurricane Observation and Forecasting](#)[Hazards and Impacts](#)[Preparation and Risk Mitigation](#)[Response and Recovery](#)[Hurricane Timeline](#)

### Teaching Resources



#### [Integer sed Auge](#)

Maecenas at orci eu [Sample link](#) pede volutpat dictum. Praesent ultricies pellentesque pede. [Hurricane Science](#) Integer sed augue.

### Image Gallery



#### [Integer sed Auge](#)

Maecenas at orci eu pede volutpat dictum. Praesent ultricies pellentesque pede. Integer sed augue. [Sample link](#)

### This is box 3

#### [Integer sed Auge 1](#)

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#### [Integer sed Auge 2](#)

- item 1
- item 2

### Hurricane Forecasts



#### [North Atlantic](#)

Atlantic Graphical Tropical Weather Outlook [National Hurricane Center](#)

1 2

# Hurricanes: Science and Society

Home

Resources

Downloads

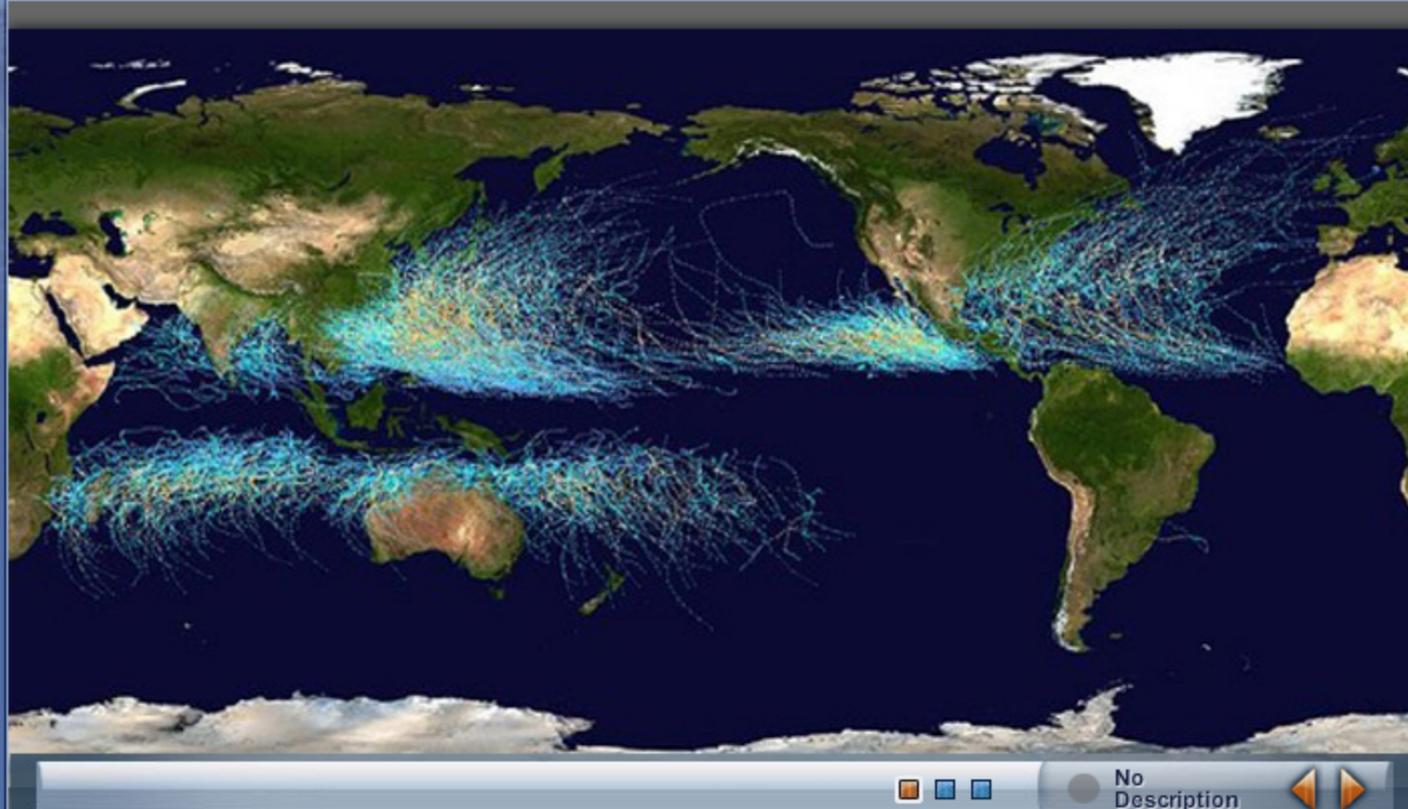
Themes

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Search



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### Integer sed Auge 2

- item 1
- item 2

## Hurricane Forecasts



### North Atlantic

Atlantic Graphical Tropical Weather Outlook [National Hurricane Center](#)

1 2

The Louisiana State Museum has started working with teachers so that they will be able to make effective use of the exhibit in their classrooms.

After the exhibit opens, we will have regular children's and adult programming relating to exhibit themes.



Teachers' Institute: Living with Water, June 2009