

The Consequences

only one-fifth the number prior to the hurricane. The need for mental health services is expected to increase due to the stress and trauma caused by the destruction of homes, the loss of jobs, the separation of families and the death and devastation surrounding those in the New Orleans area.

Social, Cultural and Historical Impacts

Only eight of the 73 neighborhoods identified by the City of New Orleans Planning Department did not flood; 34 neighborhoods were completely inundated. Many of these areas remain uninhabitable. Repopulation is likely to take more than a year, and there is a high degree of uncertainty whether some neighborhoods — especially poor areas with low levels of home ownership — will regain their pre-Katrina occupancy levels within the next five years.

As of March 2006, 400,000 fewer people resided in metro New Orleans. School enrollment in the five parishes is



down 52 percent (86 percent in New Orleans Parish).

The poor were disproportionately affected by Hurricane Katrina. Flood waters inundated eight of the 10 poorest neighborhoods in New Orleans.

Music, food and art — unique resources that helped define the character of New Orleans — were cultural victims of the flood.

Environmental Effects

The loss of an estimated 295 square kilometers of wetlands was nearly four times Louisiana's average annual loss. Saltwater contamination of wetlands within the flood protection system and toxic contamination from inorganic and organic chemicals within and outside the system were associated with levees' overtopping and breaching.

Previous experience with hurricanes indicates that saltwater species of fish fare far better than freshwater species. Initial post-Katrina surveys found no reduction in offshore fish or shrimp populations.

While few data are available to support speculation about storm impact on wildlife, damage was substantial. Pre-storm levels of wildlife abundance are expected to recover where suitable habitat remains, but some damaged habitat may take decades to recover, if it recovers at all.

For more information on this topic, please refer to Volume VII of the IPET Report.

IPET Report Summaries

The Consequences

Hurricane Katrina's impact on the New Orleans area was profound. The powerful storm took lives, destroyed property, and devastated the region's economy, dramatically altering the area's physical, political and social character.

In the immediate aftermath of Katrina, the Interagency Performance Evaluation Taskforce (IPET) was established to assess the performance of the New Orleans area hurricane protection system. Volume VII of the IPET's nine-volume report focuses on the societal consequences of Katrina-related flooding.

Consequences were evaluated for five parishes — Orleans, St. Bernard, Plaquemines, Jefferson and St. Charles — and from five perspectives:

- 1) direct economic consequences
- 2) indirect economic consequences
- 3) human health and safety
- 4) social, cultural and historical impacts
- 5) environmental effects





Direct Economic Consequences

Katrina caused direct property losses of approximately \$21 billion. This included the loss of 25 percent of the residential property value and 12 percent of the nonresidential property value.

Damage to public structures and utility infrastructure — roads, transit, drainage, sewage and water, electrical utilities — and debris removal cost about \$7 billion. The damage was largely the result of breaches in levees and floodwalls and the failure of interior drainage pumps. Yet even had the hurricane protection system performed at its optimum level, there would have been \$10 billion in property damage, excluding public utilities, from the record rainfall of 14 inches and the overtopping of levees.

Indirect Economic Consequences

The analysis of indirect economic consequences was limited by the uncertainty that persists regarding the region's recovery. The reaction of the local popu-

lation to disruptions in their lives and livelihoods, the effects on commuters working in the area and the response of investors are not yet fully known. Immediately after Hurricane Katrina, employment in 36 of the 70 sub-sectors in metropolitan New Orleans fell by more than 25 percent. And while the national economy remained resilient, the growth of gross domestic product for the region dropped from 4.1 percent in the third quarter of 2005 to 1.9 percent in the fourth quarter.

Long-term recovery of the five parishes remains uncertain due to the inability to accurately calculate rate of capital repair and labor force return.

Human Health and Safety

Data on fatalities associated with Hurricane Katrina remains incomplete; however, as of February 23, 2006, there were 887 recorded fatalities. Additionally, as many as 400 of those listed as missing are thought to be deceased.



The majority of deaths were caused by drowning or by pre-existing medical conditions. Others are attributed to infection, accidents, suicide and homicide. The groups least able to evacuate on their own — the poor, elderly and disabled — were hit hardest.

During the period from September 8 to October 15, 2005, the Centers for Disease Control and Prevention reported a total of 6,597 injuries and 13,166 illnesses in Jefferson, Orleans, Plaquemines, St. Bernard, St. Charles and St. Tammany Parishes. Two large state hospitals in New Orleans were destroyed in the storm, and only two of eight New Orleans hospitals reopened in the months following the hurricane.

Health care in New Orleans remains seriously limited, with hospital beds in March of this year numbering 456 —

For the complete report,
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