

# Verchick: Katrina's lessons: learned and unlearned

By Robert Verchick | August 28, 2015 | Updated: August 28, 2015 7:02pm



[Copyrighted image suppressed]

Photo: Joe Raedle, Staff

Former President George W. Bush greets people during a visit to the Warren Easton High School to mark the 10th anniversary of Hurricane Katrina on August 28, 2015 in New Orleans, Louisiana. The former President's visit came as the town prepares to honor the 10th anniversary of Hurricane Katrina, which killed at least 1836 and is considered the costliest natural disaster in U.S. history, on August 29. (Photo by Joe Raedle/Getty Images)

In the last few years, I've commemorated the anniversary of Hurricane Katrina in a new way: by pedaling along the self-guided "Levee Disaster Bike Tour." I begin beneath muscular oaks along New Orleans' Bayou St. John, and I weave my way around potholes and waterfowl to pay silent respect near three prominent levee-breach sites, each marked with a commemorative plaque. Ten years ago, those breaches, combined with more than 50 others to bring a great American city to its knees.

I lived in New Orleans then, and evacuated to Houston for six months. Like so many others I resolved to return to my flooded home and rebuild. I did just that, and for a decade since I've taught graduate students about disaster policy and the central role Katrina plays in shaping our understanding of catastrophic hazards. I've learned a lot along the way, as have my students, I hope. But I can't say the same for policy makers. A decade after the levees burst, some of the most important lessons are still just soaking in. Here is what I hope we will remember.

New Orleans was swamped by an engineering failure, not just a storm, and other cities are waiting in line. Katrina was a monster, but much of its rage had dissipated by the time it reached land. When the levees broke, the storm was within that system's design specifications. To its credit, the

Army Corps of Engineers acknowledged the failings in its design and construction and has toiled since to build a supersized complex of ramparts, gates and pumps as sophisticated as any flood-control project in the world.

But other time bombs tick across the country. An estimated 100,000 miles of levees protect tens of millions of households, from Sacramento to Miami to New York City, with nearly 1 million of those households in Houston. Yet we know surprisingly little about their fitness. In response to Katrina, the federal government is developing an inventory of all federal and many nonfederal levees. Of those rated so far, only 9 percent have been found to be in "acceptable" condition. In 2013, the American Society of Civil Engineers gave the nation's levees a D- and estimated that repairs would cost more than \$100 billion.

But even that isn't enough. U.S. flood-control projects are normally designed to withstand only a so-called "100-year" event, or more accurately, an event with a 1-percent chance of occurring in any given year. If you own a home for the span of a 30-year mortgage, you have a 26-percent chance of being under water in the literal sense before you pay it off. By comparison, dikes in the Netherlands, where they know from floodwaters, are designed to withstand events that are up to 100 times less probable.

Social burdens linked to income and race make everything worse. As Americans learned watching television broadcasts of their fellow citizens, many of them poor and African-American, helicoptered off battered rooftops or trapped in the Superdome, disasters do not ignore social inequalities; they amplify them. Low-income and minority populations, for instance, are less likely to have first-aid kits, emergency food supplies, fire extinguishers and evacuation funds, but more likely to suffer property damage, injury and death. In the aftermath of Katrina, the damaged areas of New Orleans were 75 percent African-American, while undamaged areas were 46 percent African-American. Government assistance programs - crucial in the wake of large catastrophes - tend to favor middle-class homeowners over less affluent renters or the homeless.

Hurricanes Katrina and Sandy inspired a variety of indices and mapping platforms to identify "social vulnerability." As with the federal inventory of levees, this information is critical. But, still, I wonder whether it will be used to its best effect. Will such mapping lead to safer homeless shelters, multilingual responders in immigrant areas, better public transportation for the elderly, better evacuation plans? If not, what's the point?

Disaster is backlit by climate change. Experts agree that human-caused global warming is increasing average temperatures, disrupting rain patterns and raising the seas. While scientists can't link any individual storm to climate change, Katrina was perhaps the first to open the public's imagination to what life on a warming planet could really mean. Thus the Federal Emergency Management Agency now incorporates climate impacts into its disaster recovery framework (now being followed in the aftermath of Hurricane Sandy) and has plans to fold climate projections into the flood maps that determine insurance needs across the country.

What Katrina really teaches is that we are all in this world together, surrounded by vulnerabilities. On the frame of my 10-speed is a bumper sticker with the motto, "Be a New Orleanian - Wherever You Are." What you didn't know, is that you may have little choice.

Verchick, who teaches at Loyola University New Orleans and Tulane University, is president of the

---

## OPINION

---



**Editorial: Run, Joe, run**

**Friedman: Bonfire of the assets, with Trump lighting matches**

**Friedman: The world's hot spot**

**A change in scenery can mean so much**



**Let's wait**

---

Center for Progressive Reform, and author of "Facing Catastrophe: Environmental Action for a Post-Katrina World."