Epilogue

August 29, 2007 A hot and humid afternoon in the Seventh Ward New Orleans, Louisiana Two years after Katrina

By Gregory J. Smith

Today, as I stand on Rousselin Drive, there is a mixture of both the strange and the familiar. Two years ago, I piloted a small boat on this street to bring people from their flooded homes to safety. Now on my left, several workers are gutting the home where our USGS boat evacuated a family from their second-story porch. On the opposite side of the street is a white house marked with the ubiquitous painted "X" that reports the results of the unified search and rescue operation. The four quadrants of the X reveal that the home was searched on September 11 and that it stands witness to the human condition in this neighborhood; 0 dead and 0 alive found in this home on that day in 2005.

The past now seems unimaginable until I look at the lingering destruction of homes, many still bearing the markings of search and rescue operations, and at the expressions on the faces of those who have returned. The street now seems like a different world since the flood waters have receded. Cars move up and down it instead of our flat-bottom research boats. Surrounding this neighborhood

is the city, the remaining wetlands, the coastal forests, the Mississippi River, and to the south, the Gulf of Mexico.

The coast is a complex mosaic of human infrastructure and the natural environment that have developed on very separate paths over centuries creating what is now a deltaic coast with vulnerabilities that this storm amplified. Katrina brought into focus the risks of living in the delta, below sea level where wetlands were filled and drained; where land was reclaimed from the marsh; where barrier islands have eroded; and where people have literally watched coastal wetlands sink before their eyes. Katrina, and later Hurricane Rita, clearly demonstrated the magnitude of the vulnerability of this coast.

Unfortunately, we are a people rapidly being separated from our natural environment, and on the northern Gulf Coast this means wetlands. Human and natural landscapes need to be managed beyond simple coexistence to create a resilient coast that can withstand massive storms and that can support fish, wildlife, and human communities that are sustainable. The storms of 2005, the massive damage they produced, and





Rousselin Drive just after Hurricane Katrina made landfall (left), and the same view 2 years later (right).

the enormous rebuilding efforts during the past 2 years have filled the people of the Gulf Coast with a myriad of emotions and challenges. The human struggle for existence has been enormous. For those of us working for USGS along the Gulf Coast, we have also gone through these experiences, directly and indirectly, with our neighbors, friends, and relatives. The research conducted in the aftermath of these storms will help to define how we as a nation will respond to and prepare for future natural disasters.

An important lesson learned during the storms of 2005 was that science has an integral role in the community. Scientists need to continue to be a part of these events and be connected to the people who suffer through

them. During the past 2 years, national media, politicians, high-level administrators, community organizations, church groups, and the public have asked how the tragic aftermath of these storms could have occurred. Now, 2 years later, the more important question is, "How can we learn from these storms and prevent this outcome from happening again?"

Our scientists were impacted by and responded to these storms with the residents of the Gulf Coast. We realized that science and scientists cannot stand apart from society but must stand with people, their cultures, their hopes, and their dreams. At USGS, we strive to make our science meaningful and relevant to society with the goal of improving people's lives, both in the present and for the future. In this volume stands our testament that we are a part of the community and will continue to be on a day-to-day basis and especially in times of need.

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