PERILOUS PLACE, POWERFUL STORMS
CONTENTS

vii  List of Illustrations
ix   Acknowledgments
3    Introduction
12   City at Risk
28   Season of the Storms
85   Protecting the Delta, the West Bank, and the Coast
112  Developments to the Eve of Katrina, 1990–2005
136  Conclusions
151  Notes
169  Bibliography
187  Archival Collections
189  Index
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ILLUSTRATIONS

FIGURES

1.1 Hurricane-protection projects in southeast Louisiana . . . 10
2.1 New Orleans topography and cross section . . . 14
2.2 Natural setting of southeast Louisiana . . . 16
2.3 Levees built by 1812 . . . 18
2.4 Lakefront levee at Milneburg, 1927 . . . 22
2.5 New Orleans lakefront seawall completed in 1934 . . . 23
2.6 Peoples Avenue Canal constructed by the Sewerage and Water Board for urban drainage during the early 1900s . . . 26
3.1 Hurricane paths, 1945–1960 . . . 29
3.2 Hurricane Flossy track and area of inundation, September 1956 . . . 31
3.3 Hurricane paths, 1961–1971 . . . 33
3.4 Hurricane Betsy track and area of inundation, September 1965 . . . 34
3.5 Area of flooding in New Orleans after Hurricane Betsy, 1965 . . . 35
3.6 Flooding in the Ninth Ward of New Orleans, September 1965 . . . 36
3.7 Hurricane Camille track and area of inundation, September 1969 . . . 38
3.8 New Orleans area Standard Project Hurricane . . . 43
4.1 Hurricane-Protection Plans . . . 52
4.2 High-level levee system details and levee heights . . . 73
4.3 Hurricane paths, 1980–2005 . . . 80
5.1 New Orleans to Venice levees and barriers, 1971 . . . 87
5.2 West Bank levees, Westwego to Harvey Canal . . . 99
5.3 West Bank levees east of Harvey Canal, 2004 . . . 101
5.4 Larose to Golden Meadow hurricane protection, 2003 · · · 109
6.1 Flooding after the May 8, 1995, downpour · · · 121
6.2 Southeast Louisiana Flood-Control Project · · · 122
6.3 Seventeenth Street Canal parallel levees, 2001 · · · 126

TABLES

4.1 Adjusted Levee Heights · · · 55
4.2 Lake Pontchartrain and Vicinity Budget, 1967–90 · · · 83
5.1 West Bank Actual Costs · · · 105
6.1 Population in Orleans and Jefferson Parishes, 1960–2000 · · · 119
Numerous organizations and individuals contributed to making this project possible. First and foremost, the original version of this work was done under contract with the U.S. Army Corps of Engineers History Office. Martin Reuss served as the initial project manager and capably steered this project through its beginnings. Matt Pearcy, who assumed Marty’s position in spring 2006, has proved helpful as the Corps evaluated the initial draft.

Staff at the New Orleans District office also played a vital role. Despite terrible disruption to working and living conditions in the year after Hurricane Katrina, they stuck with their jobs and provided me with assistance. Gary Hawkins, in particular, assisted my field researchers in gaining access to documents. Ed Lyon offered insight to the workings of the office; Nancy Mayberry searched through her considerable graphics holdings to help us illustrate the report; and Sandra Brown assisted with our efforts in the district library. Charles Camillo, historian at the Mississippi Valley Division, also provided valuable assistance. I am grateful to the Corps of Engineers History Office for granting me permission to publish this work.

A group of diligent researchers assembled many of the pertinent records. Most notably, Matt Schandler undertook the arduous chore of fighting through the post-storm traffic snarls to review project files at the district office and assisted with archival research. Bryan Landry and Jennifer Melancon Cook both did essential work on the bibliography and chronology, plus undertook important archival field work. Additional archival assistance came from Kathryn Norseth, a former colleague from my days in Maryland, Cary Beshel in Fort Worth, and Caree Banton in New Orleans.
Archivists at both the National Archives and its Records Centers also assisted the researchers. Amy Sumpter capably assisted with a second phase of historical research in 2007. Clifford Duplechin efficiently transformed my sketches into readable maps, and DeWitt Braud provided the digital imagery for the first illustration.

A troop of retired Corps employees agreed to sit for interviews and, in doing so, provided incomparable insight into the development of this system. My special thanks go out to them.

I am also deeply indebted to the library staffs at the Hill Memorial Library at Louisiana State University, the Louisiana Collection at the University of New Orleans, the Special Collections at Tulane University, and the New Orleans Public Library. The librarians based in New Orleans deserve special thanks since they were dealing with massive disruptions caused by Katrina. Staffs with the Jefferson Parish Police Jury and their drainage and levee districts and the Orleans Levee District also assisted with access to records, sometimes in extremely difficulty situations, that aided this investigation. Staffs at both the New Orleans and Jefferson Parish drainage authorities also provided access to essential documents.

Many investigations have explained the circumstances that produced flooding in New Orleans during Katrina. I have purposefully limited my use of these post-Katrina sources in order to maintain an independent perspective. Nonetheless, I do cite the key reports in the conclusions.

Also, I am grateful to Craig Gill at the University Press of Mississippi for his efforts to see this project into print and to Tammy Rastoder for her thorough and capable editorial attention to the manuscript.

I am deeply indebted to these individuals and many others who assisted along the way.
PERILOUS PLACE, POWERFUL STORMS
Hurricanes have been a constant, if irregular, threat to New Orleans and its vicinity since the city’s founding in 1718. Even before surveyors platted the old Vieux Carré, a hurricane swept over the incipient settlement. Back-to-back storms in September 1722 and 1723 destroyed much of the new colonial capital, and at least nine additional storms battered the city before the Louisiana Purchase in 1803. Since becoming part of the United States, another thirty-seven storms have lashed the city, and others have swept ashore nearby, delivering rain and storm surges to Louisiana’s coastal wetlands and Mississippi’s beaches. New Orleans and its residents are no strangers to the power and damage delivered by hurricanes.

The impact, although not the power, of the most notorious tropical storm to roar across New Orleans and its environs exceeded that of previous events. Despite both familiarity with the threat and recent experience, public officials and citizens were unprepared for Katrina’s overwhelming devastation in 2005. Levee failures allowed waters from Lake Pontchartrain and the Gulf of Mexico to pour into much of the city and neighboring parishes. Then, held captive by the ring of levees, the waters inundated as much as 80 percent of the city proper—from a few inches to upwards of fifteen feet. Hurricane-protection levees withstood the storm in neighboring Jefferson Parish, but the massive surge overtopped levees in St. Bernard and Plaquemines parishes, and swept across Grand Isle. Damage to thousands of houses and businesses disrupted the economy of the city, the state, and the region. Additionally, hundreds of thousands of residents were displaced for months, tens of thousands for years. Despite both structural systems
and social organizations built to minimize hurricane impacts, Katrina overwhelmed them all. The tragic impacts were not just the result of a short-term meteorological event but the outcome of flawed and incomplete human preparations. Those preparations represent protracted developments and the involvement of many organizations over decades. At the center of the preparations was the set of hurricane-protection levees largely designed and built by the U.S. Army Corps of Engineers and its multiple local partners. Only a long-term, historical account can expose the complex interplay of the numerous players in the failed effort to protect New Orleans from tropical storms.

In the nineteenth century, the Corps of Engineers was a reluctant participant in flood protection. During the early 1800s, it earned an enviable reputation for hydraulic engineering through its efforts to maintain the country’s navigable waterways. Charged with pulling snags from internal waterways and designing and installing works that kept the Mississippi and other rivers open to commerce, the Corps compiled an impressive resume. Its programs transformed the wild and untamed internal rivers into what environmental historian Richard White would call “organic machines”—natural systems reworked to serve human needs. Snag boats pulled navigation hazards from channels, and crews removed massive rafts from rivers to open then to steamboats. Wing dams put the river to work maintaining its own channel, and channel straightening reduced the length of meandering streams. Such constructions led historian Todd Shallat to label the Corps as a “nation builder.” That is, its efforts aided the expansion of the American republic by modifying waterways to maintain effective linkages among the country’s far-flung regions. In this regard, it became known as the foremost engineering organization in the country, but with responsibilities focused on navigation, not flood protection. Its transformation of riverways expanded in the twentieth century. Dams helped regulate flow and maintain adequate depth for shippers, along with reducing flooding, while locks enabled towboats and barges to move up and down rivers reconfigured into hydraulic stairways.