Introduction

Anatomy of Vulnerability

Much attention has been devoted to natural and man-made disasters since the terrorist attack on the United States in September 2001, the anthrax attack in Washington, D.C., that same year, and the government response to Hurricane Katrina and its aftermath, in 2005. Before these incidents grabbed headlines and shone the national spotlight on government ineptness and incompetence and on severe gaps in disaster preparedness, African Americans for decades had complained about differential treatment, about being left behind, and about outright racial discrimination. Most of these complaints routinely fell on deaf ears long before Hurricane Katrina devastated New Orleans and the Gulf Coast. Katrina raised "a new class of problems that demand rigorous analysis, prudent planning, and courageous political leadership."[1]

This book examines government responses to a range of environmental and health threats to African Americans, including weather-related disasters like hurricanes and droughts, which conventionally have been considered "natural," and disasters that are normally considered human induced, such as industrial accidents, railcar explosions, chemical contamination, and bioterrorist attacks. Our analysis uses an environmental justice and racial equity frame to understand mitigation and adaptation to human-induced threats and to show how best society should both think about, prepare for, and respond to weather-related disasters and prevent public health threats, environmental catastrophes, toxic contamination, industrial accidents, and related human-induced disasters.

We examine the unequal protection and unequal treatment afforded African Americans over eight decades and factors that have made them vulnerable, including their physical location, socioeconomic status, race, and the lingering institutional constraints created and perpetuated by racialized place. We also explore how environmental hazards develop into public health

threats and how design factors either mitigate or amplify their effects. The case studies detail special challenges and barriers faced by African Americans in everyday society and how these obstacles are compounded by government's ineptitude, inaction, and slow response to environmental health threats.

Environmental and public health threats from natural and human-made disasters are not randomly distributed. Healthy places and healthy people are highly correlated. It should be no surprise that the poorest of the poor within the United States and around the world have the worst health and live in the most degraded and at-risk environments. While access to insurance and to health care is important, social conditions are also major determinants of health. Social forces acting at a collective level help shape an individual's risk, environmental exposure, and access to resources that promote health.[2]

One of the most important indicators of one's health is one's street address or neighborhood. Where you live affects your health and your chances of leading a flourishing life. It also affects your risk from natural and unnatural disasters. Today, numerous researchers are looking at individual health outcomes through an ecological lens, recognizing that "place matters." They are using geographic information system (GIS) analysis to map relationships between racial and income composition and vulnerability.

The Centers for Disease Control and Prevention (CDC) recognizes this connection in its "Healthy People in Healthy Places" initiative. The initiative operates from the idea that the places where people live, work, learn, and play can protect and promote their health and safety, especially those people at increased risk of health disparities. Among the social determinants of health are factors in the social environment that contribute to or detract from the health of individuals and communities. These factors include the socioeconomic status of community residents, availability of transportation, quality of housing, access to services, existence of discrimination based on social grouping (e.g., race, gender, or class), and social or environmental stressors. Inequitable distribution of these conditions across various populations is a significant contributor to persistent and pervasive health disparities in the United States.

The CDC's 2008 *Promoting Health Equity: A Resource to Help Communities Address Social Determinants of Health* report is a workbook for community-based organizations that seek to affect the social determinants of health through community-based participatory approaches and nontraditional partnerships.[3] The social determinants of health are the circumstances in which individuals are born, grow up, live, work, play, learn, and age and the

systems that are created to deal with illness. These circumstances are in turn shaped by a wider set of societal forces such as economics, social policies, and politics, as well as psychosocial factors such as opportunities for employment, access to health care, hopelessness, and freedom from racism, including institutional racism and discrimination.[4]

Race and place in America have always been connected.[5] In the South, during the Jim Crow era and even after "separate but equal" laws were struck down by the courts, there were places where black people could not buy homes, ride public transit, play in parks and beaches, gain access to schools and hospitals, or sit down at a restaurant. These "special places" for whites and blacks were artificially created by racism, with privilege and advantage biased in favor of whites. White elites reserved the best of the best for themselves and, not surprisingly, doled out the worst of the worst for blacks.

Place affects access to jobs, education, public services, culture, shopping, and medical services, as well as level of personal security.[6] Place even affects the air we breathe. Although there is no "white air," "Hispanic air," or "black air," race maps closely with bad air quality. African Americans and other people of color live in the most polluted places and suffer the health consequences. Race does not cause illness; racism does. More than one hundred studies now link racism to worse health.[7]

All communities are not created equal. Some communities are more equal than others. If a community happens to be poor or working class or is in a geographic area made up predominantly of people of color, its residents generally have fewer choices and opportunities—on a range of residential amenities, such as housing, schools, jobs, shopping, parks, green space, hospitals, police, and fire protection—than residents of affluent, middle-class, or white neighborhoods.[8]

Using a racial equity lens, this book builds on more than three decades of environmental justice, health equity, and disaster research and policy work that challenge the dominant environmental protection paradigm and the traditional quantitative-risk model. The dominant environmental protection paradigm manages, regulates, and distributes risks.[9] This paradigm also institutionalizes unequal enforcement; trades human health for profit; places the burden of proof on the "victims" and not on the polluting industry; legitimates human exposure to harmful chemicals, pesticides, and hazardous substances; promotes "risky" technologies; exploits the vulnerability of economically and politically disenfranchised communities; subsidizes ecological destruction; creates an industry around risk assessment and risk management; delays cleanup actions; and fails to develop pollution prevention as the

overarching and dominant strategy. The dominant paradigm seldom challenges environmental racism and other forms of environmental injustice.

On the other hand, the environmental justice framework rests on developing tools, strategies, and policies to eliminate unfair, unjust, and inequitable conditions and decisions. The framework rests on prevention, precaution, and avoidance of harm. It also attempts to uncover the underlying assumptions that may contribute to and produce differential exposure and unequal protection. The framework brings to the surface the *ethical* and *political* questions of "who gets what, when, why, and how much."

A Focus on the Southern United States

We chose the southern United States for our analysis. We recognize that issues addressed in this book are not unique to the South. Additionally, we recognize that many of the circumstances detailed in our analysis are not unique to African Americans. However, the southern region of the United States and its treatment of African Americans present some unique circumstances that deserve isolation. Our analysis shines a special spotlight on "slow-moving" disasters in a region whose legacy includes slavery, Jim Crow segregation, and entrenched white supremacy. It also gives perspective to pre- and postgovernment responses to natural and unnatural disasters that disproportionately impact African Americans.

The South gave birth to the modern civil rights movement and to the environmental justice movement.[10] It is also a region that is vulnerable to weather-related disasters, including hurricanes, floods, and droughts. Today, the South is the favorite destination for black migration and black vacationing.

The 2000 census showed that African Americans ended the twentieth century by returning "home" to the South—the same region they had spent most of the century escaping or being pushed out. The southern United States grew by more than 3.6 million people in the 1990s.[11] Blacks' search for a "New South" began in the mid-1970s; between 1970 and 1980, more than 100,000 more blacks moved to the South than moved out.[12] This pattern continued unabated in the 1990s. The 1970s saw the South become a leader in the creation of nonagricultural jobs, and this increased economic opportunity attracted migrants from the postindustrial economy of the North; the region is attracting large numbers of black middle-class, post–baby boomers.

Millions of African Americans who left the South for other parts of the country decades ago are returning to reclaim the region.[13] Searching for the

"New South" that was prominently displayed in booster campaigns undertaken by southern cities, many have moved back to Alabama and Georgia to retire or to seek new job opportunities in the "New South." They moved to the South for many other reasons, as well, including the region's warm climate, the improved racial climate, the cheaper cost of living, and to be near elderly parents.

In the 620 counties that make up the southern "Black Belt," stretching from Delaware to Texas, African Americans make up about 12 percentage of the total population, a larger percentage than in the country as a whole. In the fifteen southern states (excluding Texas and Florida), blacks make up 22.8 percent of the population, far more than the 3.5 percent of the population that is Hispanic.[14]

The African American population in cities, suburbs, and rural areas of the South is growing at twice its rate of growth than in any other region in the country. The 1990s saw the black population increase in metropolitan centers in every state of the former Confederacy. Florida and Georgia posted the largest gains, adding 674,000 and 632,000 black residents, respectively. Several other southern states—Texas, North Carolina, and Maryland—added more than 300,000 African Americans.

At the same time African Americans were moving to the South, the Northeast, the Midwest, and the West all saw blacks leaving as African Americans sought better jobs, safer neighborhoods, and warmer weather in cities like Atlanta, Washington, D.C., Memphis, and Dallas. Other top southern destinations for black Midwesterners included Norfolk, Virginia; Houston; Nashville; and Louisville. Atlanta, however, which calls itself the "Black Mecca," was by far the top urban destination for African Americans.[15] In the 1990s, metropolitan Atlanta continued to serve as the "premier African American magnet."[16]

As the "region of choice," the South attracted both the skilled and the unskilled, the educated and the undereducated, as well as low-income and middle-income African Americans who sought to make their fortune in this "land of new opportunity." If the South "rises again," blacks want to reap some of the benefits of this rebirth.

Many newcomers settle in the suburbs. The two most affluent African American counties in the nation, Prince George's County, Maryland, and DeKalb County, Georgia, are suburban and in the South.[17] Some 76 percent of all southern blacks live in metropolitan areas, and 43 percent live in the suburbs. Seven of the ten fastest growing U.S. counties in terms of African American population are located in the suburban part of metropoli-

tan Atlanta.[18] Black suburbanization has often meant re-segregation. Separate translates into unequal, even for the most affluent African American enclaves.[19]

Today, African Americans voters are a key constituency in general elections in at least fifteen states and represent a key voting bloc in Democratic primaries in more than twenty states. There are more than nine thousand African American elected officials in America.[20] Eight of the ten states with the highest number of black elected officials are in the South. African Americans have been elected mayor in most of the nation's big cities, there are roughly six hundred African Americans in state legislatures nationwide, and blacks now hold about 10 percent of the seats in the U.S. Congress. Still, African Americans are underrepresented at most levels of government.

Environmental decision making and local land-use planning operate at the juncture of science, economics, politics, and special interests that place communities of color at special risk. In many instances, the only science involved is "political" science. This is especially true in America's Deep South. By default, the southern United States became a "sacrifice zone," a dump for the rest of the nation's toxic waste.[21] Unfortunately, "sacrifice zones" cheapened the lives and damaged the health of the most vulnerable people and places.[22]

There is a direct correlation between exploitation of land and exploitation of people. It should not be a surprise to anyone to discover that African Americans have to contend with some of the worst pollution in the region. A colonial mentality exists in Dixie, where local government and big business take advantage of people who are both politically and economically powerless. The region is stuck with a unique legacy—the legacy of slavery, Jim Crow, and white resistance to equal justice for all. This legacy has also affected race relations and the region's ecology. It has also affected how local, state, and federal officials respond to public health threats from natural and human-induced disasters.[23]

The South is characterized by "look-the-other-way environmental policies and giveaway tax breaks" and a place where "political bosses encourage outsiders to buy the region's human and natural resources at bargain prices."[24] Lax enforcement of environmental regulations has left the region's air, water, and land the most industry-befouled in the United States.

Toxic-waste discharge and industrial pollution are correlated with poorer economic conditions. An Institute for Southern Studies report, *Gold and Green 2000*, used two separate lists of indicators to evaluate states' economic performance and stresses on the natural environment.[25] The twenty eco-

nomic indicators include annual pay, job opportunities, number of business startups, and number of workplace injury rates; the twenty environmental measures range from toxic emissions and pesticide use to energy consumption and urban sprawl. Ten states, mostly in the South, are among the worst fifteen on both lists. Louisiana ranks forty-eighth on economic performance and fiftieth on the environment. Others ranking at the bottom are Alabama, Texas, Tennessee, Mississippi, Indiana, Arkansas, West Virginia, Kentucky, and South Carolina.

Having industrial facilities in a community does not automatically translate into jobs for that community's residents. Many industrial plants are located at the fenceline with black communities. Some are so close that local residents could walk to work. More often than not, however, communities of color are stuck with the pollution and poverty, while other people commute in for industrial jobs.

Similarly, tax breaks and corporate welfare programs have produced few new jobs at polluting companies for black residents who live on the fenceline with industry. However, state-sponsored pollution and lax enforcement have allowed many communities of color and poor communities to become dumping grounds for industrial waste. Louisiana is the poster child for corporate welfare. The state is mired in both poverty and pollution. It is no wonder that Louisiana's petrochemical corridor, the eighty-five-mile stretch along the Mississippi River from Baton Rouge to New Orleans, dubbed "Cancer Alley," became a hotbed for environmental justice activity long before Hurricane Katrina struck and the levee breach drowned 80 percent of the city in 2005.[26]

The environmental justice movement has set out clear goals of eliminating unequal enforcement of environmental, civil rights, and public health laws; unmasking differential exposure among populations to harmful chemicals, pesticides, and other toxins in the home, school, neighborhood, and workplace; exposing faulty assumptions used in calculating, assessing, and managing risks; revealing discriminatory zoning and land-use practices and exclusionary policies and practices that limit some individuals and groups from participation in decision making. Many of these problems could be eliminated if existing environmental, health, housing, and civil rights laws were vigorously enforced in a nondiscriminatory way.

The poisoning of African American residents and workers in Louisiana's "Cancer Alley" and in other black communities across the South has its roots in an economic system characterized by economic exploitation, racial oppression, and devaluation of human life and the natural environment.[27]

This same thinking drives waste and risky technologies to the poorest communities in this country and the poorest nations around the world.

The unwritten policy of targeting Third World nations for waste trade received international media attention in 1991. Lawrence Summers, at the time chief economist at the World Bank, shocked the world and touched off an international firestorm when his confidential memorandum on waste trade was leaked. Summers wrote: "'Dirty' Industries: Just between you and me, shouldn't the World Bank be encouraging more migration of the dirty industries to the LDCs (Least Developed Countries)?"[28] Summers's memorandum was newsworthy not so much for the view expressed but because he put this policy in writing for the world to see.

The events that unfolded in New Orleans and the Gulf Coast region before and after Hurricane Katrina provide the sociohistorical backdrop for our examination of social vulnerability and government responses to environmental and health threats to African Americans that date back more than eight decades. Our analysis focuses on government response to weather-related events, such as hurricanes, floods, and droughts, but also includes case studies on toxic contamination, industrial accidents, train derailments and explosions, medical experimentation, and bioterrorism threats.

Over the past three decades, environmental justice and disaster scholars have compiled an impressive record of research detailing unfair, unjust, and disparate treatment by government of African Americans and other people of color in a wide array of policy areas, including siting enforcement, cleanup, mitigation, and emergency response to man-made and natural disasters. While progress has been made in addressing inequities, much work is still needed to ensure that all populations receive environmental justice and equal protection from natural and human-induced hazards.

In the nine chapters that follow, we describe and provide explanations of government response to natural and unnatural disasters that have impacted African Americans in the southern United States. Although we confine ourselves to the South, our approach and findings may have implications well beyond the region and African Americans, given the nature of institutional racism in America, which is a national phenomenon. We have provided lessons learned and lessons not learned and a framework for addressing the legacy of unequal protection.

Finally, we offer policy strategies for preventing disastrous responses by government to various threats to African Americans. Eliminating disparities and providing equal protection will make us a stronger and healthier people and nation as a whole.