

# Race, Planning, and Emergency Management: Combating Inequities in Community Planning Policies

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## Abstract

Disaster preparedness and relief is a key service provided by the American system of government, but emergency management practices have produced varying outcomes. Based on the existing literature, emergency management, community planning, and a history of racial inequities are inextricably interconnected. Based on the concepts presented by social equity, community planning, emergency management, and environmental policy literature, an interdisciplinary approach was used to create an original checklist of considerations for emergency managers, community planners, and policymakers to use in a collaborative manner to proactively address potential threats to their constituents and communities.

## Keywords

gender/race/ethnicity, planning history, politics and society, social equity

## Introduction

In the aftermath of Hurricane Ian, marginalized communities in the Fort Myers area of Florida found themselves without power for days after the storm made landfall (Hassanein 2022). Residents were not surprised that recovery efforts in nearby White neighborhoods were proceeding with much more urgency than their own; “No matter how long I’ve lived in Fort Myers and seen storms, it’s been like that. This neighborhood that’s full of people of color, always comes last,” claimed one resident (Hassanein 2022). In the neighborhood of Dunbar, the low-income, working-class residents are predominately black and, in many cases, had no means by which they could evacuate or protect their belongings from the storm (Pierre 2022). Florida State Representative Michele Rayner-Goolsby reported the smell of sewage inside residents’ homes due to wastewater failures (Pierre 2022; Patel and Mufson 2022). Disaster preparedness and relief is a key service provided by the American system of government. Yet not all emergency management practices have had equal success in their outcomes—a phenomenon experienced by survivors of Hurricane Ian. The fact that the residents in Fort Myers were not surprised by the racialized outcomes in emergency response suggests that the phenomenon has long been intrinsic to the system itself, rather than the result of individual decision-making. This supports the descriptions of racism and racial outcomes provided by Ibram X. Kendi, who argues that racism is perpetuated predominately by racist policies, since policies are what create the power to discriminate (2019, 18–19).

Considering that disasters are spatial events, there is the potential for inequities in outcomes based on location. Due to

location-based disparities, communities with a history of spatial marginalization might suffer damages from disasters at disproportionately high levels. The possibility of these scenarios has led to the research inquiries for this paper:

1. Has racist residential planning policy in community planning impacted African American communities via emergency management?
2. If such disparities exist, what are ways that policymakers can meaningfully approach emergency management and disaster planning to halt—if not reverse—those effects?

Based on the review of the literature, it is apparent that the overlap of racialized threats to well-being and natural hazards create unique forms of danger for African Americans. Thus, this article argues the need for closer consideration of planning and emergency management policies that proactively seek to address racial inequities. To aid in that process, this article analyzes the impact of racist residential planning policy on emergency management by investigating how emergency management can be segmented into strategic policy areas. This is accomplished by using two existing frameworks from academic and practitioner literature to create a matrix of emergency

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management considerations. Then, a brief review of racialized residential policies is provided to contextualize modern-day segregation in American spaces. Because emergency management is inextricably tied to space and because American spaces are inextricably tied to a history of racial oppression, emergency management is inevitably impacted by racialized decision-making. Thus, the considerations identified in the literature should be critically re-examined through a race-conscious lens to address and prevent any racialized outcomes.

## Emergency Management in the United States

The first federal emergency management action was taken by Congress in 1803 when a relief program was signed into law to assist the town of Portsmouth, New Hampshire after a destructive fire (FEMA 2019, 15; Haddow, Bullock and Coppola 2017, 3). For the next century, federal response to disasters would remain *ad hoc* and typically reactionary to each individual event (FEMA 2019, 15). During the Franklin Roosevelt administration, agencies like the Tennessee Valley Authority began to emerge that included disaster prevention in their secondary objectives and in 1936, The Flood Control Act began to establish a new paradigm in emergency management: that humans could take measures to prevent disasters and eliminate risk (Haddow, Bullock and Coppola 2017, 3).

The Federal Civil Defense Act of 1950 was one of the first large steps toward an organized federal response to emergency management (FEMA 2019, 16). This piece of legislation created parallel systems of response; civil organizers who collaborated with local responders and military organizers who stockpiled materials to be used in the event of a war (FEMA 2019, 16; Haddow, Bullock and Coppola 2017, 3–4). The National Flood Insurance Act of 1968, championed by Congressman Hale Boggs of Louisiana, brought the concept of “community-based mitigation” to the forefront of emergency management practice by establishing the National Flood Insurance Program (FEMA 2019, 16–17; Haddow, Bullock and Coppola 2017, 4).

By 1978, The National Governors Association had developed a formal request for the creation of a federal emergency management organization that would reduce administrative burdens caused by decentralized and *ad hoc* management practices (Haddow, Bullock and Coppola 2017, 6). President Carter—a former governor himself—submitted a reorganization plan to Congress that June and the Federal Emergency Management Agency (FEMA) was officially established on April 1, 1979 (FEMA 2019, 17; Haddow, Bullock and Coppola 2017, 6–7). John Macy, the first director of FEMA, created the Integrated Emergency Management System—an “all hazards” approach to emergency management that emphasized overlaps in strategies between all types of hazards (Haddow, Bullock and Coppola 2017, 7).

In response to the terror attack on September 11, 2001, the George W. Bush administration created the Department of Homeland Security (DHS), which brought FEMA under its control (Haddow, Bullock and Coppola 2017, 12–16). The failures of the DHS and FEMA to adequately respond to Hurricane

Katrina in 2005 resulted in many investigations and reforms that ultimately gave FEMA greater authority to respond to disasters without interference from DHS administrators (Haddow, Bullock and Coppola 2017, 16–21). In 2011, the Obama administration then sought to foster a “culture of preparedness” by issuing “Presidential Policy Directive 8: National Preparedness” which established the first National Preparedness Goal (FEMA 2019, 25; Haddow, Bullock and Coppola 2017, 22).

## Racist Policies and Racialized Outcomes

The following sections provide context for modern-day segregations in American spaces. Overtly racist policies and practices—such as the infamous “redlining” of African American neighborhoods—have made impacts on American communities and their living situations that are visible to this day. As a result, living spaces have developed at different rates and have been exposed to different levels of risk. One example of such environmental racism is provided in this article, though many other examples and case studies have been documented in the literature.

### Racist Policies in Housing

Many federal public housing programs were racially discriminatory, bringing segregation into areas where it previously did not exist. The housing of World War I and World War II defense laborers, as well as public housing programs in the post-war era, regularly excluded African American communities or completely segregated them (e.g., Hirsch 2005, 45; Rothstein 2017, 19).

In 1933, the Home Owners’ Loan Corporation (HOLC) was created to buy up mortgages and issue new, low-interest mortgages with 15 to 25-year repayment plans (Faber 2020, 741; Rothstein 2017, 63–64). The HOLC was required to exercise some prudence in its lending, so it had to assess the value of homes to determine market stability. The HOLC outsourced the task to local real estate agents—who were beholden to segregationist ideas (Rothstein 2017, 64; Schill and Wachter 1995). “Risky” neighborhoods were colored red and were given to an area that had African Americans living there; “safe” neighborhoods were colored green and were given to areas that had “not a single foreigner or negro” (Rothstein 2017, 64; *see also* Pulido 2000, 27–28). Areas designated as high-risk were not as eligible for the attractive loans, thus were not owned by African Americans at the same rates that White people were able to buy their homes (Pulido 2000, 27–28; Rothstein 2017, 64; Schill and Wachter 1995, 1312).

At the same time, the Federal Housing Administration (FHA) did their own appraisals, which specifically required that loans only be given to properties in “Whites-only” areas, with an additional preference for those in suburbs (FHA 1938; Rothstein 2017, 64–65). The FHA *Underwriting Manual* (FHA 1938) was also concerned with keeping schools segregated (Rothstein 2017, 65–66) Though the *Underwriting Manual* got rid of explicitly racist language in 1947, the nature of the policies did not change (Rothstein 2017, 66)

Explicitly racialized zoning ordinances were deemed unconstitutional in 1917 in *Buchanan v. Warley* (Eskew 1997, 54; Rice 1968, 179; Silver 1991, 190). However, the impacts of those policies stubbornly persisted—and perhaps in no better example than Birmingham (Eskew 1997; Silver 1991, 196). In 1933, over a decade after *Buchanan v. Warley*, policymakers in Birmingham still passed an ordinance prohibiting African Americans from living in specified areas, claiming that it was “quite acceptable to both races” (Eskew 1997, 54). Enforcement of the ordinance was implemented by both formal and informal means; the city denied a variety of permits to people who violated the rule while White vigilantes terrorized those who physically entered neighborhoods deemed to be “White” (Eskew 1997; Silver 1991, 196–7). The terrorism was both overt and state-supported; known White terrorists like Robert E. “Dynamite Bob” Chambliss were allowed to keep their municipal jobs and were even given assistance in their crimes by police lookouts (Eskew 1997, 60).

Restrictive contracts—while not government-generated—certainly had the approval of the American governmental system. Thirteen state supreme courts upheld restrictive covenants based on the idea that they were “private agreements,” and therefore not subject to anti-discrimination laws (Rothstein 2017, 81–82). In 1926, The United States Supreme Court’s *Euclid v. Ambler* decision upheld exclusionary zoning and restrictive covenants based on the “private agreement” argument (Rothstein 2017, 82). In 1931, President Herbert Hoover’s homeowner conference produced the Bartholomew Report, which encouraged restrictive covenants (Rothstein 2017, 82–83). The 1938 FHA handbook recommended that deed restrictions be used so that higher ratings be preserved via segregation (FHA 1938; Rothstein 2017, 83–84). The result was that property bought with FHA loans usually came with a required deed restriction with racial language (Rothstein 2017, 84–85).

These practices and policies remained fully intact until 1948, when *Shelley v. Kraemer* decision stated that the state courts’ involvement in enforcing racial discrimination was unconstitutional and a companion piece banned federal courts from doing the same (Johnson 1962; Rothstein 2017, 85; SBM 1997). Even then, agencies such as the FHA resisted the decision; there was a 2-year delay between *Shelley* and the FHA no longer requiring restrictive covenants on new mortgages (Rothstein 2017, 86–87). After that, the FHA encouraged buyers and sellers to make “gentlemen’s agreements” instead (Rothstein 2017, 88). Finally, in 1962, President John F. Kennedy issued an executive order prohibiting the use of federal funds to support racial discrimination in housing, forcing the FHA to stop financing subdivision developments that openly restricted itself from Black buyers (Kennedy 1962; Rothstein 2017, 88).

### Environmental Racism

One notable consequence of uneven development in the United States has been that of environmental racism (Bullard 1994; Colten 2008; Pulido 2000). Robert Bullard defined

environmental racism as “any policy, practice, or directive that differently affects or disadvantages (whether intended or unintended) individuals, groups, or communities based on race or color” (Bullard 1994, 98). Historically, the economic and social benefits of development and industry have been received by White people while the burden of costs goes to people of color (Bullard 1994, 98; Godsil 1991, 408; O’Connell 2012, 721). Despite frequent claims to the contrary, this disparity is not explained simply by class differences—the disproportionate effects on African Americans are present even when class is held constant (Bullard 1994, 98–99; Godsil 1991, 395; Lichter, Parisi and Taquino 2012, 383). Bullard reported that the EPA found that White communities are better protected by environmental regulations than communities of color (Bullard 1994, 100). In most cases, the environmental disparities can be traced back to zoning and rezoning—activities which often take place without minority representation in the decision-making process (Bullard 1994, 101–2; Godsil 1991, 399). Susan Cutter’s conception of social vulnerability includes many factors involving environmental racism, including race itself, levels of poverty, historical neglect of infrastructure, employment opportunities, education opportunities, and many others (Cutter 2006; Cutter et al. 2000).

The economic and industrial growth in the 1970s South exacerbated issues of neglect and disparities, especially between Black and White people (Bullard 1994, 23; Colten 2008, 76). Whatever economic development took place in the South during the 1970s, Black people certainly did not benefit from it in the same ways that White people did—if they benefitted at all (Bullard 1994, 24–25; 2019, 239). As jobs moved away from Black urban areas and toward White suburbs, Black people found themselves dealing with pollution issues for the first time (Bullard 1994, 26). Prior to the 1970s, many Black activists had worked for relaxed pollution regulations so that they could keep jobs in their communities (Bullard 1994, 26–27).

Bullard provides empirical evidence for environmental racism in numerous reports that were publicly available prior to many modern pollution events. For example, The Commission for Racial Justice’s *Toxic Wastes and Race* report found that (1) race is the single most important factor in the location of abandoned toxic-waste sites; (2) three of five African Americans live in communities with abandoned toxic waste sites; (3) 60% of African Americans live in communities with one or more abandoned toxic waste sites; (4) three of the five largest commercial hazardous-waste landfills are in communities of color; and (5) African Americans are heavily overrepresented in the cities with the largest number of toxic waste sites (Bullard 1994, 102; CRJ 1987).

While these disparities can be found across the country, the American South has especially struggled with environmental racism. By the 1970s, States like Texas, South Carolina, North Carolina, and Florida led the country in polluting industries due to their relaxed standards (Bullard 1994, 27; Colten 2008). This was due to a strong attitude of “don’t bite the hand that feeds you” (Bullard 1994, 28). Many industries,

especially waste disposal, exploited the Black communities that were deemed to have the least amount of political agency (Bullard 1994, 27). Bullard illustrated the general insensitivities with the following vignette:

... a paper mill spewing its stench and poison in one of Alabama's poverty-ridden blackbelt counties led Governor George Wallace to declare: "Yeah, that's the smell of prosperity. Sho' does smell sweet, don't it." (Bullard 1994, 29)

Bullard went on to describe the southern United States as a "third world," where "political bosses encourage outsiders to buy the region's human and natural resources at bargain prices" (Bullard 1994, 97). Based on his interviews with people of color in the Southern United States, Bullard notes that some minority residents feel that their areas are becoming "sacrifice zones" (Bullard 1994, 103)—a trend that persists to this day (e.g., Ward 2021).

Laura Pulido reported that a large portion of the social science literature was not fully recognizing the issue of environmental racism, noting that Robert Bullard was one of the few scholars who had captured the impacts of both structural and hegemonic racism (Pulido 2000, 12). The historical tendency of social science research to focus on "siting, intentionality, and scale" has falsely led to the notion that environmental racism is discrete objects, rather than ongoing social relationships (Pulido 2000, 33). Pulido uses the concept of "White Privilege" to explain how overtly racist decisions made in the past are perpetuated by seemingly non-racialized decisions in the present; if a White family is situated in a neighborhood that was created with overtly racist intents, the present-day desire to protect generational wealth will have racist impacts, regardless of the personal intentions of the individual (Pulido 2000, 15–16). During the Trump administration, overtly racist tactics—or "spectacular racism"—have also played a role in shaping spaces (Pulido et al. 2019, 520–1). Pulido et al. argue that Trump's use of spectacular racism in his messaging allowed for a dehumanizing process to occur, which made environmental deregulation more palatable to the public (Pulido et al. 2019, 522).

### *Historical Example: Texarkana*

An example of both environmental racism and cascading disasters occurred in Texarkana, Texas involving the Koppers Company and the Carver Terrace community—a predominantly African American neighborhood (Bullard 1994, 110–2; Čapek 1993, 10; EPA 2022). Because the surrounding area was dominated by racially exclusive deed restrictions, Carver Terrace was one of the few places that African American residents could live that had paved roads, fire insurance, and other necessities (Čapek 1993, 10). The 62-acre Koppers Company wood treatment facility operated from 1903 to 1961 and was actively dumping toxins into a "wastewater lagoon" (ATSDR 1993, 1; Bullard 1994, 110; EPA 2022). Unusual flooding over the course of two decades interacted with the facility's

site pollution and made the soil and groundwater hazardous, as defined by EPA studies (ATSDR 1993, 1; Bullard 1994 p.110; EPA 2022).

Residents of the Carver Terrace community lived under the assumption that their neighborhood was in a 100-year floodplain (ATSDR 1993; Bullard 1994, 110–1). However, residents reported that they experienced several flooding events per year, resulting in contaminants being brought into their residential living spaces (ATSDR 1993, 3). Health concerns of the community included "... skin rashes, cancers, negative birth outcomes"; concerns which were later confirmed as public health issues by the Texas Department of Health (ATSDR 1993, 4–5).

In response to community outcries from 1990 to 1992, Congress mandated that the EPA relocate the residents, since they did so little to prevent and mitigate the situation (Bullard 1994, 110; Čapek 1993, 11). However, the EPA's relocation efforts were severely undermined by a series of the agency's missteps: (1) a poorly written and insensitive letter of notification was issued by the EPA that threatened, rather than reassured, the residents; (2) the EPA ignored the reality of property values; in this part of the South, the long-time Black residents would not be able to afford comparable property with the compensation that they were given; (3) the EPA rejected a request to relocate the community as a community; and (4) the EPA never acknowledged the trauma of the move (Bullard 1994, 111–2).

As recently as 2016, former residents of the Carver Terrace community have continued to demonstrate their concern regarding the contaminated site. Community leaders have called for a monument to be established in the area—not only as a memorial, but to prevent anything else from being built in that location going forward (KSLA Staff 2016). One former resident summarized her concerns:

It is our contention that the Carver Terrace group is to ensure that no one lives on this land anymore and we want to make sure that this poisonous land is known for what havoc it caused all of us who lived there. Bess Gamble-Williams (KSLA Staff 2016)

### **Ongoing Issues**

The following section outlines some of the ongoing issues and risks that are posed by environmental racism that can be addressed through community planning and emergency management. Then, some of the projected threats are introduced—namely those driven by climate change. Finally, some of the proposed solutions to these problems are reviewed.

### *Continued and Worsening Threats*

There is already a long and tragic history of racist practices disproportionately exposing African American communities to disasters (e.g., Bullard 1994; Čapek 1993; EPA 2022; KSLA Staff 2016). The case of the Koppers Company poisoning the Carver Terrace community by way of unexpected flooding

gives an example of how a natural disaster can cause an anthropological disaster (ATSDR 1993, 1; Bullard 1994, 110; EPA 2022). Thus, it is reasonable to assume that the situations of the past could repeat themselves, especially when considering the exacerbating effects of climate change. The existing literature addresses the intersection of community planning and emergency management from a variety of theoretical and practical perspectives. Brenden Gleeson observed that a shift away from “sustainability” and toward “resilience” has been underway in the planning literature, which has shown to be appealing to a more wide-ranging audience (2016). In looking toward the future of planning, Gleeson comments that humanity’s expansion across the globe has changed and will continue to change how people will interact with nature in two ways: (1) human structures can be compromised by disasters, causing more complex disasters and (2) humans are present in more places than ever before, making human harm of byproduct of nearly every natural disaster (Gleeson 2016, 245). The reviewed literature indicated that future disasters—especially climate-related events—will have disproportionate health and economic impacts on “communities that are least likely to cope with, resist, and recover from the impacts of climate change” (Shonkoff et al. 2011, S499). This uneven impact on poor and minority communities will be fueled in part by the increased costs for goods following a disaster event and the loss of jobs that are likely to be experienced in industries that often hire minority workers, such as agriculture, construction, and hospitality (Shonkoff et al. 2011, S499).

Flooding has been identified as an increasing threat due to climate change (Kirshen et al. 2008; Mallakpour and Villarini 2015). Coastal flooding has the potential to be exacerbated by sea level rise and increasing storm surges—both of which are known byproducts of climate change (Kirshen et al. 2008, 438–9). Kirshen and colleagues found that, by 2050, sea level rise impacts will be severely felt in areas like Boston and Atlantic City (2008, 448). Storm surge increases pose a less-predictable threat, with the rate of pollution and emissions having a significant impact on possible outcomes (Kirshen et al. 2008, 448). The authors conclude by stating, “... based on previous storm surge damages in the region, the economic and environmental damages associated with these changes will be severe ...” (Kirshen et al. 2008, 448). Landlocked areas are not immune to the threat of increased flooding; rainfall is expected to increase in both volume and frequency since warm air can carry more evaporated water (Mallakpour and Villarini 2015). Iman Mallakpour and Gabriele Villarini’s study of the United States Geological Survey stream gauge daily records revealed that both increased rainfall and overdeveloped land contributed to a significant increase in flooding in the Central United States (2015, 253). Peterson et al. found that buyout programs at all levels of government have become a common mechanism for disaster recovery, with approximately ten thousand vulnerable properties or structures being purchased in the United States (2020, 15). However, buyout programs have been found to have disparate impacts for minority and low-SES homeowners (Greer, Binder and

Zavar 2022; Nelson and Molloy 2021). Based on FEMA data, Nelson and Molloy found that Black homeowners were less likely to receive a buyout offer, and the offers made were at lower values than those received by White homeowners (2021, 11). Greer et al. found similar patterns in state-sponsored buyout programs that tend to exclude underprivileged homeowners (2022, 163). These findings indicate that contemporary practices—particularly relevant in the context of increased flooding from climate change—continue to exacerbate the impacts of residential segregation rather than creating just residential outcomes.

Heat waves have also been identified as a major source of disaster risk that are likely to increase in the near future due to climate change (Shonkoff et al. 2011; Wilson 2020). In their analysis of climate disaster literature in California, Shonkoff et al. identified a “climate gap,” which refers to “disproportionate and unequal implications that climate change and climate change mitigation hold for people of color and the poor” (Shonkoff et al. 2011, S486). That study predicted that Californian communities of color and of low socioeconomic status would be more likely to experience challenges in coping, resisting, and recovering from extreme climate events as a response to their findings regarding heat waves in Californian urban centers (Shonkoff et al. 2011 p. S499). In 2020, Bev Wilson continued to search for evidence of the climate gap in urban heat management (Wilson 2020). In that analysis, the HOLC maps were used to identify areas of historic “redlining” (Wilson 2020, 444). Wilson found that areas in which redlining was prevalent had less vegetative coverage and higher average temperatures than their “greenlined” neighborhood counterparts (Wilson 2020, 449–52). Neglect of heat-related infrastructure—as found by Shonkoff et al. and Wilson—will likely cause the gap in climate adaptability to widen along racial and residential lines.

### *Diagnosing the Issues*

Though scholars like Wilson (2020) have used the HOLC redlining maps as proxies for disinvestment and segregation, others argue that historical redlining maps alone are not a sufficient method for identifying all areas that are made more vulnerable due to racist policy (Perry and Harshbarger 2019). Andre Perry and David Harshbarger point out several deficiencies in the practice of using the HOLC maps as a blueprint for equity programs, due to the population changes that have occurred since the HOLC maps were drawn (2019). While the HOLC maps might be a reasonable starting point for locating underserved areas, some redlined areas have a lower African American population per capita than the non-redlined parts of that city—such as Detroit, Michigan; Boston, Massachusetts; and Philadelphia, Pennsylvania (Perry and Harshbarger 2019). In cities like Los Angeles, California and Denver, Colorado, redlined areas are predominantly populated by minorities, but the makeup of those neighborhoods has shifted away from African American and toward Latinx populations (2019). In cities in which development has rapidly increased, like Dallas, Texas or Sacramento,

California, the ratio of redlined areas to modern development is simply too small to provide a useful policy target because it ignores the underserved neighborhoods that have developed since the mid-1900s (2019). Similarly, there is a limitation because not every city in America has a map from the HOLC, including the notable lack of maps for Washington, D.C. and Las Vegas, Nevada (2019).

### *Proposed Solutions*

To recognize community needs more effectively and equitably, several potential solutions could be implemented. Data from the United States Census could be used to identify neighborhoods with disproportionately higher minority demographics and disproportionately lower wealth to identify areas in need of improved investment and policy (Perry and Harshbarger 2019). Richard Rothstein outlined several recommendations regarding how neighborhoods should be targeted for improvement programs (2017, 195–213). For example, neighborhoods in which the African American population is “plus or minus 10 percent” of the region-wide average could be targets for pro-integration programs (Rothstein 2017, 204). This method would certainly be less precise than using the HOLC maps but would include many more African Americans who are experiencing modern segregation. Another approach could be that pro-integration programs use restrictive covenants and deed agreements as a historical basis for their geospatial positioning (Rothstein 2017, 203–4).

After analyzing over 30 local emergency operation plans from around the United States, Gooden et al. found several ways in which emergency managers can approach existing inequities in the committees in which they serve (2009, 9–10). First, localities can commit to collecting reliable demographic data that will help identify vulnerable populations (Gooden et al. 2009, 9). Second, emergency operation plans should specifically consider the needs of vulnerable populations and account for them in detail (Gooden et al. 2009, 10). Third, localities should consider the unique needs of those people with disabilities and those who do not speak English; in other words, localities should avoid using a “one-size-fits-all” approach to emergency management (Gooden et al. 2009, 10). Fourth, emergency managers should make an effort to improve their cooperative relationships with nongovernmental organizations in their delivery of services (Gooden et al. 2009, 10). One way to implement such reforms to emergency management might come from “separate annexes dedicated to emergency management services for vulnerable populations,” which could advocate for improved emergency planning on behalf of the underrepresented groups (Gooden et al. 2009, 10). Wilson argues that both procedural equity and recognitional equity are needed to effectively implement heat-related emergency management policies (2020, 444–53). By pursuing equity through the use of information and data to focus upon and actively target inequalities, new policy solutions may emerge (Wilson 2020, 453).

### **Types of Disasters**

To classify the types of disasters that can threaten communities, the framework created by Berren, Beigel, and Ghertner is used (1980). In this model, each disaster event can be classified along five dimensions: (1) natural events versus anthropological events; (2) duration of the event; (3) degree of citizen impact by the event; (4) potential or likelihood for the event to occur or reoccur; and (5) control over future event impacts (Berren, Beigel and Ghertner 1980). If an analysis excludes any of the five elements of the disaster, that analysis might fail to consider a significant factor in what makes a disaster hazardous. Thus, analysis of community planning policies must consider all five dimensions to identify exacerbating impacts. This approach to hazard evaluation is supported by Cutter et al.: “The multifaceted nature of vulnerability demands a thorough consideration of both the biophysical and the social systems that give rise to hazards” (2000, 107). If a particular residential policy causes any negative changes in the way a community is exposed to a disaster event, then it can be viewed as having a negative impact on that community. Furthermore, this would have a racial impact if that policy were specific to an African American community or if the policy outcome is specific to an African American community.

### *The National Preparedness Goal*

To properly discuss the role that emergency management plays in disaster event preparedness, the National Preparedness Goal (NPG) is used as a conceptual framework (FEMA 2015a, 2015b). Created by FEMA under the direction of the Obama Administration, the NPG established five mission areas necessary to keep the “whole community” safe and secure (FEMA 2015a, 2015b, 3). Those five mission areas are: (1) Prevention; (2) Protection; (3) Mitigation; (4) Response; and (5) Recovery (FEMA 2015a, 2015b).

If a particular residential planning policy lowers a community’s capacity to perform in any of the mission areas, then it can be viewed as having a negative effect on that community. Furthermore, this would be a racialized effect if the policy is specific to an African American community or if the policy outcome is specific to an African American community. Thus, evaluation of community planning policies must consider all five areas of preparedness to determine whether a policy hinders a community’s safety and security.

The NPG has not yet been fully utilized in the evaluation of community planning policies. Prior to the release of the first edition of the NPG in 2011 (FEMA 2011), authors focused upon the “all-hazards” emphasis within the National Strategy for Homeland Security (OHS 2002), since the five core mission areas had not yet been introduced (Caruson and MacManus 2006; Caudle 2005; Wise 2006). Because the “all-hazards” approach called for the cooperation of every level of government, the role of community planners was most frequently alluded to when local officials were included in the formulation and execution of emergency response plans

**Table 1.** Emergency Management Considerations for Equitable Residential Planning Policies.

National preparedness goal <sup>a</sup>	Disaster dimensions <sup>b</sup>				
	<i>Natural events versus human-made events</i>	<i>Duration of event</i>	<i>Degree of impact felt by citizens in the event</i>	<i>Potential for event to occur/ reoccur</i>	<i>Control over future event impacts</i>
Prevention	<input type="checkbox"/> Is placement of housing facility in an area prone to natural hazards? <input type="checkbox"/> Is placement of housing facility in an area prone to human-made disasters?	<input type="checkbox"/> Will the residents be able to sustain themselves if the event prevents contact with other areas/regions? <input type="checkbox"/> Are the residents being included in the planning process regarding industrial activity and construction?	<input type="checkbox"/> Is housing affordable because the area is seen as hazardous? (i.e., floodplain) <input type="checkbox"/> Are the residents' occupations tied to the commercial interests of the area? Are they captive to the industry?	<input type="checkbox"/> Will adequate warning will be available to all residents prior to an event? <input type="checkbox"/> Are the residents of the housing facility likely to experience the disaster more than once?	<input type="checkbox"/> Will residents be able to form a governing body that can create or influence policy? <input type="checkbox"/> Are there adequate community centers in which residents can gather and share policy ideas?
Protection	<input type="checkbox"/> Are there protections in place for natural hazards? <input type="checkbox"/> Are there protections in place for human-made disasters?	<input type="checkbox"/> Is the local infrastructure capable of withstanding a long-term natural hazard event? <input type="checkbox"/> Is the local infrastructure capable of withstanding a long-term anthropological disaster event?	<input type="checkbox"/> Do residents have access to hardware stores or other resources for sale? <input type="checkbox"/> Does the average resident have enough wealth to afford personal protective gear?	<input type="checkbox"/> Are residents aware of the likelihood of a disaster event happening in their area? <input type="checkbox"/> Does the community have access to education infrastructure that all members can access?	<input type="checkbox"/> Does the housing facility have adequate amounts of vegetation coverage? <input type="checkbox"/> Is there an adequate water management system in the area?
Mitigation	<input type="checkbox"/> Will residents have access to free mitigation materials? <input type="checkbox"/> Are legal limits in place to limit industry impacts?	<input type="checkbox"/> Will residents have access to relief centers? <input type="checkbox"/> Will residents be able to effectively evacuate their homes?	<input type="checkbox"/> Is the housing facility made of materials that are suitable for the local climate? <input type="checkbox"/> Does the community have access to emergency plans prior to an event?	<input type="checkbox"/> Does the community engage in regular practice or drills for disaster events? <input type="checkbox"/> Are there plans in place that assume novel events might occur? Are they accessible to the community?	<input type="checkbox"/> Will there be "debrief" town halls to review the performance of the locality during the event? <input type="checkbox"/> Does the average resident have the means to take time off work to prepare for the event?
Response	<input type="checkbox"/> Is housing facility within service area of emergency response personnel? <input type="checkbox"/> Would a disaster make it hard or impossible to reach residents?	<input type="checkbox"/> Is the community equipped for self-rescue? <input type="checkbox"/> Are there NGO partnerships that can assist in the delivery of services?	<input type="checkbox"/> Will response teams be reflective of the community and/or culturally competent? <input type="checkbox"/> Does the locality have adequate data regarding the community population?	<input type="checkbox"/> Are alert systems catered to the needs of the community? <input type="checkbox"/> Is it likely that multiple events cascade and create complex hazards?	<input type="checkbox"/> Are first responders trained in the possible scenario of a cascading event? <input type="checkbox"/> Are residents likely to have comorbidities that might interact with the possible event?
Recovery	<input type="checkbox"/> Does the community have access to adequate insurance? <input type="checkbox"/> Are accountability mechanisms in place for industry-caused disaster?	<input type="checkbox"/> Will medical services be able to reach the disabled if the disaster is long-term? <input type="checkbox"/> Is the locality prepared to call for state/federal assistance in clean-up on behalf of the community?	<input type="checkbox"/> Are there rehabilitation facilities near the housing facility? <input type="checkbox"/> Are there NGO partnerships that can commit to assisting in recovery services?	<input type="checkbox"/> Does the community have the ability to relocate after the disaster? <input type="checkbox"/> Are there contingency systems in place for back-to-back events reducing local capabilities?	<input type="checkbox"/> Do voluntary buyout programs consider historical inequities when calculating "fair market" offers? <input type="checkbox"/> Are the community members able to stay in contact if the disaster requires them to relocate?

<sup>a</sup>FEMA (2015a, 2015b).<sup>b</sup>Berren et al. (1980).

(e.g., Caruson and MacManus 2006, 531). The observable literature published after the release of the first edition of the NPG references the document, but does not specifically use the mission areas as a framework of analysis (e.g., Bowman and Parsons 2013, 66; Hu, Knox and Kapucu 2014).

FEMA last updated the NPG in 2015 and has not created a third edition (FEMA 2015a, 2015b). The legal code that created the NPG (6 UCS 743) does not require updates for the NPG. The National Response Framework—most recently published in 2019—references the NPG, indicating that FEMA still regards the NPG as relevant to its operation (FEMA 2019).

## Discussion

### *Proposed Matrix of Considerations*

Based on the existing literature, emergency management, community planning, and racial inequities are all interconnected. Therefore, present and future policies must be evaluated for a wide range of elements to determine whether an alternative policy is more suitable. Table 1 provides an original checklist of some of the questions that should be asked regarding residential planning policies. These questions draw from the reviewed literature and are intended to address some of the issues that have been identified in this study in such a way that is accessible to practitioners of varying backgrounds and experiences. Ideally, these questions would be asked prior to the policy's enactment; however, this evaluation template could also be used to challenge existing policies.

The purpose of this checklist is to encourage cooperation between housing authorities, emergency managers, and local policymakers. Each of those groups would likely need to establish their own practices for promoting racial equity separately from this framework. Admittedly, a weakness of this framework is that it does not specify where and when it should be used in evaluating a policy. If this framework was only applied to affluent areas at the behest of affluent citizens, it would do little to improve the situations of the underprivileged. However, this shortcoming does not preclude the framework from serving as a template for an equitable partnership between community planning authorities, emergency managers, and local policymakers.

### *Selected Examples from the Checklist*

To provide further explanation of the checklist, one example from each row and each column is discussed in further detail.

*Prevention/natural events versus human-made events.* “Is the placement of the housing facility in an area prone to man-made disasters?” This question is a direct response to the environmental disasters that have occurred in minority communities caused by toxic waste facilities. Aside from the dangers of being exposed to the toxins alone, the proximity to a toxic waste site increases the likelihood that a natural disaster—such as a

flood—will be a much more complex event—like a flood of toxic wastewater.

*Protection/duration of event.* “Is the local infrastructure capable of withstanding a long-term natural disaster event?” This question encourages community planners to imagine a scenario in which a disaster places unusual strain on the infrastructure of a community. Will an unpaved road remain usable in the event of a monsoon? If residents become stranded by a washed-out road, their capacity to recover from the disaster may be drastically reduced.

*Mitigation/degree of impact felt by citizens in the event.* “Is the housing facility made of materials that are suitable for the local climate?” This question encourages community planners to work with policymakers in establishing building codes that take disasters into account. Examples might include freeze-proofing pipes or using materials that are capable of withstanding elevated levels of humidity. While this will likely result in higher building costs, requiring higher standards in building materials can be a powerful tool against disasters that the individual citizen cannot typically wield on their own.

*Response/potential for event to occur/reoccur.* “Is it likely that multiple events cascade and create complex hazards?” Emergency managers should consider geospatial information when determining emergency plans, just as community planners should consider disaster hazards when approving structure locations. The most obvious example of this being an issue is when residential structures are built in floodplains—even if they are thought to be infrequent floodplains.

*Recovery/control over future event impacts.* “Are the community members able to stay in contact if the disaster requires them to relocate?” This question alludes to the idea that a community that has experienced a disaster might be able to advocate for preventative changes in the future—but only if they are able to organize afterward. In scenarios in which community members are dispersed, they are less capable of lobbying for meaningful progress in the areas which they were required to leave.

## Conclusion

The purpose of this paper is to use the existing literature to answer two questions: Has racist residential planning policy in community planning impacted African American communities via emergency management? If such disparities exist, what are meaningful approaches to emergency management that can combat those effects?

The resulting literature review suggests that racist residential planning policies have had a detrimental impact on the environmental safety of African American communities regarding both natural and anthropological disasters. Furthermore, the negative impacts of climate change threaten to harm African American communities in continuously disproportionate ways. Based on

that assessment, there is a need for equitable solutions in residential planning policy, emergency management policies, and the policies that are at the intersection of those two policy areas. Many authors have provided recommendations on ways to ameliorate community planning and emergency management, but there is not currently a synthesized framework for practitioners to use in their work.

Based on the concepts presented by social equity, community planning, emergency management, and environmental policy literature, an interdisciplinary approach was used to create an original checklist of considerations for emergency managers, community planners, and policymakers to use in a collaborative manner to proactively address potential threats to their constituents and communities. Future research endeavors could expand this checklist to consider different types of marginalized groups to better account for the needs of an increasingly diverse population. Furthermore, this article frames the narrative in an American context, making some of these recommendations less useful to practitioners in other countries. Nonetheless, the proposed matrix of considerations can provide a starting point for future conversations among policymakers.

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