

RELOCATING JUSTICE

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ABSTRACT

Managed retreat—the planned relocation of people facing imminent climate threats—is an inevitable part of future climate adaptation in the United States. Given that Black, Brown, and low-income communities are disproportionately vulnerable to climate hazards, managed retreat has significant justice implications. This Article explores what I call an apparent “justice paradox”—two “justice problems” with managed retreat that seem to point to opposite solutions. On the one hand, managed retreat can be inaccessible to marginalized communities, many of whom lack the resources to successfully navigate the relocation process. This justice problem suggests that decision-makers should prioritize managed retreat for marginalized communities since they are in greater need of relocation assistance. On the other hand, managed retreat can disproportionately harm marginalized communities, who may experience greater relocation-related psychosocial and financial harms. This justice problem suggests that decision-makers should avoid managed retreat for marginalized communities.

This Article argues that although these justice problems appear to indicate opposite solutions, they in fact reveal the same structural flaws with our current approach to climate-induced relocation and therefore call for the same remedies. First, both justice problems reflect the logic of racial capitalism and, specifically, the limitations of market-based economic approaches to managed retreat. Second, both problems manifest the ongoing failure to conceptualize and seize managed retreat as an opportunity to redress historic and systemic injustices. Finally, both problems are rooted in a lack of self-determination for marginalized communities facing climate threats. Addressing these

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structural issues will require fundamental transformations in how we think about climate adaptation.

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INTRODUCTION

Betty Ricks, a Black resident of Smithfield, Virginia, lost and rebuilt her home after Hurricane Floyd in 1999 and then again after Tropical Storm Ernesto in 2006.¹ More flooding followed the 2006 storm.² Twice rescued from her home by boat, Ricks felt that the only way out of this costly, incessant cycle of flooding and rebuilding was to apply for a buyout—that is, ask the government to purchase her home so she could relocate.³ Ricks and her neighbors sought federal buyout funding on two separate occasions.⁴ Both times, their applications were denied for unknown or unspecified reasons.⁵ Ricks lives in perpetual fear of the next flood: She keeps her television on to look out for storm warnings and has wrapped her important documents in plastic bags and stored them in a trunk in her bedroom.⁶

Meanwhile, in the predominantly Black coastal community of Edgemere, New York, Kimberly Smalls struggled to unlock government funding to rebuild her family home after Hurricane Sandy.⁷ After unsuccessfully navigating convoluted city, state, and

1. Alex Lubben, Julia Shipley, Zak Cassel & Olga Loginova, *Trapped in Harm's Way as Climate Disasters Mount*, CTR. FOR PUB. INTEGRITY (Aug. 3, 2022), <http://publicintegrity.org/environment/harms-way/disasters-mount-climate-relocation-assistance> [<https://perma.cc/8AYZ-VHV4>].

2. *Id.*

3. *Id.*

4. *Id.*

5. *Id.*

6. *Id.*

7. Amir Khafagy, *She Survived Hurricane Sandy. Then Climate Gentrification Hit*, GUARDIAN (Apr. 18, 2021, 5:00 PM), <https://www.theguardian.com/us-news/2021/apr/18/hurricane-sandy-new-york-far-rockaway-climate-gentrification-hit> [<https://perma.cc/BL27-7ZGA>].

federal aid programs for six years, Smalls was told that she no longer qualified for rebuilding funds and that her only remaining option was to sell her home to the city and relocate.⁸ Smalls noticed that nearby Breezy Point and other white communities were able to rebuild and elevate their homes while she and her Black neighbors were offered buyouts.⁹ Ultimately, Smalls felt that she had no choice but to leave the community where she had spent her whole life.¹⁰ Her family moved a few blocks away, to a poorly constructed home with cracked walls and a leaky roof.¹¹ Smalls's husband, who had long battled health issues, died three months later.¹² Smalls links her husband's death to the stress of relocation: "He didn't even survive three months [after] we got the new property The city [gave] us such a runaround; it was out of control."¹³

Over thirteen million people across the United States are facing imminent threats of extreme flooding and other hazards as climate change accelerates.¹⁴ Managed retreat—the planned and coordinated relocation of people out of harm's way—is one climate adaptation strategy.¹⁵ As seawalls, levees, home elevations, and other adaptation mechanisms prove increasingly incapable of withstanding intensifying climate disasters, managed retreat has come to be seen as inevitable, at least for households in the most flood-prone areas.¹⁶ There is no official framework for managed retreat in the United States, and no government agency or process is specifically dedicated to handling climate-induced relocation. Instead, climate retreat is effectuated largely through individual, voluntary property acquisitions, in which

8. *Id.*

9. *Id.*

10. *Id.*

11. *Id.*

12. *Id.*

13. *Id.*

14. See Mathew E. Hauer, Jason M. Evans & Deepak R. Mishra, *Millions Projected to Be at Risk from Sea-Level Rise in the Continental United States*, 6 NATURE CLIMATE CHANGE 691, 691–92 (2016) (discussing projections of the number of people facing extreme climate change events).

15. A.R. Siders, *Managed Retreat in the United States*, 1 ONE EARTH PERSP. 216, 216 (2019) [hereinafter Siders, *Managed Retreat*].

16. Christopher Flavelle, *U.S. Flood Strategy Shifts to 'Unavoidable' Relocation of Entire Neighborhoods*, N.Y. TIMES (Aug. 26, 2020), <https://www.nytimes.com/2020/08/26/climate/flooding-relocation-managed-retreat.html> [<https://perma.cc/3SGY-BBD4>] [hereinafter Flavelle, *U.S. Flood Strategy Shifts*]; see U.S. GLOB. CHANGE RSCH. PROGRAM, IMPACTS, RISKS, AND ADAPTATION IN THE UNITED STATES: FOURTH NATIONAL CLIMATE ASSESSMENT vol. II, at 73–75 (Reidmiller et al. eds., rev. 2021), https://nca2018.globalchange.gov/downloads/NCA4_2018_FullReport.pdf [<https://perma.cc/JWR2-VSKQ>] (describing future changes due to climate change).

the government purchases properties susceptible to flooding and residents of the properties relocate.¹⁷ To implement buyouts, state and local agencies typically appeal to the Federal Emergency Management Agency (“FEMA”) for hazard mitigation funds, which were not designed to facilitate climate retreat.¹⁸

It is well established that Black, Brown, and low-income communities are disproportionately vulnerable to climate hazards.¹⁹ Examining the justice and equity implications of managed retreat—that is, how marginalized communities interact with, benefit from, and are harmed by climate-induced relocation—is therefore essential. The stories of Betty Ricks and Kimberly Smalls highlight what I call the “justice paradox” of managed retreat—two “justice problems” that seem to point to opposite solutions. After juxtaposing each of their descriptive and normative implications, this Article argues that both justice problems in fact reflect the same structural flaws with our current approach to managed retreat and therefore call for the same solutions. We must reimagine and overhaul our design and implementation of climate-induced relocation if we hope to remedy its justice problems.

On the one hand, managed retreat can be inaccessible to marginalized communities, as Part II of this Article explores. Poor and rural communities generally lack the financial and human resources necessary to successfully maneuver the labyrinthine federal grant application process.²⁰ Even when these communities manage to apply for buyouts—as Betty Ricks and her neighbors did—the slow pace and arbitrariness of buyout programs present additional obstacles. Low-income households often cannot afford temporary housing and other costs associated with the long timeline of the buyout process.²¹ As Ricks knows all too well, nontransparent and seemingly arbitrary eligibility and selection criteria place buyouts inexplicably out of reach of some homeowners.²² Unable to access buyout programs, many

17. See *infra* notes 59–67 and accompanying text.

18. See *infra* notes 62–72 and accompanying text.

19. See *infra* Part I.C.

20. A.R. Siders, *Social Justice Implications of US Managed Retreat Buyout Programs*, 152 CLIMATIC CHANGE 239, 251 (2019) [hereinafter Siders, *Social Justice Implications*].

21. Anna Weber & Rob Moore, NAT. RES. DEF. COUNCIL, GOING UNDER: LONG WAIT TIMES FOR POST-FLOOD BUYOUTS LEAVE HOMEOWNERS UNDERWATER14 (Sept. 12, 2019), <https://www.nrdc.org/sites/default/files/going-under-post-flood-buyouts-report.pdf> [https://perma.cc/Y3U9-SPZB].

22. Siders, *Social Justice Implications*, *supra* note 20, at 247.

marginalized residents either remain stranded in the floodplain like Ricks— anxiously awaiting the next storm and wondering what they will do— or sell their homes at a loss on the open market, often to speculators.²³ This justice problem with managed retreat— that is, its inaccessibility to marginalized communities— suggests that a just approach to retreat would *prioritize* the relocation of marginalized communities since they are more vulnerable to climate hazards and in greater need of relocation assistance. This is the “harm-from-staying” justice problem.

On the other hand, managed retreat may disproportionately target and harm marginalized communities, as Part III of this Article contends. Government agencies conduct cost-benefit analysis (“CBA”) to determine which households to target for buyouts, and according to the standard economic logic of these analyses, it is more cost-effective for the government to purchase lower-value properties.²⁴ CBA also helps agencies determine which areas to protect-in-place with flood mitigation infrastructure such as seawalls and levees. In these scenarios, economic logic is more likely to result in protective infrastructure for higher-value properties.²⁵ For these and other reasons, marginalized households— like Kimberly Smalls’s— are more likely to be bought out, while higher-income households— like those in Breezy Point— are more likely to have the option to remain in their communities. Buyouts and relocation may also have particularly detrimental impacts on marginalized households. In part because of traumatic histories of forced removal and housing discrimination, residents like Smalls are more likely to feel compelled or coerced into

23. See David Hunn & Matt Dempsey, *In Houston’s Flooded Neighborhoods, Real Estate Investors See an Opportunity*, HOUS. CHRON. (May 10, 2018, 5:19 PM), <https://www.houstonchronicle.com/news/houston-texas/houston/article/houston-harvey-flood-homes-real-estate-investor-12901718.php> [https://perma.cc/7BVK-3A2N].

24. See Eric Tate, Aaron Strong, Travis Kraus & Haoyi Xiong, *Flood Recovery and Property Acquisition in Cedar Rapids, Iowa*, 80 NAT. HAZARDS 2055, 2064–66 (2016) (applying CBA to decisions to fund buyouts).

25. See Jeremy Martinich, James Neumann, Lindsay Ludwig & Lesley Jantarasami, *Risks of Sea Level Rise to Disadvantaged Communities in the United States*, 18 MITIGATION & ADAPTATION STRATEGIES FOR GLOB. CHANGE 169, 175 (2013) (“In general, the model estimates that high-value land will be protected with hard structures or nourished with sand, while low-value land will be abandoned.”); Kelly McGee, *A Place Worth Protecting*, 88 U. CHI. L. REV. 1925, 1925 (2021) (“This approach has resulted in higher-property-value communities receiving a disproportionate share of mitigation infrastructure, while lower-income communities are either left without protection or relocated.”).

accepting buyout offers.²⁶ Communities of color may perceive buyout programs that are technically “voluntary” as tools of racialized displacement. Black, Brown, and low-income communities may also experience greater relocation-related psychosocial and financial harms, such as the mental strain that Smalls links to her husband’s demise.²⁷ This justice problem with managed retreat—that is, its disproportionate adverse impacts on marginalized communities—suggests that a just approach to retreat would *avoid* relocation of marginalized communities. This is the “harm-from-relocating” justice problem.²⁸

Although the harm-from-staying and harm-from-relocating justice problems appear to indicate opposite solutions, both of these problems are in fact symptoms of the same root causes, as Part IV of the Article argues. First, both justice problems reflect the logic of racial capitalism and, specifically, the limitations of market-based economic approaches to managed retreat. Second, both problems manifest our failure to conceptualize and seize managed retreat as an opportunity to redress historic and systemic injustices. Finally, both problems are rooted in a lack of self-determination for marginalized communities facing climate threats. By tackling these root causes—which will

26. Daniel H. de Vries & James C. Fraser, *Citizenship Rights and Voluntary Decision Making in Post-Disaster U.S. Floodplain Buyout Mitigation Programs*, 30 INT’L J. MASS EMERGENCIES & DISASTERS 1, 4, 19–20 (2012) [hereinafter de Vries & Fraser, *Citizenship Rights*].

27. See Devon J. McGhee, Sherri Brokopp Binder & Elizabeth A. Albright, *First, Do No Harm: Evaluating the Vulnerability Reduction of Post-Disaster Home Buyout Programs*, 21 NAT. HAZARDS REV. 1, 1 (2020) (“Research considering post-buyout impacts on participating households is limited, though studies of buyouts and other relocation efforts have found post-disaster relocation to be associated with psychological distress, unexplained physical ailments, economic hardship, disrupted social networks, and disrupted attachments to place.”).

28. Some marginalized communities—for example, the Indigenous communities of Isle de Jean Charles, the coastal Louisiana town of Jean Lafitte, and New Orleans’s predominantly Black and low-income neighborhoods post-Katrina—have emphatically resisted the prospect of climate-induced relocation and fought to remain in place. See *infra* Part III.A. According to one advocate who works with Tribes, “[W]e have a new kind of Manifest Destiny going on that’s called ‘managed retreat.’” Julie Maldonado, Itzel Flores Castillo Wang, Fred Eningowuk, Lesley Iaukea, Aranzazu Lascrain, Heather Lazrus, Chief Albert Naquin, JR Naquin, Kukuya Margarita Noguera-Vidal, Kristina Peterson, Isabel Rivera-Collazo, M. Kalani Souza, Mark Stege & Bill Thomas, *Addressing the Challenges of Climate-Driven Community-Led Resettlement and Site Expansion: Knowledge Sharing, Storytelling, Healing, and Collaborative Coalition Building*, 11 J. ENV’T STUD. & SCIS. 294, 299 (2021) [hereinafter Maldonado et al., *Addressing the Challenges*]. This resistance to managed retreat among some marginalized communities—along with the perception, whether true or not, that the government wields retreat as a weapon of forced displacement—suggests that retreat of marginalized communities should be avoided.

require fundamental transformations in how we think about climate adaptation—we can address both sides of the justice paradox.

I. CLIMATE ADAPTATION IN THE UNITED STATES

A. *The Need for Managed Retreat*

As growing numbers of people face climate-induced risks of extreme flooding and other hazards, the prospect of managed retreat is gaining traction in the United States. Long considered politically unpalatable—“an attack on Americans’ love of home and private property”—managed retreat is increasingly seen as inevitable, at least for households in the most flood-prone areas.²⁹

After accounting for projected population growth, over thirteen million people across U.S. coastal counties—including almost the entire populations of three counties in the U.S. South—could face inundation by the end of the century.³⁰ Millions more, living in the nation’s inland floodplains and alongside rivers, face rainfall-driven and riverine flooding risks.³¹ Indeed, recent research has found that an estimated 14.6 million properties are currently at risk from a 100-year flood, which has a 1 percent or higher chance of occurring in any given year.³² A FEMA-commissioned study has projected, moreover, that the 100-year flood zone will expand by 40 to 45 percent before the year 2100.³³ These figures do not account for the impacts of other climate disasters, such as wildfires. Staggering numbers of U.S. residents, in other words, face impending destruction of their homes, lives, and livelihoods if action is not taken.

Climate adaptation strategies for reducing hazard vulnerability in flood-prone areas include engineered solutions—like the construction of seawalls or levees to resist encroaching floodwaters or the elevation

29. Flavelle, *U.S. Flood Strategy Shifts*, *supra* note 16.

30. Hauer et al., *supra* note 14, at 691.

31. Oliver E.J. Wing, Paul D. Bates, Andrew M. Smith, Christopher C. Sampson, Kris A. Johnson, Joseph Fargione & Philip Morefield, *Estimates of Present and Future Flood Risk in the Conterminous United States*, 13 ENV’T RSCH. LETTERS 2–3 (2018).

32. Christopher Flavelle, Denise Lu, Veronica Penney, Nadja Popovich & John Schwartz, *New Data Reveals Hidden Flood Risk Across America*, N.Y. TIMES (June 29, 2020), <https://www.nytimes.com/interactive/2020/06/29/climate/hidden-flood-risk-maps.html> [<https://perma.cc/CD6J-T96C>].

33. AECOM, MICHAEL BAKER JR., INC. & DELOITTE CONSULTING, LLP, THE IMPACT OF CLIMATE CHANGE AND POPULATION GROWTH ON THE NATIONAL FLOOD INSURANCE PROGRAM THROUGH 2100 ES-7 (2013).

of homes to accommodate floodwaters—as well as retreat.³⁴ Engineered strategies alone are likely insufficient in the face of looming climate threats. In addition to causing coastal erosion, accelerating beach loss,³⁵ and displacing water to neighboring areas,³⁶ seawalls and levees “can fail or be breached” with devastating consequences, as recent climate disasters have demonstrated.³⁷ In areas built on a porous limestone foundation, such as South Florida, seawalls and levees are ineffective because water flows up through the limestone.³⁸ Beach nourishment, the nation’s primary strategy for coastal protection since the 1970s, is a temporary fix.³⁹ Further, all of these coastal armoring solutions are criticized for “encourag[ing] development in at-risk areas by creating a false sense of security.”⁴⁰ And home elevation cannot reliably protect people and properties: Homes may not be elevated high enough to prevent inundation, especially as sea levels rise and larger floods become increasingly likely; even when homes are sufficiently elevated, residents “may still be exposed to contamination and disease spread by flood waters or isolated by flooded roads.”⁴¹

Rather than attempting to protect properties in place through engineered solutions, retreat seeks to relocate people and properties away from flood risk. Unlike seawalls, levees, beach nourishment, and home elevation, retreat is a *permanent* hazard mitigation solution: When people move out of a flood-prone area and their properties become open space, future damage and destruction in the area is

34. Siders, *Managed Retreat*, *supra* note 15, at 217.

35. Arlan Brucal & John Lynham, *Coastal Armoring and Sinking Property Values: The Case of Seawalls in California*, 23 ENV’T ECON. & POL’Y STUD. 55, 56 (2021).

36. Liz Koslov, *The Case for Retreat*, 28 PUB. CULTURE 359, 363 (2016).

37. Siders, *Managed Retreat*, *supra* note 15, at 217. Siders points to Hurricane Katrina, Superstorm Sandy, and the Midwest floods of 2018 and 2019 as evidence of the limitations of coastal armoring. *Id.*

38. Drew Kann, *Other Cities Have Built Levees and Sea Walls. That Won’t Work in Florida*, CNN (Sept. 3, 2019, 2:32 PM), <https://www.cnn.com/2019/09/01/us/sea-level-rise-costs-climate-change-florida/index.html> [https://perma.cc/J7BH-WD5W].

39. Scott B. Armstrong, Eli D. Lazarus, Patrick W. Limber, Evan B. Goldstein, Curtis Thorpe & Rhoda C. Ballinger, *Indications of a Positive Feedback Between Coastal Development and Beach Nourishment*, 4 EARTH’S FUTURE 626, 626, 633 (2016).

40. Siders, *Managed Retreat*, *supra* note 15, at 217; *see also* Armstrong et al., *supra* note 39, at 626.

41. Siders, *Managed Retreat*, *supra* note 15, at 217.

permanently prevented.⁴² Once converted into open space, moreover, these properties reduce future flooding by absorbing stormwaters and can provide ecological and recreational benefits to host communities.⁴³

Retreat may also be the most cost-effective approach to dealing with climate disasters. Federal and state agencies have spent exorbitant sums of money on rebuilding homes destroyed by hazards, paying out insurance claims, and protecting communities in place⁴⁴—often inequitably.⁴⁵ The National Flood Insurance Program (“NFIP”), a FEMA-administered program that offers low-cost insurance to people whose homes are at risk of flooding, has paid \$46.6 billion to repair and rebuild flood-damaged homes since the year 2000.⁴⁶ A highly disproportionate share of these taxpayer funds are spent on “severe repetitive loss properties”—properties that flood repeatedly and have been rebuilt multiple times. As of 2015, severe repetitive loss properties made up 0.6 percent of the 5.1 million properties insured by the NFIP but had received 9.6 percent of total payout funds.⁴⁷ As advocacy organizations have pointed out, “[w]ithout relocation assistance, homes become locked in a cycle of ‘flood, rebuild, repeat’—an unintended consequence of the NFIP’s focus on rebuilding in the wake of a flood.”⁴⁸ Because of the increasing frequency of flood events and rising costs of flood damages, the NFIP is over \$20 billion in debt.⁴⁹ Since 2006, the NFIP has been on the U.S. Government Accountability

42. PEW CHARITABLE TR., PROPERTY BUYOUTS CAN BE AN EFFECTIVE SOLUTION FOR FLOOD-PRONE COMMUNITIES 1 (2022), <https://www.pewtrusts.org/en/research-and-analysis/reports/2022/04/property-buyouts-can-be-an-effective-solution-for-flood-prone-communities> [<https://perma.cc/9HXD-ZHQB>].

43. See Tate et al., *supra* note 24, at 2057 (describing FEMA’s Hazard Mitigation Grant Program, which seeks to “prevent future hazard risk to people and property” by acquiring properties and “reverting [them] in perpetuity to open space, recreational use, or natural floodplains”). As others have noted, buyouts can also prevent gentrification since vacated land cannot be redeveloped—“developers cannot, for example, purchase the land to build luxury housing.” See Weber & Moore, *supra* note 21, at 5.

44. Robin Bronen, *Climigration: Creating a National Governance Framework for Climate-Forced Community Relocation*, 45 N.Y.U. REV. L. & SOC. CHANGE 574, 581 (2021).

45. See *infra* Part III.B.2.

46. NAT. RES. DEF. COUNCIL, SEEKING HIGHER GROUND: HOW TO BREAK THE CYCLE OF REPEATED FLOODING WITH CLIMATE-SMART FLOOD INSURANCE REFORMS 4 (2017), <https://www.nrdc.org/sites/default/files/climate-smart-flood-insurance-ib.pdf> [<https://perma.cc/D8HA-5ZJF>].

47. *Id.* at 2.

48. *Id.* at 4.

49. U.S. GOV’T ACCOUNTABILITY OFF., GAO-20-508, NATIONAL FLOOD INSURANCE PROGRAM: FISCAL EXPOSURE PERSISTS DESPITE PROPERTY ACQUISITIONS 1 (2020).

Office (“GAO”)’s “high-risk” list of programs that threaten the nation’s financial sustainability.⁵⁰

In a recent call for a nationwide climate migration pilot program, the GAO emphasized the potential of climate migration projects to reduce federal fiscal exposure.⁵¹ Pointing to skyrocketing federal expenditures for disaster assistance, which have exceeded \$460 billion since 2005, the GAO reported that “most of the federal government’s efforts to reduce disaster risk are reactive and revolve around disaster recovery” and urged “more strategic federal investments” in climate migration.⁵² Investing in large-scale climate resilience projects, the GAO noted, “can reduce the need for far more costly steps in the decades to come.”⁵³ Engineered solutions to protect communities in place may be cost-prohibitive and, as described above, ineffective or obsolete in the long term. According to one study, bare-minimum coastal protection in the United States would require over fifty thousand miles of coastal barriers in twenty-two states and cost over \$400 billion by 2040.⁵⁴ This figure does not include the “ongoing maintenance costs” that coastal armoring—unlike retreat—requires.⁵⁵ In addition to high initial expenditures and recurring costs of upkeep, coastal armoring also increases future flood costs by attracting new development and putting more people and property in harm’s way.⁵⁶

50. *Id.* at 5–6.

51. U.S. GOV’T ACCOUNTABILITY OFF., GAO-20-488, CLIMATE CHANGE: A CLIMATE MIGRATION PILOT PROGRAM COULD ENHANCE THE NATION’S RESILIENCE AND REDUCE FEDERAL FISCAL EXPOSURE 8 (2020) [hereinafter 2020 GAO REPORT].

52. *Id.* at 4.

53. *Id.* at 3.

54. SVERRE LEROY & RICHARD WILES, HIGH TIDE TAX: THE PRICE TO PROTECT COASTAL COMMUNITIES FROM RISING SEAS 3 (2019), https://climatecosts2040.org/files/ClimateCosts2040_Report.pdf [<https://perma.cc/7FZN-BZPQ>].

55. Miyuki Hino, Christopher B. Field & Katharine J. Mach, *Managed Retreat as a Response to Natural Hazard Risk*, 7 NATURE CLIMATE CHANGE 364, 365 (May 2017).

56. Koslov, *supra* note 36, at 363. After the Great Midwest Flood of 1993, for example, the U.S. Army Corps of Engineers found that it would have cost over \$6 billion to improve the levee systems “to a level that would have eliminated or substantially reduced the flood damages.” DAVID R. CONRAD, BEN MCNITT & MARTHA STOUT, NAT’L WILDLIFE FED’N, HIGHER GROUND: A REPORT ON VOLUNTARY PROPERTY BUYOUTS IN THE NATION’S FLOODPLAINS, A COMMON GROUND SOLUTION SERVING PEOPLE AT RISK, TAXPAYERS AND THE ENVIRONMENT 39 (1998), https://www.nwf.org/~media/PDFs/Water/199807_HigherGround_Report.ashx [<https://perma.cc/EB6W-29S6>]. The Corps noted, moreover, that these levee improvements “would increase discharges for downstream communities during flood events, decrease existing water storage and wetlands areas and result in the future development of thousands of acres of floodplain land. Such development would present a future liability on disaster relief funds.” *Id.*

Retreat, on the other hand, involves high upfront costs but is a permanent solution that eliminates the potential for future losses of property and life.

Given the inherent limitations and high costs of alternative climate adaptation strategies, retreat—for better or for worse—is now considered inevitable. Although the U.S. government has funded voluntary buyouts of individual flood-damaged properties for decades, there is a growing recognition of the need to relocate much larger numbers of people in a planned and intentional manner—ideally, before disaster strikes.⁵⁷ In 2018, the Fourth National Climate Assessment declared retreat “an unavoidable option in some areas along the U.S. coastline.”⁵⁸ A number of federal agencies as well as states have recently announced programs designed to facilitate large-scale relocation of people in vulnerable areas.⁵⁹ To be sure, the United States sorely lacks a coherent managed retreat strategy, and retreat continues to consist largely of ad hoc, autonomous migration through voluntary property buyouts.⁶⁰ But managed retreat—previously regarded as a measure of last resort—is emerging as a major, if not *the* major, climate adaptation tool of the future.⁶¹ Deeper examination of its promises and perils, particularly for marginalized communities disproportionately facing the catastrophic impacts of climate change, is therefore critical.

Voluntary buyouts, on the other hand, would cost \$209 million and “permanently remove or elevate structures above the hazard with no adverse impact to the environment and without inducing future development.” *Id.* at 39–40.

57. See Flavelle, *U.S. Flood Strategy Shifts*, *supra* note 16 (“Now, however, [the idea of relocating entire communities] is rapidly changing amid acceptance that building over and over after successive floods makes little sense.”).

58. U.S. GLOB. CHANGE RSCH. PROGRAM, *supra* note 16, at 64.

59. See, e.g., Christopher Flavelle, *U.S. To Pay Millions To Move Tribes Threatened by Climate Change*, N.Y. TIMES (Aug. 30, 2022), <https://www.nytimes.com/2022/11/30/climate/native-Tribes-relocate-climate.html> [<https://perma.cc/NAL3-EUWB>] [hereinafter Flavelle, *U.S. To Pay Millions To Move Tribes*] (“The Biden administration will give three Native tribes \$75 million to move away from coastal areas or rivers, one of the nation’s largest efforts to date to relocate communities that are facing an urgent threat from climate change.”).

60. See *infra* Part I.B.

61. Flavelle, *U.S. Flood Strategy Shifts*, *supra* note 16.

B. *Voluntary Property Buyouts: “What Passes for Managed Retreat Today”*

Voluntary property buyouts have been described as “the most common form of managed retreat” in the United States.⁶² A more accurate descriptor, however, might be that voluntary buyouts are “what passes for managed retreat today.”⁶³ There is no official framework for managed retreat in the United States, and no government agency or process is dedicated specifically to handling buyouts or climate-induced relocation.⁶⁴ Instead, climate retreat is effectuated largely through individual, voluntary property acquisition, in which the government purchases properties susceptible to flooding and residents of the properties relocate.⁶⁵ Voluntary property buyouts originate from decades-old federal disaster laws⁶⁶ that were intended to provide emergency relief in the aftermath of disasters—not to facilitate climate-induced relocation. Although collective assumptions that existed when these laws were developed—that our environment is relatively stable and that extreme weather events are rare⁶⁷—have since been radically disrupted, policymakers have yet to develop a strategy for the new reality. As Professor Stephanie Stern has written, federal disaster laws “have been conscripted into climate retreat rather than designed for it. Congress and the federal agencies have tacitly retrofitted disaster buyout provisions legislated almost fifty years ago for isolated catastrophic events into a rough-and-ready climate retreat policy.”⁶⁸

62. Siders, *Managed Retreat*, *supra* note 15, at 220.

63. Rob Moore, *As Climate Risks Worsen, U.S. Flood Buyouts Fail To Meet the Need*, YALE ENV'T 360 (Jan. 23, 2020), <https://e360.yale.edu/features/as-climate-risks-worsen-u.s.-flood-buyouts-fail-to-meet-the-need> [<https://perma.cc/Q3VW-X87E>].

64. Michael Isaac Stein, *How To Save a Town from Rising Waters*, BLOOMBERG (Jan. 24, 2018, 10:05 AM), <https://www.bloomberg.com/news/articles/2018-01-24/moving-a-louisiana-town-out-of-the-path-of-climate-change> [<https://perma.cc/55RY-YJQQ>].

65. Although individual property buyouts are by far the most common mechanism for effectuating managed retreat in the United States today, there are a handful of whole-community relocation efforts underway. *See infra* Part II.C. Only one such effort has been completed so far—the resettlement of Indigenous residents of Isle de Jean Charles, Louisiana. *Id.* Relocation of the Alaska Native village of Newtok has begun and is ongoing. *Id.*

66. *See, e.g.*, 42 U.S.C. § 5170c.

67. *See Bronen, supra* note 44, at 608 (“In the United States, disaster response and prevention, including hazard mitigation planning and flood insurance, rest on the concept of a relatively stable environment in which extreme weather events are infrequent, and their impact can be reduced through planning and preparedness.”).

68. Stephanie M. Stern, *Climate Transition Relief*, 72 DUKE L.J. 161, 177 (2022).

The most significant by far of these disaster buyout provisions is FEMA's Hazard Mitigation Grant Program ("HMGP"), which arose from the Stafford Disaster Relief and Emergency Assistance Act of 1988 and can fund almost any project that reduces future disaster-related risk to life or property, including buyouts, home elevations, residential retrofits, and localized levees or floodwalls.⁶⁹ Of the approximately forty thousand total FEMA-funded buyouts since the 1980s, the HMGP—which requires a presidential major disaster declaration to unlock funds⁷⁰—has financed over 37,000.⁷¹ To qualify for buyouts under the HMGP, the locality must have a FEMA-approved local hazard mitigation plan and participate in the NFIP.⁷² The HMGP and other FEMA buyout programs provide up to 75 percent of total buyout costs, requiring the state, locality, Tribe, or homeowner to pay the remaining 25 percent.⁷³ In addition to FEMA, the U.S. Department of Housing and Urban Development ("HUD") funds buyouts through its Community Development Block Grant Disaster Recovery ("CDBG-DR") Program.⁷⁴ CDBG-DR funding also requires a presidential major disaster declaration and is sometimes used by states or localities in conjunction with FEMA funds to cover FEMA's 25 percent cost-share requirement.⁷⁵

Although mostly or entirely funded by the federal government, voluntary buyouts are administered by state, local, or Tribal authorities.⁷⁶ The process is labyrinthine, requiring significant agency

69. *Hazard Mitigation Grant Program*, FED. EMERGENCY MGMT. AGENCY, <https://www.fema.gov/grants/mitigation/learn/hazard-mitigation#reduce-risk> [<https://perma.cc/D7YJ-GKSD>] (last updated Oct. 10, 2024).

70. Kelsey Peterson, Emily Apadula, David Salvesen, Miyuki Hino, Rebecca Kihlslinger & Todd K. BenDor, *A Review of Funding Mechanisms for US Floodplain Buyouts*, 12 SUSTAINABILITY 1, 4 (2020).

71. *Id.* at 3. In addition to the HMGP, two other FEMA programs also fund buyouts: the Flood Mitigation Assistance ("FMA") Program and the new Building Resilient Infrastructure and Communities ("BRIC") Program. *Id.* at 2.

72. Stern, *supra* note 68, at 175–76.

73. Peterson et al., *supra* note 70, at 4 (stating that FEMA's Hazard Mitigation Assistance programs—which include the HMGP, FMA Program, and BRIC Program—"typically require a 25% cost match from eligible applicants including state, local, tribal or territorial governments where buyouts are to occur").

74. *Id.*

75. *Id.*

76. Amanda W. Martin, *Race, Place, and Resilience: Social Equity in North Carolina's Post-Disaster Buyout Program*, 109 (2019) (Ph.D. dissertation, University of North Carolina at Chapel Hill) (on file with University of North Carolina Digital Repository).

capacity and expertise⁷⁷ as well as “intricate coordination across every level of government.”⁷⁸ If there is enough community support for a buyout program after a disaster, the locality decides which properties to acquire, develops a buyout proposal—usually as one of many proposed hazard mitigation projects⁷⁹—and submits the application to the state.⁸⁰ As part of its application, the locality must conduct a FEMA-approved CBA to determine cost-effectiveness, a process that has significant implications for marginalized communities.⁸¹ The state agency then reviews and ranks applications from localities and submits them to FEMA for approval.⁸² FEMA evaluates buyout proposals based on their cost-effectiveness, environmental soundness, and potential for reducing future disaster risks.⁸³

After a buyout application is approved, the cost-share requirement is met, and funds are disbursed, the administering agency implements the buyout. This process includes setting up property appraisals and title searches, making purchase offers to homeowners, and closing on properties.⁸⁴ All property acquisitions under the HMGP and the CDBG-DR are nominally “voluntary”: Homeowners may choose to accept or reject purchase offers, and the state or locality cannot seize or threaten to seize properties using eminent domain or condemnation.⁸⁵ In reality, the meaning of voluntariness in buyout programs is contested, and evidence indicates that marginalized households often feel compelled or coerced into accepting buyout offers.⁸⁶ Although purchase offers made to individual homeowners are generally based on the home’s predisaster fair market value,⁸⁷ which is

77. See *infra* Part II.A.

78. Elise Gout, *Are Buyouts a Viable Tool for Climate Adaptation?*, COLUM. CLIMATE SCH. (June 29, 2021), <https://news.climate.columbia.edu/2021/06/29/are-buyouts-a-viable-tool-for-climate-adaptation> [https://perma.cc/HW5B-LRUG].

79. Alex Greer & Sherri Brokopp Binder, *A Historical Assessment of Home Buyout Policy*, 27 HOUS. POL’Y DEBATE 372, 375–76 (2016) [hereinafter Greer & Binder, *A Historical Assessment*].

80. Gout, *supra* note 78.

81. See *infra* Part III.B.2.

82. de Vries & Fraser, *Citizenship Rights*, *supra* note 26, at 3.

83. See Siders, *Social Justice Implications*, *supra* note 20, at 242 (“To be eligible for FEMA funding, the project must be environmentally sound, cost-effective, and reduce future risk.”).

84. Weber & Moore, *supra* note 21, at 8.

85. Siders, *Social Justice Implications*, *supra* note 20, at 244.

86. See *infra* Part III.C.

87. See Siders, *Social Justice Implications*, *supra* note 20, at 242 (“HMGP requires programs to offer pre-disaster [fair market value], while CDBG may allow the program to use either pre- or post-disaster [fair market value].”).

higher than the postdisaster value, compensation on this basis is often still insufficient for households that are relocating.⁸⁸ States and localities may choose to cover homeowners' moving expenses and real estate transaction costs—for example, costs of appraisals, title searches, surveys, and closing—but are not required to do so under the HMGP.⁸⁹

Localities must demolish or relocate homes acquired with HMGP funds, and properties can never be redeveloped or sold to private individuals.⁹⁰ By converting properties into wetlands, wildlife refuges, public parks, community gardens, sports fields, or other amenities, localities can make ecological or recreational use of the land acquired through buyouts.⁹¹ Because the buyout process is individualized (that is, individual homeowners negotiate purchase offers with local officials), isolated homes or blocks—rather than whole communities or neighborhoods—tend to be bought out.⁹² When noncontiguous properties are purchased, the resulting checkerboard pattern of bought-out and remaining homes limits the stormwater-management, ecological, and recreational benefits of managed retreat—benefits that are maximized with large swaths of land—and requires local government to continue providing services and maintaining infrastructure in areas where only a few houses remain.⁹³ Buyouts of isolated homes or blocks can also have harmful consequences for residents who are left behind: Home demolitions tend to result in “disinvestment of built capital from a neighborhood,” which is in turn associated with increased poverty and crime.⁹⁴

88. See *infra* Part III.D.1.

89. Greer & Binder, *A Historical Assessment*, *supra* note 79, at 376–77.

90. See Siders, *Social Justice Implications*, *supra* note 20, at 242.

91. See de Vries & Fraser, *Citizenship Rights*, *supra* note 26, at 3. Researchers have found that “the extent to which these purported benefits” are, in fact, realized “varies by community and depends on the local context.” Celine S. Robinson, Rachel A. Davidson, Joseph E. Trainor, Jamie L. Kruse & Linda K. Nozick, *Homeowner Acceptance of Voluntary Property Acquisition Offers*, 31 INT’L J. DISASTER RISK REDUCTION 234, 235 (2018). Among 9,321 properties purchased through the HMGP, “the most common uses were a vacant lot (34%), park (14%), and athletics (9%). Only three of the uses suggested by FEMA appeared in [the] sample (athletics, wetland, garden/farm) representing a total of 21% of the properties.” *Id.*

92. See Weber & Moore, *supra* note 21, at 5.

93. Charlene K. Baker, Sherri Brokopp Binder, Alex Greer, Paige Weir & Kalani Gates, *Integrating Community Concerns and Recommendations into Home Buyout and Relocation Policy*, 9 RISK, HAZARDS & CRISIS PUB. POL’Y 455, 472 (2018); Sherri Brokopp Binder, Alex Greer & Elyse Zavar, *Home Buyouts: A Tool for Mitigation or Recovery*, 29 DISASTER PREVENTION & MGMT. 497, 506 (2019) [hereinafter Binder et al., *Home Buyouts*].

94. See Martin, *supra* note 76, at 103.

As others have noted, the approximately forty thousand homes that FEMA has acquired so far are a drop in the bucket compared to the 14.6 million properties currently susceptible to a 100-year flood⁹⁵ or compared to the nearly 50 million housing units in coastal counties.⁹⁶ For survivors of wildfires and other nonflood hazards, moreover, buyouts are generally not even on the table.⁹⁷ Relocating people in climate-vulnerable areas at the scale and on the timeline necessary will require a true managed retreat strategy rather than reliance on decades-old disaster laws that are ill-equipped to handle the exigencies of climate change. Further, as this Article later argues, if they are to achieve justice and equity for marginalized communities, new managed retreat frameworks must radically depart from the individualized, market-based property buyouts that constitute our current approach to retreat.

C. The Disproportionate Impact of Climate Disasters on Marginalized Communities

Climate disasters as well as their downstream effects, such as home damage or loss, disproportionately harm Black, Brown, and low-income communities in at least five ways.

1. *Location in Areas of Climate Risk.* First, marginalized communities are disproportionately located in climate-vulnerable areas. In 2021, new research by the real estate brokerage Redfin found that “[m]odern flood-risk maps bear a striking resemblance to 1930s redlining maps.”⁹⁸ Today, residents of neighborhoods that were historically redlined or yellowlined—that is, neighborhoods marked as “hazardous” or “definitely declining” by the federal Home Owners’ Loan Corporation largely on the basis of their racial composition—face a higher risk of flooding than residents of nonredlined areas.⁹⁹ More than half the residents of U.S. counties that experienced three or more climate disasters from 2017 to 2021 are nonwhite, and these counties contain a higher proportion of poor residents and non-English

95. Gout, *supra* note 78.

96. Siders, *Managed Retreat*, *supra* note 15, at 216.

97. Lubben et al., *supra* note 1; Siders, *Managed Retreat*, *supra* note 15, at 217 (referencing “emerging [conversations] about the potential for managed retreat to be used in response to other hazards, such as wildfire”).

98. Lily Katz, *A Racist Past, a Flooded Future*, REDFIN (June 23, 2021), <https://www.redfin.com/news/redlining-flood-risk> [<https://perma.cc/UW3S-RE3J>].

99. *Id.*

speaking residents than the rest of the country.¹⁰⁰ A recent analysis of flood damage insurance claims found that zip codes where more than 25 percent of residents are Black make up only 13 percent of the U.S. population but incur nearly 20 percent of flood damage claim dollars.¹⁰¹ Although floodplains include some waterfront areas that attract affluent households, most floodplain residents are low-income. According to one study, 64 percent of the population in the combined 100- and 500-year floodplain lived in a high- or moderate-poverty census tract from 2011 to 2015.¹⁰² Floodplain residents are also disproportionately Latiné and disproportionately nonwhite: Latiné people make up 25 percent of the combined floodplain population versus 17 percent of the nationwide population, and nonwhite people make up 45 percent of the combined floodplain population versus 38 percent of the nationwide population.¹⁰³ Disparities are often even starker at the state level; in Arkansas, for example, Black residents make up 15 percent of the statewide population but 27 percent of the population in the combined floodplain.¹⁰⁴

The settlement of marginalized communities in climate-vulnerable areas is no surprise. Housing on the private market is often unaffordable for low-income people—due in part to exclusionary zoning laws that restrict building height and prohibit multi-family homes—and public housing is in extremely short supply nationwide.¹⁰⁵ Highly limited housing options compel low-income households to settle in high-risk floodplain areas, where private homes are generally more affordable because of their vulnerability to flooding and where public housing is disproportionately located.¹⁰⁶ In the aftermath of a storm, housing prices in damaged neighborhoods generally drop and lower-income residents move in,¹⁰⁷ perpetuating the disproportionate settlement of marginalized households in flood-prone areas.

100. Lubben et al., *supra* note 1.

101. Thomas Frank & E&E News, *Flooding Disproportionately Harms Black Neighborhoods*, SCI. AM. (June 2, 2020), <https://www.scientificamerican.com/article/flooding-disproportionately-harms-black-neighborhoods> [<https://perma.cc/5A7N-4AEB>].

102. CAROLINE PERI, STEPHANIE ROSOFF & JESSICA YAGER, NYU FURMAN CTR., *POPULATION IN THE U.S. FLOODPLAINS* 5 (2017), https://furmancenter.org/files/Floodplain_PopulationBrief_12DEC2017.pdf [<https://perma.cc/8G68-9296>].

103. *Id.* at 3.

104. *Id.* at 9.

105. Stern, *supra* note 68, at 213–14.

106. *Id.* at 173, 214–15; Camilo Sarmiento & Ted E. Miller, *Inequities in Flood Management Protection Outcomes* 13 (Am. Agric. Econ. Ass'n Meetings, Selected Paper, 2006).

107. McGee, *supra* note 25, at 1944.

Conversely, as areas with lower flood risk and better flood resilience become more valuable, wealthier homeowners displace lower-income residents from these climate-safer properties—a phenomenon known as climate gentrification.¹⁰⁸

In addition to these contemporary drivers of inequity, historical factors have also pushed marginalized communities into high-risk areas. Redlining denied Black people government-insured mortgages, severely constraining the options available to them.¹⁰⁹ Other race-based exclusionary housing tactics had similar effects: Racially restrictive covenants prohibited prospective Black homeowners and renters from living in certain neighborhoods, and racial steering by real estate agents directed Black people to some areas and away from others.¹¹⁰ In the wake of Hurricane Katrina, which devastated New Orleans’s low-lying—and predominantly Black—neighborhoods, one local official explained why she and so many other Black residents lived in New Orleans East and other flood-prone areas of the city: “Black people only moved there because all the high ground had been taken.”¹¹¹ Over decades, redlining and racially restrictive covenants had relegated Black residents to New Orleans’s low-lying neighborhoods.¹¹² Some historically Black communities, such as the town of Princeville, North Carolina, were intentionally established in climate-vulnerable locations because the undesirability of these areas “was an essential survival strategy for African American land owners in the Ku Klux Klan and Jim Crow eras.”¹¹³

Many Indigenous communities now facing the prospect of climate-induced relocation were forcibly relocated to the high-risk areas they inhabit today. From the late 1700s well into the 1900s, U.S. government-mandated Tribal relocations occurred across the

108. Aparna Nathan, *Climate Is the Newest Gentrifying Force, and Its Effects Are Already Reshaping Cities*, SCI. NEWS (July 15, 2019), <https://sitn.hms.harvard.edu/flash/2019/climate-newest-gentrifying-force-effects-already-re-shaping-cities> [<https://perma.cc/ZYG6-R8ZV>].

109. Candace Jackson, *What Is Redlining?*, N.Y. TIMES (Aug. 17, 2021), <https://www.nytimes.com/2021/08/17/realestate/what-is-redlining.html> [<https://perma.cc/76RK-8N2U>].

110. *Id.*

111. Gary Rivlin, *Why the Plan to Shrink New Orleans Failed*, FIVETHIRTYEIGHT (Aug. 27, 2015), <https://fivethirtyeight.com/features/why-the-plan-to-shrink-new-orleans-after-katrina-failed> [<https://perma.cc/7KUR-WE6R>].

112. *Id.*

113. Martin, *supra* note 76, at 16, 40.

country.¹¹⁴ Under the Indian Removal Act of 1830, the government violently displaced many southeastern Tribes to lands west of the Mississippi River in a forced march that became known as the Trail of Tears.¹¹⁵ In the first federally funded, climate-induced voluntary relocation of an entire community, Indigenous residents of Isle de Jean Charles, Louisiana—an islet in the state’s southern marshes that has lost 98 percent of its land since 1955¹¹⁶ and is now almost entirely submerged in the Gulf of Mexico—recently moved to a resettlement site forty miles away.¹¹⁷ As a result of the 1830 Indian Removal Act, the Biloxi-Chitimacha-Choctaw residents of Isle de Jean Charles were forcibly displaced from their original lands to the north and fled to the state’s flood-prone southern marshland to escape violent European settlers.¹¹⁸ More recently, in the early 1900s, the U.S. Bureau of Indian Affairs ordered Alaska Native Tribes to enroll their children in formal schools under threat of imprisoning parents or forcibly removing children from their families.¹¹⁹ The government school mandate forced Alaska Native Tribes to permanently settle on lands—such as Kivalina, Shishmaref, and Newtok, which are now facing existential threats from sea level rise and coastal erosion—that the Tribes had previously used only as seasonal hunting grounds.¹²⁰ Thus, forced displacement and permanent settlement shoehorned Indigenous communities into less hospitable areas, prevented them from pursuing the seasonally migratory lifeways that had long ensured their sustenance and safety, and heightened their vulnerability to the effects of climate change by

114. Julie Koppel Maldonado, Christine Shearer, Robin Bronen, Kristina Peterson & Heather Lazrus, *The Impact of Climate Change on Tribal Communities in the US*, 120 CLIMATIC CHANGE 601, 603 (2013) [hereinafter Maldonado et al., *Impact of Climate Change*].

115. MAXINE BURKETT, ROBERT R.M. VERCHICK & DAVID FLORES, REACHING HIGHER GROUND 35 (2017) (Loy. Univ. New Orleans Coll. of L. Legal Stud. Rsch. Paper Series No. 2017-07).

116. Stein, *supra* note 64.

117. Lucy Sherriff, *This Louisiana Town Moved to Escape Climate-Linked Disaster*, BBC (Jan. 30, 2024), <https://www.bbc.com/future/article/20240130-this-louisiana-town-moved-to-escape-climate-disaster> [<https://perma.cc/EF44-X99Y>].

118. See Maldonado et al., *Impact of Climate Change*, *supra* note 114, at 605; LEAH SHEPPARD, KATHARINE BURGESS & ALEC APPELBAUM, URB. LAND INST., ON SAFER GROUND: FLOODPLAIN BUYOUTS AND COMMUNITY RESILIENCE 17 (2021), https://knowledge.uli.org/-/media/files/research-reports/2021/onsaferground_final_june14.pdf [<https://perma.cc/XEM5-QC8U>].

119. *Id.* at 604; see NAT’L CTR. FOR ATMOSPHERIC RSCH., LAW AND POLICY FOR ADAPTATION AND RELOCATION MEETING 8 (2019).

120. Hino et al., *supra* note 55, at 367; Maldonado et al., *Impact of Climate Change*, *supra* note 114, at 604; NAT’L CTR. FOR ATMOSPHERIC RSCH., *supra* note 119, at 8.

constraining their ability to draw upon traditional knowledge and subsistence practices.¹²¹

2. “*Infrastructure Apartheid.*” Second, a longstanding lack of investment in protective infrastructure such as sewers and levees has rendered marginalized communities more vulnerable to storm ravages. Overlapping historical and contemporary factors are at play. The racist 1930s-era practice of redlining kept property values in Black neighborhoods depressed, leading to a decades-long cycle of disinvestment in those communities.¹²² Today, the legacy of redlining is apparent in the lack of upgraded flood mitigation infrastructure in many Black neighborhoods¹²³—or “the ‘racial footprint of infrastructure apartheid,’” in Professor Robert Bullard’s words.¹²⁴ In addition, and as discussed in detail below, contemporary CBA often favors flood mitigation funding for higher-value properties while finding that engineering protection for lower-value properties would not be cost-effective.¹²⁵ As a result of their acceptance of the standard economic logic of CBA—which relies primarily on property values, a highly racialized economic marker¹²⁶—government agencies prioritize hazard protection in wealthier, whiter communities.

3. *Impact of Home Loss on Overall Wealth.* The consequences of home loss or damage are more acute for marginalized communities. Since homeownership tends to comprise a larger share of overall household wealth in Black, Latiné, and low-income communities than in whiter and wealthier communities, climate disasters that damage or destroy homes generally have a greater impact on the total wealth of marginalized households.¹²⁷ Loss of homeownership—which is critical

121. Maldonado et al., *Impact of Climate Change*, *supra* note 114, at 602–03.

122. Katz, *supra* note 98.

123. *Id.*

124. Lubben et al., *supra* note 1.

125. *See infra* Part III.B.2.

126. *See infra* Part III.B.2.

127. *See* Leah A. Dundon & James S. Camp, *Climate Justice and Home-Buyout Programs: Renters as a Forgotten Population in Managed Retreat Actions*, 11 J. ENV’T STUD. & SCIS. 420, 420–21 (2021).

to closing the racial wealth gap and building intergenerational wealth—is particularly concerning in Black communities.¹²⁸

4. *Environmental Injustice.* In marginalized neighborhoods, environmental justice issues often exacerbate risks from climate hazards. Communities located near industrial areas with brownfields and contaminated soil, for example, may have highly polluted stormwater runoff during flood events.¹²⁹ Sewage from combined sewer overflows in urban areas can also pose health risks.¹³⁰ The coastal erosion and saltwater intrusion that submerged Isle de Jean Charles were facilitated not only by climate change but also by the pipeline-cutting and canal-dredging activities of oil and gas companies.¹³¹ Indigenous islet community members battled not only the gradual disappearance of their ancestral homeland but also the “health and livelihood impacts from decades-long industrial contamination and encroaching toxic industries, chemicals from dispersants, oil spills, including the 2010 BP oil disaster, and post-storm debris contaminating the air, soil, and water.”¹³² The effects of climate disasters, in other words, can compound the effects of pre-existing environmental injustices.

5. *Fewer Resources for Disaster Recovery.* Marginalized communities are less equipped to recover from climate disasters. With fewer resources for storm preparation, evacuation, temporary housing, rebuilding, and relocation, low-income households are often unable to rebound from flood events quickly and completely.¹³³ According to the U.S. Federal Reserve, nearly four in ten adults in 2022 said that they would not be able to cover an unexpected four-hundred-dollar

128. Rashawn Ray, Andre M. Perry, David Harshbarger, Samantha Elizondo & Alexandra Gibbons, *Homeownership, Racial Segregation, and Policy Solutions to Racial Wealth Equity*, BROOKINGS INST. (Sept. 1, 2021), <https://www.brookings.edu/essay/homeownership-racial-segregation-and-policies-for-racial-wealth-equity> [<https://perma.cc/N8H3-39J5>].

129. U.S. WATER ALL., WATER RISING: EQUITABLE APPROACHES TO URBAN FLOODING 15 (2020), https://uswateralliance.org/sites/uswateralliance.org/files/publications/Final_USWA_Water%20Rising_0.pdf [<https://perma.cc/7SP2-YQCY>].

130. *Id.*

131. Maldonado et al., *Impact of Climate Change*, *supra* note 114, at 606.

132. *Id.*

133. SHEPPARD ET AL., *supra* note 118, at 18.

expense.¹³⁴ The potential expenses associated with storm preparation and recovery are orders of magnitude higher.¹³⁵

In these and other ways, climate disasters disproportionately affect Black, Brown, and low-income communities. Examining the justice problems with climate-induced relocation—that is, the implications of relocation for racially and economically marginalized communities—is therefore essential. As later sections of this Article explain, these implications are messy rather than clear-cut, revealing a justice paradox at the heart of managed retreat.

D. Renters in the Floodplain: “A Forgotten Population”

Federal buyout assistance is tied to property ownership: Only homeowners can qualify for assistance. Yet 38 percent of housing units in the combined floodplains were occupied by renters from 2011 to 2015.¹³⁶ Renters are not only “a forgotten population”¹³⁷ when it comes to buyout programs but also disproportionately from marginalized backgrounds: Two-thirds of renter households are low-income,¹³⁸ and renters are twice as likely as homeowners to be nonwhite.¹³⁹ The Black homeownership rate (44 percent) is further behind the white homeownership rate (72.7 percent) than it has been in a decade.¹⁴⁰ These disparities are rooted in decades of discriminatory laws and policies, including the exclusion of Black veterans from the homeownership benefits of the post-World War II GI Bill,¹⁴¹ redlining

134. BD. OF GOVERNORS OF THE FED. RSRV. SYS., ECONOMIC WELL-BEING OF U.S. HOUSEHOLDS IN 2022 31 (2023), <https://www.federalreserve.gov/publications/files/2022-report-economic-well-being-us-households-202305.pdf> [<https://perma.cc/PV3W-U3QU>].

135. Erum Salam, ‘What Are We Going To Be Walking Back Into?’: Immense Costs for Americans Under Hurricane Threat, GUARDIAN (Oct. 9, 2024, 10:00 AM), <https://www.theguardian.com/us-news/2024/oct/09/hurricane-milton-helene-costs-residents> [<https://perma.cc/A4Z3-3BY3>].

136. PERI ET AL., *supra* note 102, at 4.

137. Dundon & Camp, *supra* note 127, at 420.

138. *Id.* at 422.

139. AM. FLOOD COAL., *Turning the Tide Toward Equity: Improving Federal Flood Programs to Serve Marginalized Populations*, AFC BLOG, <https://floodcoalition.org/2020/05/turning-the-tide-toward-equity-improving-federal-flood-programs-to-serve-marginalized-populations> [<https://perma.cc/A99Q-YSF5>].

140. Lauren Cozzi, *More Americans Own Their Homes, but Black-White Homeownership Rate Gap Is Biggest in a Decade, NAR Report Finds*, NAT’L ASS’N REALTORS (Mar. 2, 2023), <https://www.nar.realtor/newsroom/more-americans-own-their-homes-but-black-white-homeownership-rate-gap-is-biggest-in-a-decade-nar> [<https://perma.cc/A4KV-8DPB>].

141. Dundon & Camp, *supra* note 127, at 421.

and other race-based exclusionary housing tactics, and exclusionary zoning.

Black, Brown, and low-income renters are some of the most vulnerable residents in the aftermath of a climate disaster. Participation in a buyout program is technically “voluntary,” but renters—and mobile home park residents who lease the land under their homes—have no choice: If a property owner or landowner chooses to sell, renters may be involuntarily displaced.¹⁴² According to a conservative estimate, 4,500 renter households have had to relocate under these circumstances since 1989.¹⁴³ Ineligible for federal buyout funds, renters are not compensated for their leasehold interests when their homes are sold to localities during a buyout.¹⁴⁴ The Uniform Relocation Act (“URA”) compensates renters for moving expenses and the difference between their old rent and market rent for a comparable residence, up to a cap of \$7,200 over three-and-a-half years;¹⁴⁵ however, renters may not meet the URA’s eligibility requirements,¹⁴⁶ and the \$7,200 compensation maximum is generally much lower than the renter’s leasehold interest in the original property.¹⁴⁷ In addition, disasters and buyouts often reduce the supply of affordable housing in an area,¹⁴⁸ exacerbating a dire nationwide shortage of rental housing for extremely low-income people.¹⁴⁹ As a result of undercompensation and a diminished housing stock, renters may be forced to relocate far away, pay higher rent, or move to an even more climate-vulnerable area—if they can find housing at all.¹⁵⁰ Sixteen months after California’s devastating 2018 Camp Fire, for example, renters were disproportionately struggling with basic unmet needs, and the vast majority of renters—as many as 83 percent—appeared to be

142. Caroline M. Kraan, Miyuki Hino, Jennifer Niemann, A. R. Siders & Katharine J. Mach, *Promoting Equity in Retreat Through Voluntary Property Buyout Programs*, 11 J. ENV’T STUD. & SCIS. 481, 483 (2021).

143. *Id.*

144. Stern, *supra* note 68, at 228.

145. *Id.* at 228–29.

146. SHEPPARD ET AL., *supra* note 118, at 28. Undocumented renters, for example, do not qualify for assistance under the URA. 42 U.S.C. § 4605.

147. Stern, *supra* note 68, at 229.

148. Lubben et al., *supra* note 1.

149. ANDREW AURAND, MATT CLARKE, IKRA RAFI, DAN EMMANUEL, MACKENZIE PISH & DIANE YENTEL, NAT’L LOW INCOME HOUS. COAL., *THE GAP: A SHORTAGE OF AFFORDABLE RENTAL HOMES* (2023), <https://nlihc.org/gap> [<https://perma.cc/WWA9-9EW9>].

150. Dundon & Camp, *supra* note 127, at 428.

unsettled in permanent housing.¹⁵¹ Researchers cited a lack of renter-specific assistance and a rebuilding program that prioritized homeowners.¹⁵² As one renter who had become homeless put it, “All the resources have dried up. They’re gone.”¹⁵³

E. The Justice Paradox

The disproportionate impact of climate change on marginalized communities and the future inevitability of managed retreat together underscore the urgent need to critically examine the justice implications of climate-induced relocation. As illustrated by the stories of Betty Ricks and Kimberly Smalls, there are two justice problems with managed retreat as it is currently designed and implemented. On the one hand, managed retreat is inaccessible to marginalized communities, who often lack the financial and human resources to navigate the buyout process and survive its long waiting periods. This harm-from-staying problem suggests that a just approach to managed retreat would *prioritize* the relocation of marginalized communities since they are more vulnerable to climate hazards and in greater need of relocation assistance. On the other hand, managed retreat itself disproportionately harms marginalized communities, who may feel compelled or coerced to accept buyout offers and may experience greater relocation-related psychosocial and financial harms.¹⁵⁴ This harm-from-relocating problem suggests that a just approach to managed retreat would *avoid* relocation of marginalized communities.

Two recent empirical studies indicate that these justice problems indeed coexist. In a 2019 analysis of over forty thousand climate-induced voluntary buyouts in the United States, Professor Katharine Mach and colleagues found that counties with higher population, population density, income, and education level are more likely to receive federal buyout assistance.¹⁵⁵ Within those counties, however, bought-out properties tend to be located in zip codes with greater racial

151. See Camille von Kaenel, *Renters Falling Through the Cracks of Disaster Recovery*, ENTERPRISE-RECORD (Mar. 13, 2020, 2:37 PM), <https://www.chicoer.com/2020/03/12/renters-falling-through-the-cracks-of-disaster-recovery> [<https://perma.cc/84BZ-74KZ>] (noting that only 17 percent of renters had made address changes).

152. *Id.*

153. *Id.*

154. See *infra* Part III.

155. Katharine J. Mach, Caroline M. Kraan, Miyuki Hino, A. R. Siders, Erica M. Johnston & Christopher B. Field, *Managed Retreat Through Voluntary Buyouts of Flood-Prone Properties*, 5 SCI. ADVANCES, 1, 3 (2019).

diversity and lower income, population density, education level, and English language proficiency than other zip codes in the same county.¹⁵⁶ In other words, while wealthier counties are more likely to offer their residents buyouts, residents of poorer and more racially diverse neighborhoods in those counties are more likely to accept buyout offers.¹⁵⁷ The study's authors reasoned that county-level income and population are "proxies for local government capacity" and that "wealthier, denser counties" have greater financial and human resources to successfully maneuver the federal grant application process and administer a buyout program.¹⁵⁸ As for why residents of more socially vulnerable areas within those counties are more likely to accept buyout assistance, the authors presented a range of potential explanations. "Poorer, more marginalized people may be more likely to meet the eligibility requirements for buyouts," they hypothesized, in addition to citing "perceived coercion" and "local-level political pressures favoring flood hazard mitigation [that is, protective infrastructure] for the privileged over the marginalized."¹⁵⁹

A subsequent 2020 study similarly examined buyouts at two different geographic scales, building on the results of the previous study.¹⁶⁰ At the county level, Professor James Elliott and colleagues found that the whiter a county, the greater its likelihood of receiving federal buyout assistance.¹⁶¹ The authors also concluded that the U.S. government's buyout policy is essentially "an urban buyout policy": Three-fourths of bought-out properties to date are in the central counties of metropolitan areas, which are more likely to receive federal buyout assistance than nonmetropolitan and suburban counties.¹⁶² At the census tract level—and only in the central counties of metropolitan areas—whiter census tracts are more likely to receive federal buyout assistance than less-white tracts in the same county,¹⁶³ but residents of less-white tracts are more likely to accept buyout offers.¹⁶⁴ Like the

156. *Id.*

157. *Id.* at 5–6.

158. *Id.* at 3.

159. *Id.* at 6.

160. James R. Elliott, Phylicia Lee Brown & Kevin Loughran, *Racial Inequities in the Federal Buyout of Flood-Prone Homes: A Nationwide Assessment of Environmental Adaptation*, 6 *SOCIUS* 1, 2 (2020) [hereinafter Elliott et al., *Racial Inequities*].

161. *Id.* at 7.

162. *Id.* at 11.

163. *Id.* at 7.

164. *Id.* at 9.

prior study's authors, Elliott and colleagues surmised that whiter counties in urban areas and whiter neighborhoods within those counties are "better positioned politically, financially, and administratively" to access buyout programs—but that residents of racially diverse neighborhoods in these otherwise white urban counties are more likely to accept buyout assistance and relocate because they lack "other, more desirable options."¹⁶⁵

Thus, empirical evidence supports the existence of both justice problems. Communities in rural, less dense, lower-income, and more racially diverse counties may struggle to access buyouts and remain stranded in the floodplain. This is the harm-from-staying problem. Meanwhile, buyouts may disproportionately target, relocate, and harm marginalized communities in urban, denser, higher-income, and whiter counties. This is the harm-from-relocating problem. After exploring each of these justice problems in greater depth, this Article will argue that although opposite solutions are indicated when each problem is considered in isolation, both justice problems in fact reflect the same structural flaws with our current approach to managed retreat and therefore call for the same remedies.

II. THE "HARM-FROM-STAYING" JUSTICE PROBLEM: WHY MANY MARGINALIZED COMMUNITIES ARE UNABLE TO ACCESS BUYOUT PROGRAMS

As Professor A.R. Siders, a leading researcher on managed retreat, has written, "[t]here are untold numbers of people who want to relocate but are trapped, unable to do so without the support of a managed retreat program."¹⁶⁶ Evidence indicates that many Black, Brown, and low-income communities struggle to access managed retreat programs for a number of reasons, including underresourced local governments, lack of political capital, long wait times that make the buyout process unaffordable, and arbitrary denials of buyout applications. Indigenous communities face unique—and often insurmountable—obstacles to collective relocation. Ultimately, residents who are unable to access managed retreat programs either remain stranded in climate-vulnerable areas or are forced to abandon or sell their properties for a fraction of the predisaster value.¹⁶⁷

165. *Id.* at 4.

166. Siders, *Managed Retreat*, *supra* note 15, at 218.

167. *See id.* at 217.

A. Lack of Resources

Marginalized communities often lack the resources—that is, funding, local government capacity and expertise, and political clout—to access federal buyout assistance. Since buyout funding is granted on a competitive basis after disasters—with flood-struck communities submitting funding applications for review and evaluation by state and federal agencies—“communities with expertise and financial wherewithal to develop competitive proposals may be more likely to receive funding, rather than those with greatest need.”¹⁶⁸ Indeed, advocates perceive the competitive, application-based nature of the buyout process as one of the major barriers to equitable access.¹⁶⁹

FEMA buyout programs provide up to 75 percent of buyout costs, while the remaining 25 percent must be covered by the state, county, municipality, Tribe, or homeowner.¹⁷⁰ Only affluent homeowners would be able to self-fund a quarter of their buyout costs, and underfunded localities often cannot meet the 25 percent cost-share requirement.¹⁷¹ As one state hazard mitigation officer explained, “[e]specially in our low-resource communities, there are numerous concerns about how they can provide that non-federal share [of funding] for FEMA grants.”¹⁷²

The buyout application and implementation process also requires significant time, capacity, and expertise from local government personnel, who must clear a number of bureaucratic hurdles and coordinate closely with agencies across all levels of government. Localities must, for example, engage with homeowners and identify which properties to acquire, conduct FEMA-approved CBA, complete environmental and historic preservation assessments, prepare buyout applications, handle title searches and appraisals, negotiate with homeowners, manage title transfers and closings, demolish structures on bought-out properties, and maintain properties as open spaces.¹⁷³ State and local hazard mitigation officials have told the GAO that

168. Siders, *Social Justice Implications*, *supra* note 20, at 251.

169. See McNelly Torres, Alex Lubben & Zak Cassel, *Too Little, Too Late for People Seeking Climate Relief*, TYPE INVESTIGATIONS (Aug. 10, 2022), <https://www.typeinvestigations.org/investigation/2022/08/10/too-little-too-late-for-people-seeking-climate-relief> [<https://perma.cc/KT2V-FQZ5>].

170. Peterson et al., *supra* note 70, at 3.

171. See Gout, *supra* note 78; CONRAD ET AL., *supra* note 56, at 163–64.

172. Gout, *supra* note 78.

173. See Weber & Moore, *supra* note 21, at 7.

grant application processes are “complex and lengthy,” citing localities’ lack of “technical capacity . . . to successfully apply for hazard mitigation grants” and particular difficulties with CBA “due, in part, to the amount of resources and data needed.”¹⁷⁴ The highly resource-intensive nature of the buyout process is consistent with empirical studies showing that wealthier, whiter, denser, and urban areas are more likely to secure federal buyout assistance than underresourced areas. When Virginia’s Department of Emergency Management recently surveyed local officials serving marginalized, climate-vulnerable communities, officials frequently mentioned the cost-share requirement and lack of time, staffing, capacity, expertise, and training as major hurdles in the federal grant application process.¹⁷⁵ “Can’t manage all duties + grant applications (one man show),” wrote one official in his survey response.¹⁷⁶ “We don’t even know what to do,” wrote another.¹⁷⁷

In addition to financial and human resources, the buyout process also requires political capital. Homeowners who wish to relocate after a disaster cannot apply for buyout funds themselves; they must convince local officials to apply on their behalf.¹⁷⁸ Local officials can be reluctant to seek buyouts for fear of eroding their property tax base, removing desirable development properties from the market, reducing the supply of affordable housing stock, or damaging real estate values in neighborhoods where buyouts result in a checkerboard pattern of homes and vacant lots.¹⁷⁹ “It is therefore unsurprising that buyouts are often shaped by politicians’ re-election goals.”¹⁸⁰ Marginalized communities are less likely to have the political clout and organizing capacity necessary to successfully lobby government officials for buyouts.

174. U.S. GOV’T ACCOUNTABILITY OFF., GAO-21-140, DISASTER RESILIENCE: FEMA SHOULD TAKE ADDITIONAL STEPS TO STREAMLINE HAZARD MITIGATION GRANTS AND ASSESS PROGRAM EFFECTS 2, 18, 21, 25 (2021).

175. See VA. DEP’T OF EMERGENCY MGMT., 2021 HMA GRANTS EQUITY PRE-WORKSHOP SURVEY 1–17 app. G (2021), <https://www.documentcloud.org/documents/22187020-bric-workshop-survey-questions-and-results> [<https://perma.cc/775Z-7JVU>].

176. *Id.* at 2.

177. *Id.* at 14.

178. Siders, *Managed Retreat*, *supra* note 15, at 219.

179. See Siders, *Social Justice Implications*, *supra* note 20, at 250; Lisa Song, Al Shaw & Neena Satija, *Buyouts Won’t Be the Answer for Many Frequent Flooding Victims*, PROPUBLICA (Nov. 1, 2017), <https://features.propublica.org/houston-buyouts/hurricane-harvey-home-buyouts-harris-county> [<https://perma.cc/Y6GU-Q2NB>].

180. Siders, *Social Justice Implications*, *supra* note 20, at 250.

Juxtaposing the experiences of four different communities—Ironton, Pinhook, Oakwood Beach, and Valmeyer—puts these resource disparities into sharp relief. Ironton is a historically Black, unincorporated community in Plaquemines Parish, Louisiana.¹⁸¹ Founded by formerly enslaved people in the late 1800s, Ironton has weathered six major hurricanes in the past five years.¹⁸² Louisiana has received almost a fifth of total FEMA disaster aid—more than \$3.1 billion—over the past three decades, but Ironton residents have seen virtually none of it.¹⁸³ Because the community is unincorporated, there are no local government officials to advocate for residents or to wade through the bureaucracy of the grant application process.¹⁸⁴ After Hurricanes Katrina and Isaac, Ironton residents rebuilt the community themselves.¹⁸⁵ Then Hurricane Ida decimated the town in 2021, prying coffins out of the ground and sending them floating across the historic cemetery.¹⁸⁶ Through it all, Ironton residents have been left to fend for themselves. “We’ve been the sacrificial lambs,” said one fifth-generation community member.¹⁸⁷

While Ironton residents’ inability to access relocation assistance might be attributed in significant part to the absence of government personnel to navigate the process, residents of Pinhook, Missouri discovered that their town’s incorporated status was of little use without political muscle behind it. Pinhook was the only town in a floodway—a swath of land that the Army Corps of Engineers can legally inundate to relieve pressure on the area’s levee system—designed to protect Cairo, Illinois and surrounding communities during floods.¹⁸⁸ In the 1940s, no one would sell land to Pinhook’s Black sharecropper founders except in the floodway.¹⁸⁹ The rest of the floodway was fertile agricultural land owned by wealthier, white farmers.¹⁹⁰ When the Army Corps detonated the levee to activate the

181. Lubben et al., *supra* note 1.

182. *Id.*

183. *Id.*

184. *Id.*

185. *Id.*

186. *Id.*

187. *Id.*

188. See Lisa Song & Patrick Michels, *There Was a Plan to Save This City from Flooding. But When the Rains Came, so Did Hesitance*, PROPUBLICA (Sept. 6, 2018, 5:00 AM), <https://www.propublica.org/article/cairo-there-was-a-plan-to-save-this-city-from-flooding> [<https://perma.cc/ZH2Z-F5T4>].

189. *Id.*

190. *Id.*

floodway during a massive flood in 2011, Pinhook was destroyed in the deluge.¹⁹¹ The white landowners who farmed in the floodway had congressional representatives who aggressively advocated on their behalf, a direct line to Army Corps leadership, and even a seat on the committee that decided whether the floodway would be activated.¹⁹² Meanwhile, the Black homeowners who lived in the floodway are not even mentioned in the Army Corps' official history of the event.¹⁹³ The white landowners rebounded from the flood quickly: About half of them had crop insurance, less than one percent of their land was permanently damaged, and they successfully resumed crop cultivation after the floodwater drained.¹⁹⁴ Nevertheless, the landowners filed a lawsuit demanding compensation from the government for their losses.¹⁹⁵ Meanwhile, Pinhook residents—who lost their homes to the flood—“had federal flood insurance, but received no insurance payments because the 2011 flood was not a natural occurrence.”¹⁹⁶ Residents did not have the resources to file a lawsuit and instead fought tirelessly for years to be collectively relocated to a shared tract of land.¹⁹⁷ Despite its role in facilitating the flood that ravaged Pinhook, the federal government failed to relocate the community. Seven years later, in 2018, a handful of individual Pinhook residents moved into new homes built by volunteers using their own construction equipment and partially funded by a \$450,000 grant from the state of Missouri.¹⁹⁸

In stark contrast to the experiences of Pinhook community members, residents of Oakwood Beach—a predominantly white Staten Island neighborhood devastated by a fourteen-foot storm surge during Hurricane Sandy in 2012¹⁹⁹—flexed significant political muscle to achieve their goals in the wake of the storm. Residents formed a

191. *Id.*

192. *Id.*

193. *Id.*

194. *Id.*

195. *Id.*

196. Mark Bliss, *Housing Project Gives Former Pinhook Residents a New Sense of Community*, SE. MISSOURIAN (Jan. 27, 2018), <https://www.semissourian.com/story/2479957.html> [<https://perma.cc/X4G9-RYNS>].

197. Song & Michels, *supra* note 188; *About*, REBUILD PINHOOK, <https://rebuildpinhook.org/about> [<https://perma.cc/X7CR-MVFK>]; David Todd Lawrence, *Displaced Pinhook Residents to Receive Financial Assistance Six Years After Levee Breach*, REBUILD PINHOOK (July 28, 2017), <https://rebuildpinhook.org/2017/07/28/displaced-pinhook-residents-to-receive-financial-assistance-six-years-after-levee-breach> [<https://perma.cc/2VAS-3752>].

198. *See* Bliss, *supra* note 196.

199. *See* Koslov, *supra* note 36, at 363, 389.

community group called the Oakwood Beach Buyout Committee and began lobbying their local officials for buyouts.²⁰⁰ When city officials resisted buyouts, citing a reduction in property tax revenue,²⁰¹ community organizers set their sights on New York State. It took them just a couple of months to convince the governor to launch a state buyout program.²⁰² After circulating petitions and holding demonstrations, two other hard-hit Staten Island neighborhoods succeeded in persuading the state to include them in the buyout program too.²⁰³

Indeed, according to a recent empirical study that found a correlation between census tract-level racial demographics and acceptance of buyout offers, post-Sandy buyouts appear to be responsible for a “radical departure” from the norm in New York and New Jersey from 2010 to 2015.²⁰⁴ In central counties of metropolitan areas in the rest of the United States from 2010 to 2015 as well as during earlier time periods in New York and New Jersey, the less white a census tract relative to the rest of the county, the higher the number of buyout offers accepted.²⁰⁵ But the opposite trend holds in New York and Jersey between 2010 and 2015, the time period during which the post-Sandy buyouts occurred: The whiter a census tract relative to the rest of the county, the higher the number of buyout offers accepted.²⁰⁶ One explanation, according to the study, is that the post-Sandy buyout program “became a fountain of collective action in places such as Staten Island and along the Jersey shore, where white working- and middle-class residents organized to lobby for buyouts of entire communities” and where “white privilege . . . helped secure that assistance”²⁰⁷

Like Oakwood Beach, the town of Valmeyer, Illinois—an overwhelmingly white community of about nine hundred people with well-above-average median income and no families living below the

200. *Id.* at 375–76.

201. See Nicholas Pinter, *The Lost History of Managed Retreat and Community Relocation in the United States*, ELEMENTA: SCI. ANTHROPOCENE, Aug. 21, 2023, at 1, 15.

202. See Koslov, *supra* note 36, at 376.

203. *Id.* at 377.

204. Elliott et al., *Racial Inequities*, *supra* note 160, at 11.

205. *Id.* at 9.

206. *Id.* at 11.

207. *Id.* at 12.

poverty line²⁰⁸—benefitted from its political clout during the relocation process. The resettlement of Valmeyer has been dubbed “the poster child of a floodplain relocation in the U.S.”²⁰⁹ In August 1993, after floodwaters from the Mississippi River breached two levees and inundated Valmeyer, many residents seemed poised to individually relocate if offered buyouts.²¹⁰ Then, a farmer who owned higher-elevation land nearby offered to sell his property to the town as a rebuilding site.²¹¹ Residents took a vote during a community meeting, and a majority supported whole-community relocation to the new site.²¹² The town’s mayor, Dennis Knobloch, quit his day job to spend all his time soliciting government agencies for funds, lobbying local officials for support, and navigating the intricate bureaucracy of the relocation process.²¹³ As he later wrote, “Wandering through the myriad of government policies requires a full-time staff, and most small communities with part-time elected and appointed officials are not equipped for such an endeavor.”²¹⁴ Knobloch also points to the consistent stream of media coverage the town received: “With all of the other communities that were in the struggle for getting assistance—not just financially but also getting the support of the agencies and politicians—it helped to get our exposure out through the media.”²¹⁵ Ultimately, state and federal funding covered most of the \$35 million relocation cost.²¹⁶

Valmeyer’s success might also be attributed to residents’ active engagement in the relocation process. Within two months of the flood, residents had formed seven different committees that met at least weekly and completed “an aggressive schedule of tasks” in under six

208. See Rachel Hellman, *A Midwestern Town Moved Uphill to Survive the Elements. Can Others Do the Same?*, GUARDIAN (Aug. 21, 2021, 5:00 PM), <https://www.theguardian.com/us-news/2021/aug/21/valmeyer-illinois-town-moved-uphill-escape-flooding> [https://perma.cc/8H7A-5ZYL].

209. Cat Wise, *The Radical Approach These Communities Have Taken to Flood Mitigation*, PBS (May 28, 2019, 6:40 PM), <https://www.pbs.org/newshour/show/the-radical-approach-these-communities-have-taken-to-flood-mitigation> [https://perma.cc/6WGM-K5C3].

210. Dennis M. Knobloch, *Moving a Community in the Aftermath of the Great 1993 Midwest Flood*, 130 J. CONTEMP. WATER RSCH. & EDUC. 41, 43 (2009).

211. Hellman, *supra* note 208.

212. *Id.*

213. *Id.*

214. Knobloch, *supra* note 210, at 45.

215. Hellman, *supra* note 208.

216. *Id.*

weeks.²¹⁷ Over one hundred residents served as committee members, designing each aspect of the new town—including housing, infrastructure and utilities, the school, and commercial life—from the ground up.²¹⁸ As Professor Liz Koslov has written, accounts of the Valmeyer relocation evoke a picture “of an ideal democratic process that brings together people from all walks of life to debate and ultimately deliver their vision of a better collective future, with the support of a government acting on the wishes of those it represents.”²¹⁹ Just four months after the flood, a groundbreaking ceremony was held, and today, about 1,200 people live in New Valmeyer.²²⁰

The stories of these four towns highlight several of the reasons that marginalized communities often struggle to access managed retreat programs. Ironton has *no* local government personnel to seek buyouts on the community’s behalf, let alone teams of officials with deep knowledge of the various funding streams that might be available to the community. Pinhook residents lacked the political capital to hold the federal government responsible for the consequences of activating the floodway where they lived. Meanwhile, the interests of white farmers—who did not live in the floodway, but merely farmed there—were robustly represented at all levels of government. Residents of Oakwood Beach and other predominantly white neighborhoods in New York and New Jersey swiftly mobilized after Hurricane Sandy. Within weeks, they had successfully wielded their political clout to secure a commitment from the governor to launch a buyout program. In Valmeyer, local officials like the mayor were able to devote all their time and energy to the community’s relocation. Unlike many residents of marginalized communities—who are focused on their basic needs and day-to-day survival in the aftermath of disasters—the relatively well-off residents of Valmeyer had significant capacity to actively participate in the design of their new town. The media attention that Valmeyer received, which helped the town secure funding and political support for relocation, may also be a function of the community’s racial composition and class status. Indeed, it seems much harder to imagine a marginalized community with the resources, political influence, and

217. Knobloch, *supra* note 210, at 43.

218. *Id.*

219. Koslov, *supra* note 36, at 373.

220. *See* Hellman, *supra* note 208.

government support to engage in the sort of “ideal democratic process” that apparently characterized the Valmeyer relocation.²²¹

B. Extended Wait Times and Unpredictability

Even when marginalized communities manage to *apply* for buyouts, the lengthy, cumbersome, and seemingly arbitrary nature of the ensuing process often prevents residents in these communities from ultimately accessing buyouts.

1. *Lengthy Timeline of Buyout Process.* Perhaps no aspect of the buyout process has been better documented by advocates and journalists than the long delays that homeowners experience at each step. After a disaster, localities cannot submit buyout applications “until FEMA makes funding available to the state and the state announces the availability of funding to localities.”²²² This can take months: When Hurricane Irma struck Florida in September 2017, for example, FEMA did not make funding available to the state until five months later.²²³ Additional delays can occur as localities assess whether they are able to meet the 25 percent cost-share requirement.²²⁴ According to FEMA, a buyout application’s journey from local to state to federal agency takes an average of 15.5 months, and FEMA approval of the application then takes an additional four months.²²⁵ In a widely cited 2019 report, the Natural Resources Defense Council analyzed nearly thirty years of FEMA data and found that the median time frame between a flood disaster and a completed FEMA-funded buyout project is 5.2 years.²²⁶

The extended timeline of the buyout process disproportionately harms marginalized communities, who generally wait longer for buyouts²²⁷ and cannot afford the costs of endlessly living in limbo. Temporary housing is often unaffordable for low-income people,

221. Koslov, *supra* note 36, at 373.

222. Weber & Moore, *supra* note 21, at 8.

223. *Id.*

224. *Id.*

225. DIANE P. HORN, CONG. RSCH. SERV., IN11911, FLOOD BUYOUTS: FEDERAL FUNDING FOR PROPERTY ACQUISITION 3 (2022).

226. Weber & Moore, *supra* note 21, at 9.

227. Cristina E. Muñoz & Eric Tate, *Unequal Recovery? Federal Resource Distribution After a Midwest Flood Disaster*, 13 INT’L J. ENV’T RSCH & PUB. HEALTH 507, 520 (2016).

especially if needed for months or years on end.²²⁸ To continue living in their homes while waiting for buyouts—or before they learn about buyouts as a potential option—homeowners may undertake house repairs using some combination of flood insurance payouts, FEMA Individual Assistance grants, Small Business Administration loans, and personal resources.²²⁹ But since such repairs are not reimbursable in the event of a buyout—which is based on predisaster home value—low-income homeowners often cannot afford to accept an eventual buyout offer after having expended significant resources on repairs.²³⁰ At the same time, a homeowner who holds off on making repairs might continue to live in a house that is uninhabitable and a risk to their health and safety, only to discover—much later—that their buyout application was denied.²³¹ Long and unpredictable managed retreat programs also diminish trust in the process, particularly among marginalized communities. After initially seeking a buyout when her neighborhood in Freeport, Illinois flooded in March 2019, Cheryl Erving lost faith as the process dragged on for months and years.²³² Now, perceiving the buyout program as a tool to demolish their historically Black neighborhood and replace it with a golf course, Erving and her neighbors no longer want buyouts.²³³

While waiting for the years-long buyout process to unfold, moreover, homeowners can experience additional flood disasters that further drain them of resources, compound house damage from the previous flood, and erase any progress made on home repairs. Olga McKissic of Louisville, Kentucky, who first applied for a buyout in 2006, endured over a decade of government bureaucracy and three more floods before she was finally able to relocate in November 2018.²³⁴ She is not an outlier. After floodwaters from Hurricane Matthew inundated the city of Lumberton, North Carolina in October

228. AURAND ET AL., *supra* note 149; Weber & Moore, *supra* note 21, at 14 (“Lower-income residents are unlikely to be able to afford to wait for months or years to be offered a buyout, while their home may be uninhabitable and they continue to face the risk of flooding.”).

229. Binder et al., *Home Buyouts*, *supra* note 93, at 505–06 (mentioning sources of potential funding for repairs).

230. *Id.* at 507; Weber & Moore, *supra* note 21, at 14.

231. *Id.*

232. Torres et al., *supra* note 169.

233. *Id.*

234. Keith Mulvihill, *How Long Does It Take to Get a FEMA Buyout for a Flooded Home?*, NAT. RES. DEF. COUNCIL (Sept. 12, 2019), <https://www.nrdc.org/stories/how-long-does-it-take-to-get-fema-buyout-flooded-home> [<https://perma.cc/B4VX-5F2D>].

2016, FEMA eventually green-lit buyouts for forty-seven homes.²³⁵ In July 2018—over two years after the storm—government officials finalized the aid package.²³⁶ But less than two months later, before anyone could be relocated, Hurricane Florence bore down on the city.²³⁷ After surviving this second storm, ten homeowners in Lumberton withdrew from the aid program, some opting to sell their homes on the open market rather than continue to wait for assistance to arrive.²³⁸

Indeed, homeowners who are unable to afford an indefinite wait for a buyout that may never materialize frequently sell their homes on the private market for pennies on the dollar, often to speculators seeking a quick profit. This “dangerous game of musical chairs” not only harms the homeowner—who suffers a financial loss and is unlikely to be able to afford comparable housing in an area with less flood risk—but also places future residents of the flood-prone property in harm’s way, perpetuating the cycle of devastation.²³⁹ In the aftermath of Hurricane Harvey, which surged across Houston and Harris County, Texas in 2017, at least 5,500 homeowners—terrified at the prospect of suffering through another storm—decided to sell their flooded homes to speculators offering fast cash rather than wait for uncertain and slow government buyouts.²⁴⁰ Relying on the taxpayer-funded National Flood Insurance Program to insulate them from the financial costs of future floods, investors did a slapdash repair or rebuilding job and either flipped the properties or rented them to unsuspecting, mostly low-income tenants.²⁴¹ (Texas law does not require landlords to disclose their properties’ flood history or location in a floodplain.²⁴²) As one investor candidly said, “Anytime there’s any type of natural disaster . . . it creates a little bit of opportunity for us.”²⁴³ According to a local official, by the time Harris County received the first two of three

235. Torres et al., *supra* note 169.

236. *Id.*

237. *Id.*

238. *Id.*

239. Moore, *supra* note 63.

240. Hunn & Dempsey, *supra* note 23.

241. *Id.*

242. *Id.*

243. *Id.*; see also David Hunn, *Houston-Area Leaders Seek Ways to Stem Investor Buyouts of Flooded Homes*, HOUS. CHRON. (May 17, 2018, 4:25 AM), <https://www.houstonchronicle.com/news/houston-texas/houston/article/Harris-County-leaders-want-more-aggressive-buyout-12923703.php> [<https://perma.cc/E8A2-NCQC>].

funding allocations for buyouts, about 20 percent of homeowners whose applications had been approved withdrew from the program, generally because they had either sold their properties or spent significant resources on repairs.²⁴⁴ By the time the third funding allocation arrived, one year after Harvey, about 50 percent of approved buyout applicants had bowed out.²⁴⁵

2. *Lack of Clear and Transparent Buyout Eligibility Criteria.* Nontransparent and seemingly arbitrary eligibility criteria—at all levels of government—present an additional barrier to accessing buyouts. The federal government does not have any guidelines for buyouts, leaving local agencies with virtually limitless discretion.²⁴⁶ According to one review of eight buyout programs, local officials “provided public information about the criteria that would be used to determine whether or not a property would be eligible for a buyout offer[,] . . . but the criteria as stated are broad and over-inclusive, describing many homes not offered buyouts.”²⁴⁷ Homeowners are generally not given the reasons or rationale behind the denial of their buyout applications. Confused and frustrated about why certain properties are selected for purchase and not others, applicants have described buyout decisions as “haphazard.”²⁴⁸

At the state and federal levels, too, localities’ buyout applications—and specific homes listed in those applications—are granted or denied funding without transparency or objective criteria. Local officials in Colquitt, Georgia, for example, have inexplicably received no FEMA aid after submitting buyout applications to the agency twice since Hurricane Michael razed a mobile home park in 2018.²⁴⁹ The city of DeSoto, Missouri has sought FEMA aid twice since 2019, when the Army Corps of Engineers recommended buyouts for about seventy flood-prone properties.²⁵⁰ Even with the Army Corps’ recommendation, state and federal agencies approved a buyout for just

244. Binder et al., *Home Buyouts*, *supra* note 93, at 506.

245. *Id.*

246. Song et al., *supra* note 179.

247. Siders, *Social Justice Implications*, *supra* note 20, at 247.

248. Sherri Brokopp Binder & Alex Greer, *The Devil Is in the Details: Linking Home Buyout Policy, Practice, and Experience After Hurricane Sandy*, 4 POL. & GOVERNANCE 97, 99 (2016) [hereinafter Binder & Greer, *The Devil in Details*].

249. Lubben et al., *supra* note 1.

250. *Id.*

one home in DeSoto.²⁵¹ According to journalists who have unsuccessfully sought access to rejected buyout applications via public records requests filed with FEMA and HUD, “[t]he federal government has no comprehensive record of how many communities across the country have sought relocation assistance and failed to receive it.”²⁵²

Some criteria for buyout eligibility are racialized, creating particular hurdles for marginalized communities. In the wake of Hurricane Katrina, for example, many Black residents of New Orleans struggled to access the state’s aid program because they owned “heirs’ property” and therefore lacked formal title to their homes.²⁵³ Heirs’ property—which comprises an estimated one-third of all Black-owned land in the U.S. South—is land handed down informally over generations and owned by multiple heirs.²⁵⁴ Similarly, for Indigenous communities in Puerto Rico, land is traditionally occupied from one generation to the next without legal title.²⁵⁵ If government agencies fail to accommodate heirs’ property ownership and informal land tenure, many Black and Indigenous people in climate-vulnerable areas may be unable to access managed retreat programs.

The story of Janice Crews, a flood-struck resident of New Bern, North Carolina, highlights the devastating toll of lengthy and unpredictable buyout processes. In September 2018, Hurricane Florence struck New Bern, destroying 4,325 homes, mostly in the city’s most marginalized communities.²⁵⁶ By December 2018, Crews and at least fifty other homeowners in New Bern had submitted forms to the city indicating their interest in buyouts.²⁵⁷ City officials sent an application to the state, requesting “expedited” processing for just five of the fifty homes.²⁵⁸ The state included three of these five homes in its

251. *Id.*

252. *Id.*

253. John Ydstie, *No Title? No Easy Access to Post-Katrina Aid*, NPR (Apr. 28, 2008, 1:55 PM), <https://www.npr.org/2008/04/28/90005954/no-title-no-easy-access-to-post-katrina-aid> [<https://perma.cc/9DN9-Q2D5>].

254. Anna Deen, *What Is Heirs’ Property? A Huge Contributor to Black Land Loss You Might Not Have Heard Of.*, GRIST (Mar. 17, 2021), <https://grist.org/fix/justice/what-is-heirs-property-a-huge-contributor-to-black-land-loss-you-might-not-have-heard-of> [<https://perma.cc/C3PR-MA35>].

255. Maldonado et al., *Addressing the Challenges*, *supra* note 28, at 296.

256. Torres et al., *supra* note 169.

257. *Id.*

258. *Id.*

May 2019 buyout application to FEMA.²⁵⁹ One year later, in May 2020, FEMA approved the buyout application.²⁶⁰ For unknown reasons, Janice Crews' buyout application was not one of the three approved in this initial round of "expedited" buyouts.²⁶¹ Crews, a retired postal worker and widow who cared for a daughter with a disability, suffered a nervous breakdown as she waited for news about her application.²⁶² Finally, she decided that she had no choice but to sell her home to any willing buyer on the private market: "I couldn't go through another flood," she said.²⁶³ Crews sold her brick house—worth \$132,000 in 2010—for just \$39,500.²⁶⁴ At seventy-seven years old, she took out a mortgage to pay for a \$136,000 house outside the floodplain.²⁶⁵ Compared to the brick home that she sold at a loss, Crews says, the house she bought is a "piece of junk."²⁶⁶ In September 2021, three years after Hurricane Florence, FEMA approved buyouts for another thirteen properties in New Bern.²⁶⁷ Crews was long gone by then. "I feel that I did everything I could to get help," she said. "The government wasn't going to do nothing."²⁶⁸

C. *Particular Obstacles for Indigenous Communities*

Indigenous communities face some of the steepest barriers to accessing climate-induced relocation. This is in part because, as described above, the primary mechanism for effectuating managed retreat in the United States is individual property acquisition. Although home buyout processes are messy and involve multiple agencies at all levels of government, at least the mechanism for this type of property acquisition exists. By contrast, there is currently *no* federal mechanism for whole-community relocation, leaving heavily underresourced Tribal agencies to patch together funding from multiple different sources, each with its own bureaucratic hurdles. Both the eligibility requirements for federal grant programs and the grant selection process disadvantage Native communities. Finally, certain

259. *Id.*

260. *Id.*

261. *Id.*

262. *Id.*

263. *Id.*

264. *Id.*

265. *Id.*

266. *Id.*

267. *Id.*

268. *Id.*

features of relocation programs can conflict with Indigenous cultures, knowledge, and subsistence practices.

1. *No Federal Mechanism for Whole-Community Relocation.* For many Tribal peoples suffering coastal erosion, storm surges, and other imminent climate threats, “collective [rather than individual] relocation . . . is an absolute, non-negotiable priority” to preserve culture, identity, safety, food security, sovereignty, and self-determination.²⁶⁹ For primarily this reason, individual property buyouts are generally not a viable option in Tribal contexts.²⁷⁰ But since there is no federal agency tasked with spearheading or funding whole-community relocation—and no governing laws or regulations—Native communities are left to cobble together support from various programs designed for other purposes.²⁷¹ A number of federal agencies—including the Bureau of Indian Affairs, Army Corps of Engineers, Department of Agriculture, FEMA, and HUD—are part of the “patchwork quilt” of programs that can assist Indigenous communities with different aspects of the relocation process.²⁷² Seeking grants from these programs—each with its own eligibility criteria, timelines, and funding restrictions—requires enormous capacity that heavily underresourced Tribal agencies simply do not have. As one Tribal leader said, the competitive nature of the grant-based funding process places an onerous “burden of proof” on Tribes: “We’ve had to hustle our resources and ourselves to basically show that these things are happening here and that they’re impacting the tribe.”²⁷³ Once federal grants are secured, moreover, administering them in compliance with complex financial oversight and reporting requirements presents another massive bureaucratic challenge for Indigenous communities.²⁷⁴

269. Elizabeth Marino, *Adaptation Privilege and Voluntary Buyouts: Perspectives on Ethnocentrism in Sea Level Rise Relocation and Retreat Policies in the US*, 49 GLOB. ENV'T CHANGE 10, 12 (2018); Maldonado et al., *Addressing the Challenges*, *supra* note 28, at 296.

270. Marino, *supra* note 269, at 12.

271. 2020 GAO REPORT, *supra* note 51, at 38.

272. HORN, *supra* note 225, at 1–2; Lubben et al., *supra* note 1.

273. Hellman, *supra* note 208.

274. *Facing Floods and Fire: Emergency Preparedness for Natural Disasters in Native Communities: Hearing Before the S. Comm on Indian Affs.*, 112th Cong. 1 (2011), <https://www.govinfo.gov/content/pkg/CHRG-112shrg72392/html/CHRG-112shrg72392.htm> [<https://perma.cc/JS3P-2J3C>] (providing statements of Tribal leaders, a Tribal organization, U.S. congressmembers, and FEMA officials attesting to Tribes’ lack of “capacity to navigate through a complicated Federal bureaucracy,” lack of “financial capacity to comply with arduous federal requirements,” and lack of “ability, because of the complexity of the programs and the size of the Tribe, to serve as a grantee because of the financial oversight requirements”).

The Alaska Native village of Kotlik, for example, has applied for nearly two dozen grants from federal agencies since 2018, after the village flooded five times in nine months and 82 percent of residents said in a survey that they wanted to relocate to higher ground.²⁷⁵ One Tribal administrator, Pauline Okitkun, is shouldering almost all the burden of these multiple grant application processes.²⁷⁶ After several years of stress and late nights, Okitkun stepped down as Tribal administrator in February 2021.²⁷⁷ But when no one agreed to replace her, she was back at the job a few months later, struggling to secure relocation funding for her community of about 650 people.²⁷⁸ So far, nearly half of Kotlik’s grant applications have been denied, and the village has obtained only \$2.9 million in funding—a fraction of the estimated \$20 million it will cost to relocate the twenty-one most at-risk homes and fortify the eroding coast, let alone relocate the rest of the village.²⁷⁹

In November 2022, the Biden administration announced the winners of a competition that was hailed as “the first program in American history specifically designed to help relocate communities threatened by climate change.”²⁸⁰ Using appropriations from the 2021 Bipartisan Infrastructure Law and Inflation Reduction Act—which designated \$130 million for “community relocation” of Indigenous groups in climate-vulnerable areas²⁸¹—five out of at least eleven Tribes that submitted applications were awarded between \$2.1 and \$3 million each, a drop in the bucket of what is generally required for whole-community relocation in remote areas.²⁸² The Department of the Interior, which managed the competition, refused to discuss its criteria for decision-making.²⁸³ Later that month, with even less transparency and no formal application process, the Interior Department announced that three additional Tribal communities—including the Alaska Native

275. Lubben et al., *supra* note 1.

276. *Id.*

277. *Id.*

278. *Id.*

279. *Id.*

280. Christopher Flavelle, *Here’s Where the U.S. Is Testing a New Response to Rising Seas*, N.Y. TIMES (Nov. 10, 2022), <https://www.nytimes.com/2022/11/02/climate/native-Tribes-relocation-climate.html> [<https://perma.cc/4Q2P-WEJ3>].

281. Coral Davenport & Christopher Flavelle, *Infrastructure Bill Makes First Major U.S. Investment in Climate Resilience*, N.Y. TIMES (Nov. 10, 2021), <https://www.nytimes.com/2021/11/06/climate/infrastructure-bill-climate.html> [<https://perma.cc/LS7R-TLWR>].

282. Flavelle, *U.S. To Pay Millions To Move Tribes*, *supra* note 59.

283. *Id.*

villages of Napakiak and Newtok—would each receive \$25 million to relocate to safer ground.²⁸⁴ Although significant, a grant of this size is still often only a fraction of what Tribal communities will ultimately need. For Napakiak, the grant will cover less than a quarter of the village’s \$118 million estimated cost of relocation.²⁸⁵ Newtok’s relocation, which has been underway since 2019, is projected to cost \$120 million.²⁸⁶ As of March 2022, fewer than half of Newtok’s residents had moved to the resettlement site.²⁸⁷ The most urgent need is additional housing at the new site to facilitate the relocation of the rest of the community before the next storm strikes.²⁸⁸ However, the Interior Department’s \$25 million grant cannot be used to build homes, which are not considered “core infrastructure.”²⁸⁹ As the Newtok relocation project manager said, “Since 2019, we’ve been operating on small little budgets from different agencies and each agency has what you can do with their money and what you cannot We end up spending more money doing that.”²⁹⁰ Funding contests and opaquely determined grant awards are not a substitute for a systematic approach to whole-community relocation under the clear leadership, coordination, and oversight of a federal entity.²⁹¹

Indeed, despite federal agencies’ acknowledgment of the imminent danger that many Indigenous communities in the United States face, only one climate-induced relocation of an entire community has been completed so far. The recent resettlement of Tribal residents of Isle de Jean Charles, Louisiana took over twenty years and was highly fraught, leaving open questions as to whether the

284. *Id.*

285. Hellman, *supra* note 208.

286. Emily Schwing, *How Far Can \$25 Million Go To Relocate a Community That’s Disappearing into Alaska’s Melting Permafrost?*, HIGH COUNTRY NEWS (Jan. 18, 2023), <https://www.hcn.org/articles/north-climate-change-how-far-can-25-million-go-to-relocate-a-community-t-hats-disappearing-into-alaskas-melting-permafrost> [<https://perma.cc/CGW2-DJFN>].

287. *Id.*

288. *Id.*

289. *Id.*

290. *Id.*

291. In August 2022, as part of the White House National Climate Task Force, the Department of the Interior and FEMA jointly established an interagency Community-Driven Relocation Subcommittee with representation from the White House and fourteen federal agencies. *FEMA Efforts Advancing Community-Driven Relocation*, FED. EMERGENCY MGMT. AGENCY (Dec. 2, 2022), <https://www.fema.gov/fact-sheet/fema-efforts-advancing-community-driven-relocation> [<https://perma.cc/P9WJ-BLKF>]. The creation of this subcommittee, while a significant step, does not obviate the need for a lead federal agency and cohesive strategy for whole-community relocation. *Id.*

community's needs will be met.²⁹² The ongoing relocation of Newtok took over thirty years to get started.²⁹³ As the GAO noted in its recent call for a climate migration pilot program, the Isle de Jean Charles and Newtok relocations have been needlessly lengthy, tense, and complex due to the absence of any federal mechanism for whole-community relocation.²⁹⁴ In another report on the relocation of climate-vulnerable Alaska Native villages, the GAO warned that “[t]he lack of a lead federal entity has impeded village relocation efforts” and prevented prioritization of assistance for the most threatened villages.²⁹⁵

2. Restrictive Eligibility Requirements for Federal Grant Programs.

Indigenous communities often cannot satisfy the eligibility requirements for federal grant programs that support whole-community relocation. Some grant programs require a federal disaster declaration to unlock funds.²⁹⁶ But rather than a single catastrophic event, Alaska Native and other Indigenous communities often face a combination of slower-moving, multiyear climate threats that do not meet the definition of a disaster under the Stafford Act, according to the federal government.²⁹⁷ For example, although Newtok loses over eighty feet of land annually as a result of years of soil erosion, permafrost breakdown, and flood surges, the Obama administration denied the village's request for a disaster declaration in December 2016, leaving Newtok ineligible for a number of grants.²⁹⁸

In addition, all three FEMA programs that can be used to fund whole-community relocation require that the state and locality have a FEMA-approved Hazard Mitigation Plan in place to qualify for

292. 2020 GAO REPORT, *supra* note 51, at 39.

293. *Id.*

294. *Id.*

295. U.S. GOV'T ACCOUNTABILITY OFF., GAO-09-551, ALASKA NATIVE VILLAGES 36 (2009) [hereinafter 2009 GAO REPORT].

296. FEMA's Hazard Mitigation Grant Program, FEMA's Building Resilient Infrastructure and Communities Program, and HUD's Community Development Block Grant Disaster Recovery Program all require a federal disaster declaration. U.S. GOV'T ACCOUNTABILITY OFF., GAO-22-104241, ALASKA NATIVE ISSUES 39 (2022) [hereinafter 2022 GAO REPORT]; *see also* HUD Disaster Recovery Funds (CDBG-DR), U.S. DEP'T HOUS. & URB. DEV., https://www.hud.gov/disaster_resources/disaster_recovery_for_individuals_and_families/disaster_recovery_funds [https://perma.cc/8HGL-GZRE]. For FEMA programs that support relocation, *see* FEMA Efforts Advancing Community-Driven Relocation, *supra* note 291. For other agency programs that support relocation, *see* 2020 GAO REPORT, *supra* note 51, at 32–37.

297. 2009 GAO REPORT, *supra* note 295, at 23.

298. 2020 GAO REPORT, *supra* note 51, at 13, 16–17.

funding.²⁹⁹ Preparing a Hazard Mitigation Plan is resource-intensive, requiring engineers, surveyors, and other specialized experts to develop complex and highly technical risk assessments and mitigation strategies.³⁰⁰ FEMA may require multiple rounds of revisions before approving a plan.³⁰¹ Hazard Mitigation Plans must also be updated every five years, which “leads to a constant cycle of planning” that is extremely burdensome for small, overextended Tribal agencies.³⁰² Without the human and financial resources to produce and update Hazard Mitigation Plans, many Tribes cannot qualify for FEMA funding. As of June 2024, only 230 out of 574 Tribal governments—fewer than half—had Hazard Mitigation Plans in place.³⁰³ The proportion of Tribes with approved plans is even lower in FEMA Region X, which includes Alaska, Idaho, Washington, and Oregon—some of the states where Indigenous communities are most vulnerable to climate hazards.³⁰⁴

Another barrier to eligibility for federal grant programs is the requirement that communities seeking funds participate in the National Flood Insurance Program.³⁰⁵ Many Indigenous communities—including the sixty-four unincorporated Alaska Native villages that are located in the state’s “unorganized borough”³⁰⁶—do not qualify for the NFIP and therefore do not qualify for certain grant

299. These three FEMA programs are the HMGP, the BRIC Program, and the FMA Program. 2022 GAO REPORT, *supra* note 296, at 39.

300. Lucy Carter & Lori Peek, *Participation Please*, Nat. Hazards Ctr. (Apr. 29, 2016), <https://hazards.colorado.edu/article/participation-please-barriers-to-Tribal-mitigation-planning> [<https://perma.cc/3H9N-K73M>].

301. *Id.*

302. 2022 GAO REPORT, *supra* note 296, at 72.

303. *Hazard Mitigation Plan Status*, FED. EMERGENCY MGMT. AGENCY (July 17, 2023), <https://www.fema.gov/emergency-managers/risk-management/hazard-mitigation-planning/status> [<https://perma.cc/6ZT3-KASH>]; *Learn about Indian Affairs*, U.S. DEP’T OF THE INTERIOR: INDIAN AFFS., <https://www.bia.gov> [<https://perma.cc/UN38-FCJ3>].

304. Carter & Peek, *supra* note 300.

305. 2022 GAO REPORT, *supra* note 296, at 74. FEMA’s FMA Program and at least six Army Corps of Engineers programs require that applicants participate in the NFIP to qualify for funding. *Id.* at 38–39.

306. Boroughs in Alaska are similar to counties in other states. “About one-third of Alaska is made up of 16 organized boroughs. The remaining two-thirds of the state is sparsely populated land that is considered a single ‘unorganized borough.’ Of 213 Alaska Native villages, 147 (or 69 percent) are located within the unorganized borough.” 2009 GAO REPORT, *supra* note 295, at 8. Of the 147 Alaska Native villages in the unorganized borough, eighty-three are incorporated cities. *See id.* at 8, 26. The remaining sixty-four villages are unincorporated cities and therefore are not political subdivisions of the state. *Id.* at 26.

programs.³⁰⁷ These sixty-four Alaska Native villages are also ineligible for HUD Community Development Block Grant (“CDBG”) funds, which must be distributed to “‘units of general local government’ that are political subdivisions of the state.”³⁰⁸ Since neither the villages nor the borough are incorporated, they do not constitute “units of local government” for the purpose of receiving CDBG funds.³⁰⁹ The GAO has raised concerns twice—first in 2009 and then again in 2022—about Alaska Native villages’ disqualification from the CDBG Program.³¹⁰

Finally, eligibility for federal grants is restricted to Tribes with federal recognition. The approximately four hundred non-federally recognized Tribes in the United States face steep challenges to securing funds for relocation.³¹¹ Since, for example, the Biloxi-Chitimacha-Choctaw Tribe of Isle de Jean Charles does not have federal recognition and therefore could not apply for federal relocation funding directly, Tribal leaders sought a HUD grant through the state of Louisiana’s Office of Community Development.³¹² After using the plight of the Tribe to secure the grant, the state cut the Tribe out of the decision-making process, abandoned the Tribe’s detailed resettlement plan, and unilaterally altered key terms of the program, according to Tribal leaders.³¹³ The Tribe, lamenting its inability to receive federal funds, now regrets partnering with the state and even requested at one point that HUD retract the grant monies.³¹⁴

3. *Barriers in the Federal Grant Selection Process.* Even when eligibility to apply for grants is not a barrier, certain features of the federal grant selection process disadvantage Indigenous communities.

307. *Id.* at 23–24.

308. *Id.* at 26.

309. *Id.*

310. *Id.* at 42; 2022 GAO REPORT, *supra* note 296, at 71.

311. BURKETT ET AL., *supra* note 115, at 9–10; Natalie Fertig, *Who Gets to Be American Indian?*, POLITICO (Aug. 23, 2022, 3:05 PM), <https://www.politico.com/newsletters/the-recast/2022/08/23/american-indian-recognition-chinook-lumbee-00053331> [<https://perma.cc/8SNL-2G98>].

312. Tristan Baurick, *The Last Days of Isle de Jean Charles: A Louisiana Tribe’s Struggle to Escape the Rising Sea*, TIMES-PICAYUNE (Aug. 28, 2022), https://www.nola.com/news/environment/the-last-days-of-isle-de-jean-charles-a-louisiana-tribe-s-struggle-to-escape/article_70ac1746-1f22-11ed-bc68-3bde459eba68.html [<https://perma.cc/TVCS-63XD>].

313. *Id.*

314. *Id.*

For example, the use of CBA³¹⁵—while harmful to Black, Brown, and low-income communities generally—may be particularly detrimental to Indigenous communities. Tribes often live in remote locations with limited accessibility and sparse transportation infrastructure, making whole-community relocation extremely expensive. Forty-two percent of Indigenous people in Alaska, for example, live in areas that are inaccessible by road;³¹⁶ most Alaska Native villages are accessible only by airplane year-round and by boat seasonally, during the ice-free period and depending on water levels.³¹⁷ In these physically isolated areas, the cost of shipping building materials and equipment is exorbitant.³¹⁸ As a result of high construction costs, low population sizes, and undervaluation of avoided costs in CBA, government agencies rarely find that the economic benefits of a relocation project outweigh its significant financial costs.³¹⁹ Thus, Tribes are often at a severe disadvantage when competing with densely populated, urban localities for limited grant funds.³²⁰ In addition, Indigenous communities are frequently unable to meet requirements for cost-sharing,³²¹ which can range from 10 to 50 percent of project costs, depending on the grant program.³²² Many Indigenous communities rely on subsistence economies and have no tax base for revenue, so contributing even 10 percent of the costs of a massive project can be impossible.³²³ In 2022, the GAO reported that Alaska Native villages “often do not request the [Army Corps of Engineers’] assistance because they cannot meet cost-share requirements for construction projects, which could be tens of millions of dollars for a large project.”³²⁴

4. *Lack of Compatibility with Indigenous Cultures and Lifeways.* Certain aspects of relocation programs—for example, government

315. All three FEMA programs that can be used to fund whole-community relocation require CBA, along with HUD’s CDBG Mitigation Program and at least six Army Corps of Engineers programs. 2022 GAO REPORT, *supra* note 296, at 38–39.

316. Carter & Peek, *supra* note 300.

317. 2022 GAO REPORT, *supra* note 296, at 7–8.

318. *Id.*

319. *Id.* at 69.

320. *Id.* at 41.

321. FEMA, the Army Corps of Engineers, and the Denali Commission all have cost-share requirements. *Id.* at 38–39.

322. 2009 GAO REPORT, *supra* note 295, at 37.

323. 2022 GAO Report, *supra* note 296, at 41–42.

324. 2022 GAO REPORT, *supra* note 296, at 41.

ownership of vacated property and the demolition of homes on that property—may not be compatible with Indigenous peoples’ attachment to place, relationship to land, subsistence practices, and traditional knowledge. Many Indigenous communities conceive of relocation as “site expansion,” a term coined by Kigiqtamiut residents in Shishmaref, Alaska to signal that they will maintain control over their vacated lands even after moving to a resettlement site.³²⁵ Continued ownership of and access to vacated lands—and, with it, the ability to visit culturally sacred sites, engage in place-based ceremonies, and gather resources necessary for subsistence or economic survival—is critical for Indigenous communities’ cultural identity as well as material well-being.³²⁶ To design relocation programs that honor these needs, government agencies must be flexible and willing to depart significantly from the norm. In Isle de Jean Charles, for example, Louisiana officials and Indigenous residents of the islet ultimately worked out an arrangement in which residents retained ownership of and unfettered access to their vacated properties: Homes and other structures are to remain intact but not to be used as permanent residences or redeveloped.³²⁷ Without creative solutions that ensure permanent access and maintenance of the lifeways connected to vacated lands, managed retreat will remain out of reach for the many Indigenous communities who see this as a nonnegotiable condition of their relocation.

As Part II has detailed, many marginalized communities face existential climate threats yet are unable to access managed retreat programs. Access to managed retreat—whether individual property buyouts or whole-community relocation—requires significant human and financial resources as well as political clout. Long timelines and unpredictability compound these challenges. And for Indigenous peoples, obstacles to access can be virtually impossible to overcome. Many communities who wish to relocate are stranded in harm’s way; others, however, are disproportionately targeted and harmed by managed retreat.

325. Maldonado et al., *Addressing the Challenges*, *supra* note 28, at 296 n.3.

326. BURKETT ET AL., *supra* note 115, at 23.

327. See Jessica R.Z. Simms, Helen L. Waller, Chris Brunet & Pamela Jenkins, *The Long Goodbye on a Disappearing, Ancestral Island*, 11 J. ENV’T STUD. & SCI. 316, 325 (2021); *Frequently Asked Questions*, ISLE DE JEAN CHARLES RESETTLEMENT, <https://isledejeancharles.la.gov/frequently-asked-questions#q1> [<https://perma.cc/7GRD-Z8NA>].

III. THE “HARM-FROM-RELOCATING” JUSTICE PROBLEM: HOW MANAGED RETREAT CAN DISPROPORTIONATELY TARGET AND HARM MARGINALIZED COMMUNITIES

It is not difficult to imagine how managed retreat could be wielded by powerful forces—governments and developers, for instance—to achieve certain economic or political ends under the guise of protecting the public; indeed, one advocate likens managed retreat to “a new kind of Manifest Destiny.”³²⁸ Black and Indigenous communities may be particularly likely to resist relocation programs, which can recall traumatic histories of forced displacement and dispossession by the government. As empirical evidence indicates, buyout programs in urban areas may result in the disproportionate relocation of marginalized households due, in part, to CBA based on standard economic logic. Although technically “voluntary,” buyouts can also be coercive, especially for Black, Brown, and low-income households with fewer options in the aftermath of disasters. Finally, marginalized communities may suffer greater relocation-related financial and psychosocial harms.

A. *Resistance to Managed Retreat*

In marginalized communities, the idea of government-sponsored relocation can be met with significant resistance rooted in long histories of housing segregation, land use discrimination, urban renewal, and forced displacement. Sometimes, distrust can begin with the flood event itself. After Hurricane Floyd in 1999, many residents of Kinston, North Carolina’s Black neighborhoods felt that local officials had released water from a dam upstream to prevent it from bursting—thereby causing Kinston to flood—but had failed to warn the public.³²⁹ Residents of San Antonio, Texas’s predominantly Black community of Wheatley Heights contemplated legal action after a massive storm in 1998, believing that the city had intentionally flooded their neighborhood.³³⁰ And after Hurricane Katrina’s deadly 2005 rampage

328. Maldonado et al., *Addressing the Challenges*, *supra* note 28, at 299.

329. See JAMES FRASER, REBECCA ELMORE, DAVID GODSCHALK & WILLIAM ROE, IMPLEMENTING FLOODPLAIN LAND ACQUISITION PROGRAMS IN URBAN LOCALITIES 15 (2003) (“[R]esidents . . . felt that the flooding in Kinston had been caused by officials releasing water from Falls Lake Dam in Raleigh, to prevent the dam from bursting. Many residents felt Lenoir County officials were privy to this information, but did not let the public know.”).

330. See *id.* at 21 (“In Wheatley Heights, there were rumors of a class-action lawsuit over the claim that the city had purposely flooded the[] neighborhood.”).

through New Orleans, residents of the 98 percent Black Lower Ninth Ward believed that the Industrial Canal levee was purposely breached to force them out of their homes.³³¹ This deep-seated distrust stems not only from decades of government-perpetrated harm but also from specific historical events—for example, the destruction of a levee by New Orleans’ white elite to divert floodwaters to a poor, Black area during the Mississippi River flood of 1927.³³² Marginalized communities may also fear that government agencies, powerful developers, and corporations intend to use their vacated land for political or economic purposes—that is, by turning “[B]lack people’s neighborhoods into white people’s parks,” luxury housing complexes, or oil fields.³³³ Managed retreat can be reminiscent of old urban renewal policies that decimated mostly Black neighborhoods in the name of “progress.”³³⁴ While ostensibly intended to serve the public interest by building infrastructure like interstate highways and parks—much like managed retreat is intended to serve the public interest by enhancing climate resilience—urban renewal resulted in massive, involuntary relocations that have ongoing psychosocial reverberations in affected communities today.³³⁵

Post-Katrina events in New Orleans, a city that was 67 percent Black before the storm struck,³³⁶ illustrate the tensions that can arise when government officials raise the specter of relocating marginalized communities in postdisaster contexts. In the aftermath of the catastrophic hurricane, New Orleans Mayor Ray Nagin convened the Bring New Orleans Back Commission to steer the city’s recovery.³³⁷

331. See Robert B. Olshansky, Laurie A. Johnson, Jedidiah Horne & Brendan Nee, *Longer View: Planning for the Rebuilding of New Orleans*, 74 J. AM. PLAN. ASS’N 273, 282 (2008) (describing the “Environment of Mistrust” in New Orleans).

332. See *id.* (“Many African Americans know that members of the White elite ordered a levee protecting a poor area destroyed in order to save New Orleans during the Mississippi River flood of 1927.”).

333. Mike Davis, *Who Is Killing New Orleans*, NATION (Mar. 23, 2006), <https://www.thenation.com/article/archive/who-killing-new-orleans> [<https://perma.cc/W63D-5T4F>] (internal citations omitted); FRASER ET AL., *supra* note 329, at 21.

334. Koslov, *supra* note 36, at 363, 367.

335. See Rachel Breunlin & Helen A. Regis, *Putting the Ninth Ward on the Map*, 108 AM. ANTHROPOLOGIST 744, 744–45 (2006), <https://core.ac.uk/download/pdf/216841523.pdf> [<https://perma.cc/TTA3-7DU4>] (comparing modern urban restructuring to mid- and late-century urban renewal efforts that displaced marginalized New Orleans residents).

336. Ceci Connolly, *9th Ward: History, Yes, but a Future?*, WASH. POST (Oct. 3, 2005), <https://www.washingtonpost.com/archive/politics/2005/10/03/9th-ward-history-yes-but-a-future/5fcf8a89-31f2-4778-ac16-e09d14fc59c8> [<https://perma.cc/6CAK-VV3Q>].

337. Davis, *supra* note 333.

Described by one writer as an “elite initiative” that “grew out of a notorious meeting between Mayor Nagin and New Orleans business leaders” and “excluded most of New Orleans’s elected [B]lack representatives,” the seventeen-member Commission was charged with developing a master plan for the city’s reconstruction.³³⁸ As depicted in its now-infamous “Green Dot Map,” the Commission proposed mass buyouts of New Orleans’ low-lying—and predominantly Black and low-income—neighborhoods, which were marked on the map with green dots labeled “areas for future parkland.”³³⁹ Once converted to a greenbelt, these areas would absorb stormwaters and protect New Orleans—a reconstructed New Orleans, with some historic neighborhoods like the Lower Ninth Ward gone—from flooding.³⁴⁰ Meanwhile, predominantly white and middle-to-upper-class neighborhoods that had experienced just as much flooding during Katrina, like the Lakeview neighborhood, were not targeted for buyout.³⁴¹ The Commission’s proposal to shrink the city’s urban footprint in the name of public safety and flood protection was widely seen as a new version of “the historic elite desire to shrink the city’s socioeconomic footprint of [B]lack poverty (and [B]lack political power).”³⁴² Mayor Nagin abandoned the wildly unpopular plan after realizing that endorsing it amounted to “political suicide.”³⁴³

More recently, the relocation of Isle de Jean Charles’ Indigenous communities was similarly fraught. After members of the Biloxi-Chitimacha-Choctaw Tribe were driven out of their original lands by European settlers during the violent Indian Removal Act era, they sought refuge in the dense marshland of southern Louisiana and settled on Isle de Jean Charles.³⁴⁴ Over the ensuing decades—after realizing

338. *Id.*

339. Martine Johannessen & Dylan Goldweit-Denton, *The Green Dot Effect: Neighborhood Recovery After Hurricane Katrina*, CONFLICT URBANISM (2020), https://centerforspatialresearch.github.io/conflict_urbanism_sp2020/2020/05/06/Johannessen.html [<https://perma.cc/U63K-34EF>].

340. *Id.*; Davis, *supra* note 333.

341. *See id.* (“In contrast with Broadmoor and the Lower Ninth Ward, Lakeview was not covered by a Green Dot, though the neighborhood faced extremely high levels of flooding.”).

342. Davis, *supra* note 333.

343. Gary Rivlin, *Why the Plan to Shrink New Orleans Failed*, FIVETHIRTYEIGHT (Aug. 27, 2015), <https://fivethirtyeight.com/features/why-the-plan-to-shrink-new-orleans-after-katrina-failed> [<https://perma.cc/ZK7E-PFCX>].

344. *See* Maldonado et al., *Impact of Climate Change*, *supra* note 114, at 605 (“Forcibly displaced from their original lands by European settlers, the Isle served as a refuge for Natives to

the significant economic value of Tribal lands—state officials illegally designated Tribal lands as “public,” sold these lands to trappers and oil prospectors, and forced Tribes to sign away their claims to the land annually.³⁴⁵ Private companies, most notably the oil company now known as ConocoPhillips, erected fences to lay claim to Tribal lands.³⁴⁶ By 1928, ConocoPhillips had explored over half of Louisiana’s total available land in search of oil.³⁴⁷ Gradually, the effects of both climate change and oil and gas development led to the near-total submergence of Isle de Jean Charles.³⁴⁸ Nearly two centuries after their ancestors were forcibly displaced to the island, Tribal residents were expected to trust the government to relocate them again. During discussions about relocation, residents’ fears and suspicions often hearkened back to sordid histories of forced displacement, land prospecting, and land theft.³⁴⁹ “There’s a lot of people who think that a big real estate company or oil company is gonna come take the land,” commented one resident in a community meeting.³⁵⁰ Many residents recalled how their great-grandparents were deceived into relinquishing their claims to land by signing an “X.”³⁵¹ “We learned a long time ago not to trust when they come with paper and pen,” one resident told a reporter.³⁵²

Some residents of the island moved to the resettlement site in 2022, though only after a highly contentious, six-year-long process that deepened their distrust of the government and validated many of their fears.³⁵³ According to Tribal Chief Albert Naquin—who wrote to HUD in late 2018 and requested, unsuccessfully, that the agency retract the funding it had awarded Louisiana’s Office of Community Development for the relocation—state officials jettisoned the Tribe’s vision for resettlement and circumvented Tribal leadership throughout

escape to the end of the bayous in dense forested swamps to avoid being forcibly relocated or killed.”).

345. Simms et al., *supra* note 327, at 320.

346. *Id.*

347. *Id.*

348. Maldonado et al., *Addressing the Challenges*, *supra* note 28, at 297 (“Ninety-eight percent of the Island’s 33,000 acres of landmass has vanished due to relative sea level rise, erosion, oil and gas infrastructure, and levee development.”).

349. Simms et al., *supra* note 327, at 320.

350. *Id.*

351. *Id.*

352. Stein, *supra* note 64.

353. See Baurick, *supra* note 314 (“More than six years after the grant was awarded, only 12 homes at the 515-acre site near Houma are complete.”).

the process.³⁵⁴ Naquin criticized the state for using “‘divide-and-conquer tactics’ that mirrored those used by oil companies: Ignore tribal leaders and focus on individuals to ‘get them to sign their land away.’”³⁵⁵ Meanwhile, other state agencies were building recreational amenities and fortifying infrastructure on Isle de Jean Charles—and developers wanted to construct fishing cabins—so that tourists would be able to enjoy access to the island once it was vacated.³⁵⁶ As Naquin told parish officials, “This is profoundly unsettling Our Tribe was strongly encouraged to leave our homes, and we were told that if we stayed, we’d have no help or services there. Now, we’re finding out that the land is being repurposed and seemingly redeveloped for private recreational use.”³⁵⁷ Although the recreational development plan was ultimately scrapped after the Tribe objected,³⁵⁸ it substantiated the doubts that Tribal residents had harbored all along. Indeed, many residents’ experiences with the Isle de Jean Charles relocation were consistent with their collective memory of stolen land and broken promises.

B. Targeting Marginalized Communities for Relocation

Although marginalized communities may resist managed retreat programs, evidence indicates that buyouts disproportionately occur in these communities. The two empirical studies discussed above³⁵⁹ found that whiter counties are more likely to receive federal buyout assistance but residents of marginalized localities within those counties are more likely to accept buyout offers. Other studies have similarly found associations between race or income and buyout program participation. One statistical analysis of postdisaster buyouts in two North Carolina localities, for example, concluded that neighborhoods with higher proportions of African American residents and areas with higher levels of segregation were associated with more buyouts.³⁶⁰ The study also found that neither flood vulnerability nor poverty—two

354. *Id.*

355. *Id.*

356. *Id.*

357. *Id.*

358. *Id.*

359. *See supra* Part I.E.

360. *See* Martin, *supra* note 76, at 92 (“The statistical association between race, segregation, and buyouts is not explained by the correlation between race and poverty, nor by a concentration of African Americans in locations vulnerable to flood. This racial geography may result from subjective buyout processes that make room for implicit or explicit racial bias.”).

potentially confounding variables—could explain the relationship between race and buyouts.³⁶¹ According to another study, nonwhite homeowners were more than thirty-eight times more likely than white homeowners to accept buyout offers in two working-class neighborhoods of New York City after Hurricane Sandy.³⁶² In fact, race was the only individual-level predictor of buyout program participation found in the study.³⁶³ Researchers who examined four postdisaster buyout program sites in North Carolina, Texas, and North Dakota found that higher-income households were less likely to participate in buyout programs.³⁶⁴ And after conducting surveys in eight postdisaster sites in California, Georgia, Louisiana, and North Carolina, researchers concluded that low-income and middle-income homeowners accepted federal mitigation assistance offers 12.1 and 2.6 times more frequently than high-income homeowners.³⁶⁵ Several factors might explain these patterns.

1. *The Property-Based Logic of Cost-Benefit Analysis.* Cost-benefit analysis—which government agencies use to determine buyout eligibility—favors protection-in-place for wealthier, whiter areas and relocation for poorer, more racially diverse areas.³⁶⁶ Since the 1980s, CBA has been a key component of the federal regulatory review process, with the Office of Management and Budget (“OMB”)

361. *Id.*

362. See Sherri Brokopp Binder, Charlene K. Baker & John P. Barile, *Rebuild or Relocate? Resilience and Postdisaster Decision-Making After Hurricane Sandy*, 56 AM. J. CMTY. PSYCH. 180, 187 (2015) [hereinafter Binder et al., *Rebuild or Relocate*] (showing results of correlation matrix and logistic regression analysis).

363. *Id.* at 191.

364. de Vries & Fraser, *Citizenship Rights*, *supra* note 26, at 25.

365. James C. Fraser, Mattin W. Doyle & Hannah Young, *Creating Effective Flood Mitigation Policies*, 87 EOS 265, 266 (2006).

366. Siders, *Managed Retreat*, *supra* note 15, at 250; *see, e.g.*, A.R. Siders & Jesse M. Keenan, *Variables Shaping Coastal Adaptation Decisions to Armor, Nourish, and Retreat in North Carolina*, 183 OCEAN & COASTAL MGMT. 1, 1 (2020) (finding that protection-in-place “correlates with higher home values, household incomes, . . . and low racial diversity” and that buyouts “correlate with low home values, household incomes, . . . and high racial diversity”). Crucially, for Indigenous peoples living in physically isolated areas and seeking whole-community relocation, CBA often prevents *both* protection-in-place *and* relocation. As described above, *see supra* Part II.C.3, Alaska Native and other Indigenous communities struggle to meet cost-effectiveness requirements for relocation projects due to high construction costs and low population sizes. For these same reasons, CBA is also a major barrier to securing federal funding for protective infrastructure that would enable these communities to remain in place.

responsible for ensuring agency compliance.³⁶⁷ According to OMB guidelines, a project should have the lowest cost-benefit ratio among competing alternatives to be considered cost-effective³⁶⁸; however, FEMA has adopted a stricter interpretation of cost-effectiveness, requiring that the benefits of a flood mitigation project outweigh its costs.³⁶⁹ Importantly, FEMA’s cost-benefit methodology does not include the indirect or less tangible benefits and costs of hazard mitigation projects. Thus, FEMA ignores key benefits of infrastructure projects aimed at protecting communities in place—including “changes in regional economic production, incomes, [and] employment resulting from project construction”—as well as key costs of buyout programs, such as reductions in localities’ property tax bases and impacts on social vulnerability.³⁷⁰ FEMA instead relies largely on a comparison of direct, easily quantifiable benefits and costs. The costs of buyout programs, in particular, are conceptualized primarily in terms of the economic values of the properties to be purchased—not in terms of the social, psychological, and material costs of relocation for homeowners or in terms of a program’s potentially inequitable effects. Moreover, as Kelly McGee, currently a legal fellow at the Institute for Policy Integrity, points out, FEMA may be even less inclined than other federal agencies to assess the equity implications of its projects: “FEMA requires CBA to be conducted in accordance with [OMB guidelines],” writes McGee, but OMB’s mandate to consider distributional impacts “is notably absent from FEMA’s guidance on CBA.”³⁷¹

As a result of CBA’s property-based logic, investments in protective adaptations such as levees or elevated infrastructure tend to be considered cost-effective when the property to be protected has sufficiently high economic value, making whiter and wealthier areas more likely to receive federal assistance for this purpose.³⁷²

367. Exec. Order No. 12,291, 3 C.F.R. § 127 (1982), <https://www.archives.gov/federal-register/codification/executive-order/12291.html> [<https://perma.cc/M6CM-DLTE>].

368. OFF. OF MGMT. & BUDGET, CIRCULAR A-94, GUIDELINES AND DISCOUNT RATES FOR BENEFIT-COST ANALYSIS OF FEDERAL PROGRAMS 5 (2003).

369. McGee, *supra* note 25, at 1939.

370. *Id.* at 1940.

371. *Id.* at 1940–41.

372. According to a 2018 Brookings Institute report, “in the average U.S. metropolitan area, homes in neighborhoods where the share of the population is 50 percent Black are valued at roughly half the price as homes in neighborhoods with no Black residents.” ANDRE M. PERRY, JONATHAN ROTHWELL & DAVID HARSHBARGER, *THE DEVALUATION OF ASSETS IN BLACK NEIGHBORHOODS: THE CASE OF RESIDENTIAL PROPERTY 2* (2018), <https://www.brookings.edu/articles/devaluation-of-assets-in-black-neighborhoods> [<https://perma.cc/5VC2-FZ2A>].

Investments in property buyouts, on the other hand, are considered cost-effective for lower-value properties, making poorer and less-white areas more likely to qualify for buyout funding.³⁷³ As one managed retreat expert explains, “You don’t build a \$1-million flood wall in front of a \$100,000 home And conversely, if I give you \$1-million and say I want you to . . . acquire as much land as possible, you’re not going to purchase a \$1-million home.”³⁷⁴ U.S. disaster policy’s focus on protecting property rather than people, in other words, promotes social inequity. For example, although the small coastal town of Jean Lafitte, Louisiana is facing rising sea levels and inundation, federal agencies have repeatedly concluded that levee protection is “not economically justifiable.”³⁷⁵ As one longtime resident complained, government officials “don’t place value on anything but the money, not the longevity of these communities, not the culture.”³⁷⁶ While policymakers see CBA as an objective, technical assessment, residents of marginalized communities contend that CBA is, in fact, “inherently political and social” as well as racialized.³⁷⁷

Empirical evidence confirms these race- and class-based patterns of federal disaster funding distribution. A study of coastal adaptation in the contiguous United States concluded that “areas of higher social vulnerability are much more likely to be abandoned than protected in response to [sea level rise].”³⁷⁸ This was particularly true along the Gulf Coast, “where over 99% of the most socially vulnerable people live in areas unlikely to be protected from inundation, in stark contrast to the least socially vulnerable group, where only 8% live in areas unlikely to be protected.”³⁷⁹ The study’s authors emphasized that their findings “highlight[] the need to consider factors other than just economic efficiency in coastal adaptation decision-making.”³⁸⁰

373. McGee, *supra* note 25, at 1946.

374. Michael Allen, *Protection for the Rich, Retreat for the Poor*, HAKAI MAG. (Oct. 14, 2020), <https://hakaimagazine.com/news/protection-for-the-rich-retreat-for-the-poor> [<https://perma.cc/F94G-MWAE>].

375. Kevin Sack & John Schwartz, *Left to Louisiana’s Tides, a Village Fights for Time*, N.Y. TIMES (Feb. 24, 2018), <https://www.nytimes.com/interactive/2018/02/24/us/jean-lafitte-floodwaters.html> [<https://perma.cc/6Q9V-WV4Q>].

376. *Id.*

377. FRASER ET AL., *supra* note 329, at 48.

378. Jeremy Martinich, James Neumann Lindsay Ludwig & Lesley Jantarasami, *Risks of Sea Level Rise to Disadvantaged Communities in the U.S.*, 18 MITIGATION & ADAPTATION STRATEGIES FOR GLOB. CHANGE 169, 169 (2013).

379. *Id.*

380. *Id.* at 180.

Localized analyses are consistent with these national trends. Following historic flooding in Cedar Rapids, Iowa in 2008, government officials applying CBA determined that federally funded levees to protect the city's central business district had a medium benefit-cost ratio, while levees to protect socially vulnerable neighborhoods had a low benefit-cost ratio.³⁸¹ After unsuccessfully using social vulnerability indicators to argue that the city's marginalized neighborhoods should also receive levee protection, city officials applied for and obtained federal funding for buyouts.³⁸² A study of the Cedar Rapids buyout program found that it "targeted the most socially vulnerable neighborhoods."³⁸³ The study's authors acknowledged the normative tension in their finding, noting that although it "can be seen as a positive in terms of equity in the distribution of property acquisition resources[,] . . . the buyouts also can be viewed in terms of resident displacement and loss of neighborhood cohesion that disproportionately affected socially vulnerable areas."³⁸⁴ Cost-benefit logic thus resulted in protection for Cedar Rapids's wealthy, commercial areas and abandonment of marginalized areas. Researchers examining coastal adaptation in North Carolina similarly found that shoreline armoring to protect people in place "correlates with higher home values, household incomes, and population density and low racial diversity."³⁸⁵ Property buyouts, on the other hand, "correlate with low home values, household incomes, and population density and high racial diversity."³⁸⁶ Finally, after Hurricane Harvey decimated areas along Greens Bayou in Harris County, Texas, the county launched a mandatory buyout program targeting Black, Brown, and low-income communities in the bayou's watershed.³⁸⁷ As a report by Rice University's Baker Institute for Public Policy noted, the area of the watershed—"one of the poorest areas in Harris County"—had long failed to meet cost-effectiveness requirements for federal flood control projects that might have curbed some of the worst impacts of

381. Tate et al., *supra* note 24, at 2066.

382. *Id.*

383. *Id.* at 2071.

384. *Id.* at 2071–72.

385. Siders & Keenan, *supra* note 366, at 1.

386. *Id.*

387. Amal Ahmed, *Torn Apart*, GRIST (Sept. 19, 2022), <https://grist.org/housing/torn-apart-mandatory-buyout-flood-houston-allen-field> [<https://perma.cc/ZQQ3-8RY5>].

the storm.³⁸⁸ By neglecting to protect this area, government agencies paved the way for the eventual—and mandatory—relocation of the marginalized communities who lived there.

One way CBA creates inequity in buyout programs is through “[s]ubstantial [d]amage” declarations.³⁸⁹ If repairs would cost more than 50 percent of a home’s predisaster value, then the home is declared “substantially damaged” and a buyout is deemed cost-effective.³⁹⁰ Should a homeowner reject the buyout offer and instead choose to rebuild a substantially damaged home, federal funds cannot be used for repairs and the renovated home must meet the NFIP’s local floodplain management standards.³⁹¹ Although wealthier households may be able to rebuild their homes in accordance with these requirements for flood-safe reconstruction, poorer households generally cannot afford to do so and may be forced to move.³⁹² For example, in Kinston, North Carolina’s Lincoln City neighborhood—where 99.4 percent of the population was Black and 56.6 percent of families lived below the poverty line before Hurricane Floyd struck in 1999—97 percent of eligible homeowners accepted their post-Floyd buyout offers, largely because they could not afford to rebuild.³⁹³ As one former Lincoln City resident, who was a child at the time of the buyout, recalled, “Well, we wanted to [return to our home] . . . I remember [my parents] tried to redo everything and then it was just too costly, eventually . . . they just took the buyout.”³⁹⁴

388. JIM BLACKBURN & PHILIP B. BEDIENT, HOUSTON A YEAR AFTER HARVEY: WHERE WE ARE AND WHERE WE NEED TO BE 31 (2018), https://8ed4fb93-0a65-4904-a19c-83610559d0e9.filesusr.com/ugd/d29356_e091a002a4044214a943df4d5d2100df.pdf [https://perma.cc/R7BT-7K LK].

389. FED. EMERGENCY MGMT. AGENCY, HAZARD MITIGATION ASSISTANCE GUIDANCE: HAZARD MITIGATION GRANT PROGRAM, PRE-DISASTER MITIGATION PROGRAM, AND FLOOD MITIGATION ASSISTANCE PROGRAM 106 (2015), https://www.fema.gov/sites/default/files/2020-04/HMA_Guidance_FY15.pdf [https://perma.cc/QK5L-ZWWS].

390. *Id.* at 131.

391. *Fact Sheet: Elevating Your Flood Damaged Home to Avoid Future Damage*, FED. EMERGENCY MGMT. AGENCY (Oct. 11, 2017), <https://www.fema.gov/press-release/20230728/fact-sheet-elevating-your-flood-damaged-home-avoid-future-damage> [https://perma.cc/N7BQ-GDY E]; FED. EMERGENCY MGMT. AGENCY, CITY OF FREEPORT FLOOD MITIGATION ACQUISITION AND DEMOLITION PROJECT 4-5 (2021) [hereinafter FEMA, CITY OF FREEPORT], https://www.fema.gov/sites/default/files/documents/fema_freeport-faq-e-brochure_02-2021.pdf [https://perma.cc/W5KM-J5S2].

392. Siders, *Social Justice Implications*, *supra* note 20, at 249.

393. Martin, *supra* note 76, at 28.

394. *Id.* at 35 (alterations in original).

Moreover, as Professor A.R. Siders notes, “[l]ow-value homes are more likely to be declared ‘substantially damaged’” in the first place because they are often poorly constructed, located in climate-vulnerable areas without protective infrastructure, or “built under outdated building codes and therefore sustain more damage.”³⁹⁵ Even if two homes sustain the same dollar amount of damage, that amount comprises a larger proportion of the lower-value home’s total value and is consequently more likely to result in a substantial damage assessment for the lower-value home.³⁹⁶ In addition, some evidence indicates that local officials are predisposed to make substantial damage declarations in marginalized communities. In one qualitative study of buyout programs in North Carolina after Floyd, city planners told researchers that “[i]n the high valued but flood-prone coastal areas, officials obviously would not want the substantial damage assessment to be strictly enforced.”³⁹⁷ In the predominantly Black city of Kinston, on the other hand, city planners explained that they “saw [the substantial damage assessment] as a tool to get people out of the floodplain,” where “the people . . . were least able to deal with it and they lived in lower valued housing.”³⁹⁸ The researchers concluded that “the socio-economic vulnerability of the local population appeared to have influenced the motivation for planners to seek substantial damage declarations.”³⁹⁹

2. *Intentional Targeting.* Local officials may intentionally target marginalized communities for buyouts. Buying out low-value rather than high-value properties can prevent significant losses of local tax revenue.⁴⁰⁰ Local officials may also be motivated by a pragmatic desire to purchase more homes with a limited pool of funds or by a benevolent desire to help the communities facing the most severe risks.⁴⁰¹ On the other hand, as North Carolina’s Chief Resilience Officer Amanda W. Martin has written, implicit or explicit racial bias may drive local officials to target Black and Brown communities for buyouts—especially considering the amount of discretion that localities have when prioritizing buyout applications and determining buyout

395. Siders, *Social Justice Implications*, *supra* note 20, at 249.

396. *Id.*

397. de Vries & Fraser, *Citizenship Rights*, *supra* note 26, at 17.

398. *Id.*

399. *Id.*

400. Martin, *supra* note 76, at 42.

401. Siders, *Social Justice Implications*, *supra* note 20, at 251.

eligibility.⁴⁰² With no guidance from the federal government, localities use subjective and often nondemocratic processes to design and implement buyout programs. Ultimately, political decisions determine which areas are targeted and who qualifies, and there is no requirement for public review or oversight of these decisions.⁴⁰³ This not only enables racial bias to infect the buyout design and implementation process but also “raises concerns for segregated communities of color because segregation is associated with reduced political capital and poor political representation.”⁴⁰⁴ Local officials may feel emboldened to take unpopular action in marginalized communities with little political clout and limited resources to resist.

3. *Neighborhood Attainment.* As detailed below,⁴⁰⁵ studies indicate that buyout participants tend to relocate to areas of greater social vulnerability, higher poverty, and equal flood risk, most probably because of inadequate compensation and other financial hardships associated with buyouts and relocation. Nevertheless, there is limited evidence that some Black, Brown, and low-income households see postdisaster buyout programs as “opportunities to engage in upward neighborhood attainment.”⁴⁰⁶ By depressing property values, historic disinvestment in marginalized communities may indirectly compel many residents to accept buyout offers for financial reasons, as described above.⁴⁰⁷ But decades of government neglect may also *directly* facilitate the relocation of some residents, who may be keen to leave behind the aging infrastructure, unpaved roads, unmaintained public spaces, and social plight that has long plagued their neighborhoods.⁴⁰⁸ Ultimately, historic marginalization can mean *both* that Black, Brown, and low-income households are disproportionately targeted by buyout programs *and* that these households disproportionately gravitate toward buyout programs. There is, however, much more empirical evidence to support the former proposition.

402. Martin, *supra* note 76, at 85–86.

403. *Id.* at 86.

404. *Id.*

405. *See infra* Part III.D.1.

406. Kevin Loughran & James R. Elliott, *Residential Buyouts as Environmental Mobility: Examining Where Homeowners Move to Illuminate Social Inequities in Climate Adaptation*, 41 *POPULATION & ENV'T* 52, 57 (2019).

407. *See supra* Part III.B.1.

408. *See FRASER ET AL., supra* note 329, at 24–25.

C. “Voluntary” in Name Only: The Coercive Nature of Buyout Programs

Buyouts funded by FEMA’s HMGP must be “voluntary”—that is, government officials cannot force homeowners to participate in buyout programs. But, as others have noted, the concept of “voluntariness” is highly contested in postdisaster contexts.⁴⁰⁹ Is it possible to make a truly “voluntary” decision to accept a buyout offer when financial constraints have effectively closed off all other options? Can a decision be “voluntary” when made under conditions of extreme psychological vulnerability, as in the immediate aftermath of a disaster? Although additional empirical research is needed to explore the extent to which homeowners experience participation in postdisaster buyout programs as voluntary, studies conducted to date suggest that buyout programs can be coercive—particularly for marginalized communities without the means to pursue alternative recovery paths.

In a qualitative study of four postdisaster buyout programs that targeted marginalized communities in North Carolina, Texas, and North Dakota, researchers interviewed over three hundred homeowners who had received buyout offers.⁴¹⁰ Slightly more than half of interviewees accepted their offers and expressed satisfaction with their choice, about 35 percent accepted but felt that their participation was not voluntary, and about 10 percent rejected their buyout offers.⁴¹¹ Of the 35 percent of interviewees who indicated that they had involuntarily accepted their buyout offers, about half said that they would have stayed and rebuilt their homes if they could have.⁴¹² Government officials often measure the success of a buyout program or community satisfaction with the program in terms of the proportion of eligible homeowners who participate.⁴¹³ Here, that was roughly 90 percent assuming a representative study sample; however, as study authors Daniel de Vries and James Fraser concluded, the “true success rate” of the programs they studied may be closer to 50 percent.⁴¹⁴ High levels of participation in a buyout program are not indicative of

409. See, e.g., Katharine J. Mach & A.R. Siders, *Reframing Strategic, Managed Retreat for Transformative Climate Adaptation*, 372 SCI. 1294, 1297 (2021).

410. de Vries & Fraser, *Citizenship Rights*, *supra* note 26, at 8.

411. *Id.* at 28.

412. *Id.* at 21.

413. See Sherri B. Binder, John P. Barile, Charlene K. Baker & Bethann Kulp, *Home Buyouts and Household Recovery: Neighborhood Differences Three Years After Hurricane Sandy*, 18 ENV'T HAZARDS 127, 128 (2019) [hereinafter Binder et al., *Hurricane Sandy*].

414. de Vries & Fraser, *Citizenship Rights*, *supra* note 26, at 28.

homeowner satisfaction—and in fact may be evidence of the involuntary or coercive nature of the program. Importantly, the study authors found that experiences of involuntariness across the four sites did not stem from feelings of helplessness in the face of high perceived flood risk or from strong community attachment.⁴¹⁵ Instead, homeowners attributed the involuntariness of their participation to various forms of government pressure, exerted either through the design of the buyout program—its terms and conditions—or through the implementation of the program and its procedural features, including buyout officials’ interactions with homeowners.⁴¹⁶

The major design feature of buyout programs that often has a highly coercive effect on marginalized households is the “substantial damage” declaration described above.⁴¹⁷ Few poor or low-income households have the private funds to rebuild their “substantially damaged” homes in compliance with elevation and other flood-proofing regulations.⁴¹⁸ As a result, these households are effectively forced to accept buyout offers and relocate.⁴¹⁹ Although homeowners can challenge “substantial damage” declarations by showing either a higher pre-flood home value or a lower cost-of-repairs value (such that repairs would cost less than 50 percent of the pre-flood home value), marginalized households often cannot afford to hire appraisers and other experts to undertake these assessments.⁴²⁰ Buyout officials interviewed in de Vries and Fraser’s study, moreover, were “[a]ware of the value of these declarations in pushing property owners to participate” and saw it as “a priority to swiftly move into post-flood areas . . . to develop substantial damage declarations before residents were able to clean up, rebuild, or ask questions.”⁴²¹ After the Great Flood of 1997 devastated Grand Forks, North Dakota, low-income floodplain residents filed a class-action lawsuit accusing city officials of weaponizing “substantial damage” declarations to force them out of

415. *Id.* at 22.

416. *Id.*

417. *See supra* Part III.B.1. Other postdisaster government actions that have been seen as tools to remove marginalized people include issuing moratoria on rebuilding or making rebuilding difficult, tearing down homes after declaring them “public health threats,” and condemning properties when homeowners do not return in time. *See, e.g.,* Binder & Greer, *The Devil in Details*, *supra* note 248, at 102; *see also* Baker et al., *supra* note 93, at 470; Martin, *supra* note 76, at 13, 35, 162; de Vries & Fraser, *Citizenship Rights*, *supra* note 26, at 19.

418. de Vries & Fraser, *Citizenship Rights*, *supra* note 26, at 16.

419. Stern, *supra* note 68, at 230.

420. de Vries & Fraser, *Citizenship Rights*, *supra* note 26, at 17.

421. *Id.* at 16.

their homes.⁴²² Residents sought to compel the city to use eminent domain rather than a nominally “voluntary” buyout program that masked the on-the-ground reality of forced displacement.⁴²³ Indeed, localities are financially incentivized to use voluntary rather than mandatory property acquisitions, both because major federal relocation funding streams support only voluntary buyouts and because mandatory acquisitions trigger additional procedural protections and relocation assistance for homeowners.⁴²⁴ As a leading managed retreat expert notes, these additional benefits suggest that mandatory acquisitions “may . . . protect against some of the known harms of voluntary buyouts, although this remains an open research question.”⁴²⁵

Buyout programs are also implemented in ways that can pressure marginalized households into participating. The overarching problem is that buyouts occur in the aftermath of disasters, typically without *any* prior planning process, let alone a participatory process that involves affected community members. Marginalized communities often have weak or strained relationships with local government and experience stigma when seeking to exercise their democratic rights.⁴²⁶ To counteract this lack of political capital, predisaster community visioning and planning sessions—in which residents can think collectively about how they wish to respond to looming climate threats—are critical.⁴²⁷ Instead, buyout programs are typically designed with no community input and implemented in postdisaster contexts, when social vulnerability combines with “temporal vulnerability”⁴²⁸—a condition of collective shock and psychological disruption—to exacerbate already-steep power imbalances between local officials and marginalized communities.⁴²⁹

422. Siders, *Social Justice Implications*, *supra* note 20, at 249.

423. *Id.*

424. *Id.* at 249–50.

425. *Id.* at 252.

426. Stella M. Čapek, *The “Environmental Justice” Frame: A Conceptual Discussion and an Application*, 40 SOC. PROBS. 5, 7 (1993).

427. *See infra* Part IV.C.

428. Daniel H. de Vries, *Temporal Vulnerability: Historical Ecologies of Monitoring, Memory and Meaning in Changing United States Floodplain Landscapes* iii (2008) (Ph.D. dissertation, University of North Carolina at Chapel Hill).

429. de Vries & Fraser, *Citizenship Rights*, *supra* note 26, at 29; *see also id.* (discussing the role of “scalar power relations” between local governments and citizens in the hazard mitigation context).

Such an atmosphere is ripe for the use of coercive government tactics. Local officials have several incentives to maximize resident participation in postdisaster buyout programs. They may wish to purchase enough contiguous properties to achieve the stormwater management benefits of large tracts of open land and to avoid cost-ineffective service provision and public maintenance responsibilities for just a few remaining homes.⁴³⁰ Local officials may also see disasters as “opportunities” to effectuate preexisting hazard mitigation agendas; indeed, the American Planning Association advises localities to take advantage of disasters as “opportunities for land-use change, particularly in precluding rebuilding in hazardous areas and relocating those uses elsewhere.”⁴³¹ Buyout officials recognize that homeowners in postdisaster contexts are often in psychological states of grief, stress, vulnerability, and reduced cognitive function, rendering them ill-equipped to make life-altering decisions.⁴³² Rather than ensure that homeowners have the emotional and logistical support they need to make informed decisions, buyout officials may seize—intentionally or not—on homeowners’ compromised psychological conditions to persuade them to accept buyout offers. As a FEMA official once said, “I think often post-disaster decisions can be made by capitalizing on a loss of taking advantage of people . . . we used to call it ‘the window of opportunity to woo’ [laugh].”⁴³³

As described above, buyout officials may exploit this postdisaster period of collective shock by moving swiftly to issue “substantial damage” declarations. Officials may also attempt to convince homeowners that relocation is their best or only option by emphasizing the risk of repetitive flooding and indicating that residents who choose to remain will have to fend for themselves in the next storm.⁴³⁴ As one official told researchers, “We tried to impress the vision of what they were seeing in riding a boat back to their house and get them to project

430. Martin, *supra* note 76, at 2.

431. *Id.* at 4; ALLISON BOYD, J. BARRY HOKANSON, LAURIE A. JOHNSON, JAMES C. SCHWAB & KENNETH C. TOPPING, AM. PLAN. ASS’N, PLANNING FOR POST-DISASTER RECOVERY: NEXT GENERATION 154 (James C. Schwab ed., 2014).

432. See FRASER ET AL., *supra* note 329, at 25.

433. Daniel H. de Vries, *Temporal Vulnerability and the Post-Disaster ‘Window of Opportunity to Woo’: A Case Study of an African-American Floodplain Neighborhood After Hurricane Floyd in North Carolina*, 45 HUM. ECOLOGY INTERDISC. J. 437, 438 (2017) [hereinafter de Vries, *Temporal Vulnerability and the Post-Disaster*].

434. Daniel H. de Vries & James C. Fraser, *Historical Waterscape Trajectories That Need Care: The Unwanted Refurbished Flood Homes of Kinston’s Devolved Disaster Mitigation Program*, 24 J. POL. ECOLOGY 931, 934 (2017).

that out a few years. Are you going to be able or are you going to want to deal with this again? . . . We were able to sell our buyout program. . . . We also had the determination and the resolve that we weren't going to let them go back in there."⁴³⁵ Officials may insinuate that homeowners who stay behind will see a decline in the provision of basic services and upkeep of public spaces in their communities.⁴³⁶ As one Black homeowner who accepted a buyout offer said, "But what was made clear, if you choose to stay, you were on your own."⁴³⁷ Finally, buyout officials might highlight the loneliness of remaining in one's community when most or all of one's neighbors and friends have dispersed. One buyout official recounted, "That was the last house left on the block, but those folks weren't interested. We'd go back to them and say, 'Look you're going to be here on this entire block by yourself.'"⁴³⁸ In a postdisaster atmosphere, homeowners can be highly susceptible to pressures of this kind.

Moreover, buyout officials' warnings to residents about the perils of staying behind are not without basis and, in fact, may prove all too accurate. In Oakwood Beach, New York after Hurricane Sandy, residents watched as their neighbors accepted buyout offers and relocated, leaving boarded-up properties, weeds, mold, and rodents in their wake.⁴³⁹ These "signs of decay and abandonment . . . made it clear that remaining in the neighborhood had never been a viable option," and ultimately, all but eighteen households moved.⁴⁴⁰ Studies show that social dynamics—that is, whether neighbors are relocating—strongly influence homeowners' decisions in postdisaster buyout programs.⁴⁴¹ At the same time, without a community-led predisaster planning process, homeowners are not able to benefit from deliberate, collective action in the aftermath of disasters. They act, in other words, neither collectively nor completely unilaterally; instead, they might look around, see what their neighbors are doing, and panic into following suit.

435. de Vries & Fraser, *Citizenship Rights*, *supra* note 26, at 20.
436. Baker et al., *supra* note 93, at 470; Binder et al., *Rebuild or Relocate*, *supra* note 362, at 192.
437. de Vries, *Temporal Vulnerability and the Post-Disaster*, *supra* note 433, at 443.
438. de Vries & Fraser, *Citizenship Rights*, *supra* note 26, at 20.
439. Baker et al., *supra* note 93, at 469.
440. *Id.*
441. Hino et al., *supra* note 55, at 367; Binder et al., *Rebuild or Relocate*, *supra* note 362, at 192, 195.

Now, a decade later, the last few residents of Oakwood Beach are contending with poorly maintained roads, unreliable trash pickup, and overall neglect by both city and state agencies.⁴⁴² The story of Oakwood Beach is consistent with recent empirical findings that “buyouts generate a disinvestment effect in the places where they occur,” leading to “racially concentrated poverty, crime, and decline in housing quality, neighborhood amenities, and municipal services.”⁴⁴³ Thus, homeowners’ anxieties—and buyout officials’ warnings—about the consequences of rejecting buyout offers are entirely rational. But fear-based participation in a buyout program, while rational, is often experienced as involuntary; residents who accept buyout offers out of fear or panic tend to feel that they had no other choice.

D. Financial and Psychosocial Impacts of Buyouts

Few studies have examined postrelocation outcomes among buyout program participants. As researchers have noted, “the literature is silent on a primary, overarching question: are people better off for having participated in home buyout programs?”⁴⁴⁴ Buyout programs generally do not track residents’ new locations,⁴⁴⁵ let alone their financial, social, and psychological well-being over time. This lack of data makes it extremely difficult to evaluate the mid- and long-term impacts of buyouts, including their effectiveness at achieving their stated objective of moving people to areas of lower flood risk.

1. *Financial and Flood-Risk Outcomes.* The limited evidence that exists on financial and flood-risk outcomes indicates potentially deleterious effects of buyouts on participants. In one of the only such studies conducted to date, over 99 percent of households analyzed—321 out of 323—relocated to areas of higher social vulnerability in New York State’s post-Sandy buyout program, and 95 percent of households relocated to areas with higher poverty rates.⁴⁴⁶ 21 percent moved to places where they would continue to be exposed to coastal flood hazards.⁴⁴⁷ The relocation of nearly all buyout participants in the

442. Joaquim Salles, *What Life Is Like for the Last Residents of Staten Island’s Oakwood Beach*, GRIST (Sept. 21, 2022), <https://grist.org/equity/oakwood-beach-staten-island-buyouts-superstorm-sandy> [<https://perma.cc/D7BB-R5S3>].

443. Martin, *supra* note 76, at 103.

444. Binder & Greer, *The Devil in Details*, *supra* note 248, at 104.

445. SHEPPARD ET AL., *supra* note 118, at 21.

446. McGhee et al., *supra* note 27, at 7.

447. *Id.* at 6.

study to areas of higher social vulnerability and poverty is particularly alarming in light of its implications for intergenerational mobility: In recent years, widely cited empirical research has shown that children who live in higher-poverty neighborhoods have lower college attendance rates and earnings as adults.⁴⁴⁸ Although relocation reduced flood risk for most of the households in the post-Sandy buyout study, the fact that a sizeable one-fifth of households remained exposed to flood hazards in their new locations is also concerning.⁴⁴⁹ Another study, which found that most participants in Houston’s postdisaster buyout programs have relocated to nearby destinations, concluded that “Hispanic owners of more modest homes in lower-income neighborhoods” may be “moving among environmentally risky tracts.”⁴⁵⁰

Anecdotal evidence points to some of the factors that might account for these findings. Compensation in buyout programs, which is based on the preflood fair market value of the home, may be insufficient for relocation to a comparable home in a climate-safer area.⁴⁵¹ This is a particular concern for households in marginalized neighborhoods, where property values are lower. The dire nationwide shortage of affordable housing—and the disproportionate location of the current affordable housing stock in climate-vulnerable areas—forces some buyout participants to relocate from one risky area to another.⁴⁵² In a qualitative study of four postdisaster buyout programs in Black, Brown, and low-income communities, 54 percent of buyout participants interviewed expressed concerns about accruing additional debt as a result of the buyout and 60 percent were concerned about their ability to find affordable housing.⁴⁵³ One interviewee said, “I was terrified of taking on a new mortgage and didn’t know how we’d be able to handle the debt. On top of the debt we had already, it was absolutely terrifying. I didn’t know if the increased financial strain

448. See generally Raj Chetty, Nathaniel Hendren & Lawrence F. Katz, *The Effects of Exposure to Better Neighborhoods on Children*, 106 AM. ECON. REV. 855, 855 (2016) (“We find that moving to a lower-poverty neighborhood when young (before age 13) increases college attendance and earnings and reduces single parenthood rates.”); Raj Chetty & Nathaniel Hendren, *The Impacts of Neighborhoods on Intergenerational Mobility I*, 133 Q.J. ECON. 1107, 1107 (2018) (“We show that the neighborhoods in which children grow up shape their earnings, college attendance rates, and fertility and marriage patterns . . .”).

449. McGhee et al., *supra* note 27, at 6.

450. Loughran & Elliott, *supra* note 406, at 64.

451. See, e.g., Baker et al., *supra* note 93, at 474.

452. PEW, *supra* note 42; Kraan et al., *supra* note 142, at 487.

453. FRASER ET AL., *supra* note 329, at 24.

would ruin us or not.”⁴⁵⁴ Some residents have existing mortgages or other outstanding debts that must be paid off with their buyout compensation funds, leaving them to purchase another home with whatever amount remains.⁴⁵⁵ Others—often elderly people—have paid off their mortgages and face the prospect of assuming new mortgages in their retirement.⁴⁵⁶ Moving expenses, closing costs, property taxes, and insurance costs can present additional financial hurdles.⁴⁵⁷ As described above,⁴⁵⁸ moreover, the extended timeline of the buyout process compels many low-income homeowners—who cannot afford long periods of temporary housing—to repair their homes using flood insurance payouts or other funding sources while waiting for a buyout. Under FEMA’s “duplication of benefits” policy, any such financial assistance that a homeowner receives must be deducted from the buyout amount to prevent double dipping.⁴⁵⁹ After these subtractions, homeowners may be left with only a fraction of the original buyout offer.

Researchers who analyzed the distribution of buyout funds after severe flooding in Iowa in 2008 found that neighborhoods with higher Latiné and elderly populations had significantly lower recovery rates, defined as the ratio of buyout compensation to initial appraised home value.⁴⁶⁰ Meanwhile, other households had recovery rates substantially higher than 1.0, indicating buyout compensation amounts that exceeded initial appraised home values.⁴⁶¹ The study authors theorized that lower recovery rates in marginalized communities “might be an effect of duplication of benefits,” since a homeowner receives less than the assessed value of their property if prior financial assistance is

454. *Id.*

455. FEMA, CITY OF FREEPORT, *supra* note 391; LA. WATERSHED INITIATIVE, OFF. OF CMTY. DEV. DIV. OF ADMIN., STATEWIDE BUYOUT PROGRAM POLICIES AND PROCEDURES 26 (2022); Stern, *supra* note 68, at 217.

456. *See* FRASER ET AL., *supra* note 329, at 26.

457. Ahmed, *supra* note 387; Olga Loginova & Zak Cassel, *Leaving the Island: The Messy, Contentious Reality of Climate Relocation*, TYPE INVESTIGATIONS (Aug. 17, 2022), <https://www.typeinvestigations.org/investigation/2022/08/17/leaving-the-island-the-messy-contentious-reality-of-climate-relocation> [<https://perma.cc/3LGV-5RBC>].

458. *See supra* Part II.B.1.

459. FED. EMERGENCY MGMT. AGENCY, STAFFORD ACT, AS AMENDED, AND RELATED AUTHORITIES 18 (2019), https://www.fema.gov/sites/default/files/2020-03/stafford-act_2019.pdf [<https://perma.cc/3QWY-V5NT>].

460. Muñoz & Tate, *supra* note 227, at 13.

461. *Id.*

deducted from the buyout compensation amount.⁴⁶² Meanwhile, the authors concluded, extremely high recovery rates in other areas may be attributable to non-socially vulnerable households' abilities to successfully appeal their initial home appraisals.⁴⁶³ As the authors noted, the appraisal appeals process "requir[es] energy, time, and resources from the homeowner including hiring a licensed appraiser. Vulnerable populations, who often have limited access to political and economic resources, are less likely to appeal an appraisal successfully."⁴⁶⁴

As a result of inadequate compensation and other financial burdens associated with the buyout and relocation process, some buyout participants cannot afford to purchase another home and are forced to become renters.⁴⁶⁵ Importantly, other residents cannot afford to accept their buyout offers and are forced to stay behind.⁴⁶⁶ Thus, undercompensation both harms the marginalized households that participate in buyout programs and prevents other marginalized households from participating at all.

2. *Psychosocial Outcomes.* Although the social, psychological, and health outcomes of buyout programs are underexplored, a number of studies have found that postdisaster relocation, more broadly, is associated with psychological harm, negative physical health impacts, loss of social support networks, disrupted place attachments, and diminished social capital and resilience.⁴⁶⁷ The only study to systematically examine the psychosocial impacts of buyouts on participants over time focused on residents of three New York neighborhoods struck by Hurricane Sandy: one neighborhood, Oakwood Beach, that successfully lobbied for buyouts and had a

462. *Id.*

463. *Id.*

464. *Id.* (citation omitted).

465. *See, e.g.,* Baker et al., *supra* note 93, at 465–67 (describing some of the financial difficulties that Oakwood Beach buyout participants faced—including appraisals perceived as inadequate, the added expense of hiring a private appraiser, and duplication-of-benefits policies—and stating that “[f]or some, this meant transitioning from homeowner to renter”).

466. *See, e.g.,* Salles, *supra* note 442.

467. *See* McGhee et al., *supra* note 27 (“[F]indings from this study raise questions about the use of buyout programs as policy tools for reducing hazard vulnerability and suggest that failure to carefully consider the dynamics of population relocation may result in the large-scale redistribution and shifting of vulnerability rather than its actively managed reduction.”); Binder et al., *Hurricane Sandy*, *supra* note 413, at 128–31 (summarizing studies finding that postdisaster relocation diminishes social capital and disrupts social support networks and place attachments).

buyout participation rate of over 90 percent; another neighborhood, adjacent to Oakwood Beach, that wished to be included in the buyout program but was ultimately excluded; and a third neighborhood, Rockaway Park, that rejected relocation as an adaptation response and chose to rebuild in place instead.⁴⁶⁸ Researchers found that, 3.5 years postdisaster and 2.5 years after the first home was acquired through the buyout, former Oakwood Beach residents:

score[d] relatively lower on measures of bonding social capital (implying unrestored losses in their close social networks), place identity (implying that they have not yet developed an emotional attachment to their new homes or communities), and place dependence (implying that their new homes and communities are not equally meeting their needs) compared to the other two communities.⁴⁶⁹

Not only do buyout participants experience losses in their social networks and place-based ties, the study authors concluded, but these losses are not recovered—at least not in the medium term—and may impede buyout participants’ abilities to cope with and recover from disasters.⁴⁷⁰ Evidence indicates, moreover, that residents of climate-vulnerable areas tend to develop strong community attachments—that is, emotional bonds to both their physical area (place attachment) and its inhabitants (people attachment)—precisely because of the climate risks they confront.⁴⁷¹ In other words, residents’ collective struggle to survive in the face of adversity reinforces their community attachments. These attachments can be central to personal identity, and postdisaster relocation can therefore destabilize personal identity.⁴⁷²

For several reasons, the social costs of buyout programs are likely even higher for marginalized communities. First, poor and low-income households “compensate for a lack of resources” by relying on nearby family and friends for childcare, health care, food, and transportation

468. Binder et al., *Hurricane Sandy*, *supra* note 413, at 132.

469. *Id.* at 139.

470. *Id.*

471. Cynthia A. Grace-McCaskey, Susan C Pearce, Lynn Harris, Mamadi Corra & Kayla J Evans, *Finding Voices in the Floods of Freedom Hill: Innovating Solutions in Princeville, North Carolina*, 11 J. ENV'T STUD. & SCI. 341, 349 (2021); Binder et al., *Hurricane Sandy*, *supra* note 413, at 139–40.

472. Martin, *supra* note 76, at 75–76; Siders, *Managed Retreat*, *supra* note 15, at 218.

needs.⁴⁷³ Relocation disrupts these vital social and economic networks, which are based on longstanding communal solidarity and cannot be recreated easily in a new location.⁴⁷⁴ In the predominantly Latiné community of Allen Field in Houston, for example, residents took care of their elderly neighbors by driving them to medical appointments and dropping off meals.⁴⁷⁵ Even as hurricanes repeatedly pounded Allen Field, residents rejected voluntary buyouts because this reciprocity-based social support system was what got them through life crises—including climate disasters.⁴⁷⁶ Finally, in 2020, the county subjected Allen Field to a mandatory buyout program, forcing community members to relocate.⁴⁷⁷ As one former resident said, “I’m a single mom, and it takes a village to raise kids, and I don’t have that anymore. It’s gone.”⁴⁷⁸ Buyout participants may have to relocate farther away from places of employment, health care facilities, shopping areas, and places of worship, compounding the challenges of losing the social networks on which they previously relied to meet these needs.⁴⁷⁹

Second, as a result of their unique histories, cultural significance, and experiences of marginalization, Black and Brown communities may have stronger community attachments, and these attachments may be more integral to residents’ personal identities.⁴⁸⁰ When explaining why they resisted relocation despite repeated and worsening climate threats, residents of Princeville, North Carolina universally cited their community’s historical significance as the nation’s oldest incorporated Black town.⁴⁸¹ This was not only a point of shared pride but also a key part of residents’ individual identities, especially for those who could trace their ancestry to the town’s early years.⁴⁸² Strong community attachments stemmed not only from residents’ collective struggle to survive catastrophic storms but also from their fight against white supremacist forces, which had aimed over

473. Miranda J. Lubbers, Mario Luis Small & Hugo Valenzuela García, *Do Networks Help People To Manage Poverty? Perspectives from the Field*, 689 ANNALS AM. ACAD. POL. & SOC. SCI. 7, 13 (2020).

474. *Id.*; Ahmed, *supra* note 387.

475. Ahmed, *supra* note 387.

476. *Id.*

477. *Id.*

478. *Id.*

479. See de Vries & Fraser, *Citizenship Rights*, *supra* note 26, at 3.

480. See Martin, *supra* note 76, at 67–68.

481. Grace-McCaskey et al., *supra* note 471, at 343.

482. *Id.*

the years “to diminish Princeville’s political agency and abolish the town’s charter.”⁴⁸³ Similarly, in the Indigenous hamlet of Isle de Jean Charles, residents’ community attachment was rooted both in their experience of the island as a safe haven from oppression and in the island’s historical significance.⁴⁸⁴ As one resident said:

Knowing that there was a time that Native Americans were looked down upon, discriminated against, you know? . . . And so, whenever the world was finished with you, and you went back home to your community, once you was back with your people, you knew you was good. It’s just not something you can just let go of and and forget and and take for granted. Uh, it’s something you have to hang onto. Because of its history.⁴⁸⁵

Residents of other marginalized communities have echoed these sentiments, pointing out that they may feel safer living with climate risks than living with exclusion and discrimination in a new neighborhood.⁴⁸⁶

Third, empirical research conducted in Harris County, Texas shows that buyout participants from neighborhoods of color and poorer neighborhoods disperse farther away from their former homes as well as from each other, while buyout participants from more racially and economically privileged neighborhoods relocate shorter distances and closer together.⁴⁸⁷ Thus, whiter and wealthier homeowners are better able to retreat collectively and thereby “maintain local ties to place, neighbors, and routines”—a form of “adaptation privilege.”⁴⁸⁸ Meanwhile, marginalized households are forced to “engag[e] in longer, more individualistic relocations”⁴⁸⁹ that sever their attachments to place and people—in addition to potentially suffering greater harm from the loss of these attachments. As the study authors conclude, these findings may help explain why marginalized communities often advocate for collective relocation: To compensate

483. *Id.*

484. How We Survive, *No Place Like Home*, MARKETPLACE, at 10:02 (Dec. 14, 2022), <https://www.marketplace.org/shows/how-we-survive/no-place-like-home> [<https://perma.cc/ZF64-UA7R>].

485. *Id.*

486. FRASER ET AL., *supra* note 329, at 48.

487. James R. Elliott, Kevin Loughran & Phylcia Lee Brown, *Divergent Residential Pathways from Flood-Prone Areas*, 70 SOC. PROBS. 869, 883–84 (2021) [hereinafter Elliott et al., *Divergent Residential Pathways*].

488. *Id.* at 889 (emphasis omitted).

489. *Id.*

for their lack of adaptation privilege, they must fight to preserve their community attachments.⁴⁹⁰

Despite widespread acknowledgement of the social costs of postdisaster relocation, buyout programs largely ignore these costs. The “economic theories of rational decision-making”⁴⁹¹ that guide buyout program design and implementation cannot capture the loss of community attachments, destabilization of personal identities, and other intangible impacts experienced by buyout participants living in racialized and stratified social contexts. Ultimately, these psychosocial impacts—like the financial consequences of buyouts—both harm the marginalized households that relocate and deter others from participating in buyout programs altogether.⁴⁹²

IV. REVISITING THE JUSTICE PARADOX

This Article has exposed a justice paradox at the heart of managed retreat—two justice problems that seem to point to opposite solutions. There is the harm-from-staying justice problem: Some marginalized communities facing climate threats cannot access managed retreat programs and are stranded in risky areas, anxiously awaiting the next storm. And there is the harm-from-relocating justice problem: Other marginalized communities are disproportionately targeted by managed retreat programs and may suffer associated financial and psychosocial harms.⁴⁹³ Should decision-makers prioritize Black, Brown, and low-income communities for relocation out of climate-vulnerable areas, as the harm-from-staying problem would seem to suggest? Or should decision-makers avoid resettling these communities, as the harm-from-relocating problem indicates? The answer is neither. Both justice problems, in fact, reflect the same structural flaws with our current approach to climate-induced relocation and call for the same solutions:

490. *Id.*

491. *Id.* at 888.

492. See, e.g., Sack & Schwartz, *supra* note 375; FRASER ET AL., *supra* note 329, at 25–29.

493. In any given community considering managed retreat, it is often impossible—for community members and government officials alike—to know which of these justice problems will arise. Community members might disagree with one another about the relative benefits and harms of managed retreat, and community members’ assessments may change over time—for example, after relocating and experiencing life in a new neighborhood. A.R. Siders, *The Administrator’s Dilemma: Closing the Gap Between Climate Adaptation Justice in Theory and Practice*, 137 ENV’T SCI. & POL’Y 280, 282–83 (2022) [hereinafter Siders, *The Administrator’s Dilemma*]. Although this unknowability certainly adds to the complexity of designing a just managed retreat program, the broad proposals outlined herein address both justice problems, as described below.

rejecting frameworks based on standard economic logic; reimagining managed retreat as an opportunity to redress historic and systemic injustices; and implementing robust mechanisms for predisaster, community-driven decision-making. To address both justice problems, we must reconceptualize and overhaul managed retreat as it has been effectuated in the United States for the past four decades.

A. Rejecting Standard Economic Logic

Professor Elizabeth Marino has described the foundational elements of buyout programs as property, the market, and individualism.⁴⁹⁴ This is an apt characterization: Property ownership determines buyout eligibility; the market determines property value, on which CBA and buyout compensation rely; and buyouts are individual, voluntary transactions in which homeowners are presumed to be acting in their economic interests. Government agencies use these features to frame buyout programs as apolitical, nonideological, rational interventions.⁴⁹⁵ But Marino argues that property, the market, and individualism are, in fact, “ideological assumptions.”⁴⁹⁶ Although Marino does not name any particular ideology, these assumptions are embedded in our capitalist system. Moreover, property, the market, and individualism as concepts are “fundamental to the construction of whiteness, and a Euro-centric worldview.”⁴⁹⁷ Crucially, property ownership and market-determined property value are not just racialized *concepts* but also racialized economic markers with highly inequitable material impacts. Since they are tightly linked to the ownership and value of property, buyouts cannot be race-neutral. Instead, they take place on mostly urban landscapes shaped by decades of redlining, segregation, and other forms of institutionalized and de facto housing and land use discrimination. The “ideological assumptions” of buyout programs are thus steeped in racial

494. Marino, *supra* note 269, at 10.

495. Elliott et al., *Divergent Residential Pathways*, *supra* note 487, at 872.

496. Marino, *supra* note 269, at 11.

497. *Id.* at 12.

capitalism—that is, the mutually constitutive⁴⁹⁸ or “symbiotic”⁴⁹⁹ relationship between racism and capitalism. Buyout programs embody the standard economic logic of racial capitalism, and as such, are anything but rational or neutral.

As a result of this standard economic logic—specifically, buyout programs’ focus on property—some marginalized communities are unable to access managed retreat, and others are disproportionately targeted and harmed by managed retreat. People without legal title to property—for example, renters, some Indigenous communities, and heirs’ property owners—are ineligible for buyout programs and unable to get out of harm’s way.⁵⁰⁰ Owners of low-value properties who do not receive buyout offers high enough to afford alternative housing may also find themselves locked out of buyout programs.⁵⁰¹ On the other hand, owners of low-value properties who accept buyout offers despite insufficient compensation may be forced to relocate to areas of higher social vulnerability and equal or greater climate risk, which may have harmful intergenerational impacts on well-being.⁵⁰² CBA, a central tool of standard economic logic in buyout programs, also has these harmful dual impacts on marginalized communities.⁵⁰³ Indigenous groups, who often live in physically isolated areas where the construction costs of whole-community relocation are high, are frequently unable to access managed retreat because federal agencies determine that the economic costs of relocation outweigh the benefits.⁵⁰⁴ On the other hand, in dense, urban areas, CBA can mean that homes in marginalized communities are disproportionately targeted for relocation because of their low property values.⁵⁰⁵ Thus, with property rather than people as their foundation, buyout programs produce *both* justice problems.

498. CEDRIC J. ROBINSON, *BLACK MARXISM: THE MAKING OF THE BLACK RADICAL TRADITION 2* (3d ed. 2020) (“The development, organization, and expansion of capitalist society pursued essentially racial directions, so too did social ideology. As a material force, then, it could be expected that racialism would inevitably permeate the social structures emergent from capitalism.”).

499. Carmen G. Gonzalez, *Racial Capitalism, Climate Justice, and Climate Displacement*, 11 OÑATI SOCIO-LEGAL SERIES 108, 114 (2021).

500. See *supra* Parts I.D, II.B.2, II.C.

501. See, e.g., Salles, *supra* note 442 (“Oakwood Beach[s] . . . affordab[ility] . . . made it hard to find comparable housing elsewhere when the state offered buyouts. That challenge has only gotten worse. The median sale price for a home in Staten Island was \$417,000 in 2013. Today, that figure has increased to \$685,000.”).

502. See *supra* Parts III.B.3, III.D.

503. See *supra* Part III.B.1.

504. See *supra* Part II.C.3.

505. See *supra* Part III.B.2.

Rather than determining buyout eligibility and compensation on the basis of property ownership and value, any future framework for climate-induced relocation should focus instead on ensuring that all marginalized people in harm's way—including those without legal title to property—can relocate in a manner that ensures their well-being. As an example of an incremental step to achieving this overarching goal, compensation could be based on the cost of adequate housing in a climate-safe area and account for any outstanding mortgages or other debts. Since FEMA is required under the Stafford Act to fund cost-effective hazard mitigation projects,⁵⁰⁶ redesigning compensation schemes to center residents' social, physical, and financial well-being may not be possible without congressional involvement. In the meantime, FEMA can adopt policy changes to incorporate equity considerations in its cost-benefit methodology. As Kelly McGee has proposed, FEMA should consider expanding its categories of benefits and costs to include the indirect and intangible effects of hazard mitigation projects,⁵⁰⁷ using “[d]istributional weights” in its cost-benefit analysis—that is, “weighing benefits and costs experienced by lower-income individuals more heavily than those” experienced by higher-income people;⁵⁰⁸ and incorporating cost-benefit analysis as “one component of a multifactor analysis” so that the cost-effectiveness of a project can be considered alongside its equity impacts.⁵⁰⁹

Buyout programs' individualized, household-by-household approach to relocation has also contributed to both justice problems. Many Indigenous communities' cultural survival and subsistence lifeways depend on collectivism, and individual relocation is simply not an option.⁵¹⁰ The lack of a clear, federally funded mechanism for whole-community relocation is a major barrier to Indigenous peoples' access to managed retreat.⁵¹¹ Some residents of other marginalized groups—for example, those who depend heavily on neighborhood social support systems to meet their basic needs or have strong cultural or ancestral ties to their community—also refuse relocation because they would rather live with climate risk than live without family, friends, and neighbors.⁵¹² Other marginalized households, however, accept buyout

506. 42 U.S.C. §§ 5170c(a), 4104c(c)(2)(A)(i), 5133(b).

507. McGee, *supra* note 25, at 1958–61.

508. *Id.* at 1961.

509. *Id.* at 1963.

510. *See supra* Part II.C.1.

511. *See supra* Part II.C.1.

512. *See supra* Parts II.C.4, III.D.2.

offers and then experience social, psychological, and even physical health harms as a result of their dislocation—effects that are exacerbated by their lack of “adaptation privilege,”⁵¹³ or relatively distant dispersal from former homes and fellow community members. A lead federal agency, cohesive strategy, and increased funding for collective relocation of communities—as well as of smaller groups of households, such as blocks or streets—would help compensate for this lack of adaptation privilege and minimize the social costs of managed retreat.⁵¹⁴

B. Reconceptualizing Managed Retreat as Opportunity

As this Article has underscored, marginalized communities’ disproportionate vulnerability to climate risk cannot be separated from the forces that produced it: historical and colonial legacies of forced displacement and urban renewal as well as contemporary forms of structural racism. The harm-from-staying justice problem seems to suggest that these historical and ongoing forces of oppression—which have pushed Black, Brown, and low-income communities into risky areas and undermined their ability to survive there—are precisely why decision-makers now have a responsibility to prioritize the relocation of marginalized peoples. The harm-from-relocating justice problem seems to indicate the opposite—that this dark backdrop should give decision-makers pause about potentially retraumatizing communities with a new wave of displacement. Rather than make a false choice between leaving people in harm’s way or violently uprooting them, however, we can reimagine and redesign managed retreat as an opportunity to begin remedying the historic and systemic injustices that have driven marginalized communities into risky areas in the first place.

Reconceptualizing managed retreat in this manner will first require an expansion of its goals. Government agencies view the primary aim of buyout programs as hazard mitigation—that is, the reduction or elimination of long-term disaster risk at relatively large

513. Elliott et al., *Divergent Residential Pathways*, *supra* note 487, at 889.

514. Whole-community relocation also has other benefits, including the prevention or minimization of checkerboarding, which occurs when some households in a neighborhood accept buyout offers and others choose to remain. The resulting checkerboard pattern of homes and vacant lots can both increase the municipal costs of providing services to remaining households and cause neighborhood decline and disinvestment that harms residents’ economic and psychosocial well-being. SHEPPARD ET AL., *supra* note 118, at 30–31.

geographic scales, such as the neighborhood or county levels.⁵¹⁵ For homeowners, though, buyout programs are “a personal relief strategy, or a means of recovery.”⁵¹⁶ It is certainly a problem that government officials see buyouts primarily in terms of their potential to reduce overall risk rather than in terms of their potential to provide relief to disaster-struck residents.⁵¹⁷ However, if managed retreat is to be a tool for transformational change, its objectives must extend far beyond disaster recovery for affected households. Additional goals might include “integrat[ing] homeownership programs” with managed retreat so that relocation can enable renters to become homeowners⁵¹⁸; increasing residents’ home equity by compensating them well beyond pre-flood market value so that they can purchase higher-value homes⁵¹⁹; disrupting patterns of racial-spatial inequity by ensuring the relocation of marginalized households to areas of lower social vulnerability and lower climate risk; embedding managed retreat in larger economic development priorities—such as urban regeneration or densification—that seek to improve well-being⁵²⁰; and providing reparations for historic forced resettlements and other injustices.⁵²¹ Approaches that build the material wealth of marginalized communities will enhance their resilience to future disasters as well.⁵²² By seizing managed retreat as an opportunity to tackle the underlying socioeconomic and racial drivers of climate vulnerability, we can avoid the binary justice problem trap and alleviate rather than reinscribe inequity. Harnessing the transformative potential of managed retreat will enable us to build communities that thrive economically, ecologically, socially, and culturally.

C. *Ensuring Self-Determination*

As described above, the only systematic, longitudinal study of the psychosocial impacts of buyouts focused on three communities in New York after Hurricane Sandy: Oakwood Beach, where the vast majority of residents participated in a buyout program that they had actively sought; a neighborhood adjacent to Oakwood Beach that had lobbied

515. Binder et al., *Home Buyouts*, *supra* note 93, at 505.

516. *Id.*

517. *See supra* Parts I.B, III.B.1.

518. Martin, *supra* note 76, at 47.

519. *Id.* at 46.

520. Hino et al., *supra* note 55, at 368.

521. Mach & Siders, *supra* note 409, at 1296.

522. Martin, *supra* note 76, at 152.

for inclusion in the buyout program but was ultimately left out; and Rockaway Park, where residents rejected the prospect of relocation and instead rebuilt in place.⁵²³ Researchers found that residents of the neighborhood adjacent to Oakwood Beach “experienced significantly worse general health, higher stress, and lower satisfaction with life compared to residents of [Rockaway Park].”⁵²⁴ Even compared to Oakwood Beach—where most residents relocated and psychosocial harms from losses in community attachments would therefore be expected—the adjacent neighborhood “far[ed] relatively poorly across all three indicators.”⁵²⁵ The study authors surmised that residents of the neighborhood adjacent to Oakwood Beach suffered adverse health and quality-of-life impacts due to a lack of “perceived control over their neighborhood and future.”⁵²⁶ Denied the option of participating in a buyout program even though they wanted buyouts, residents of this adjacent community may have felt that they did not have agency or control over their own destinies. Residents of Rockaway Park, on the other hand, also remained in place but had made the choice to do so. As the study authors concluded, “providing residents the opportunity to determine the future of their neighborhood post-disaster may be an important determinant of their health, whether they decide to rebuild or not.”⁵²⁷

Yet buyout programs generally do not offer residents this opportunity. Affected households and communities lack agency, choice, and involvement in buyout design, planning, and implementation.⁵²⁸ Various aspects of this procedural injustice have contributed to both sides of the justice paradox. First, implementing managed retreat as a reactive adaptation measure in the aftermath of disasters—rather than as a proactive strategy codesigned with affected communities well before disaster strikes—can render retreat inaccessible to marginalized communities. For example, households that cannot afford the costs associated with long buyout wait times—which could be considerably shorter if buyout design and planning occurred prior to disasters—are locked out of the buyout process.⁵²⁹ At the same time, buyouts implemented during the turmoil of the

523. Binder et al., *Hurricane Sandy*, *supra* note 413, at 1155.

524. *Id.*

525. *Id.* at 1156.

526. *Id.*

527. *Id.* at 1157.

528. *See supra* Parts II.B.2, II.C.4, III.B.2, III.C.

529. *See supra* Part II.B.1.

postdisaster period may disproportionately harm marginalized residents: When disaster-related shock and other psychological states of vulnerability compound preexisting economic states of precarity, people are more likely to experience buyouts as coercive.⁵³⁰

Second, the competitive nature of the buyout process also contributes to both justice problems. Buyout funding is awarded on the basis of competitive grant applications submitted by localities rather than according to need and community interest in relocation.⁵³¹ As a result, poorer and more rural counties and municipalities—which often lack the financial and human resources to maneuver the tortuous federal grant application process—are at a disadvantage and have difficulty accessing buyout funding.⁵³² Meanwhile, in whiter and wealthier localities with the resources to successfully compete for federal funding, marginalized communities are disproportionately targeted by buyout programs, which may be seen as convenient ways to clear out blighted or historically disinvested areas.⁵³³

Third, due to their lack of political capital and reduced capacity to mobilize their communities, marginalized peoples are often unable to access buyouts when they are desired and unable to fend off buyouts when they are not desired.⁵³⁴ Community demands for buyouts may fall on deaf ears, and community resistance to buyouts may be ignored.⁵³⁵ Government officials who are wary of a reduced tax base might not seek buyout funding if communities lack the political clout, time, and resources to put up a fight and make their demands for relocation heard.⁵³⁶ Meanwhile, officials seeking to relocate unwilling communities—perhaps to enhance flood protection for other areas—might be more likely to take unpopular action in marginalized neighborhoods.⁵³⁷ Robust mechanisms for procedural justice in the buyout process would help ameliorate these power imbalances and compensate for marginalized communities' lack of political weight.

Fourth, the subjectivity and lack of transparency of buyout eligibility criteria can both limit the accessibility of buyout programs for some marginalized communities and result in the disproportionate

530. See *supra* Part III.C.

531. See Siders, *Social Justice Implications*, *supra* note 20, at 251.

532. See *supra* Part II.A.

533. See *supra* Part III.B.

534. See *supra* notes 168–80 and accompanying text.

535. See *supra* notes 168–80 and accompanying text.

536. See *supra* note 179 and accompanying text.

537. See *supra* notes 188–97 and accompanying text.

targeting of other marginalized communities for relocation.⁵³⁸ As described above, localities' as well as individual homeowners' buyout applications are frequently denied without rhyme or reason, placing buyouts out of reach of residents who wish to relocate.⁵³⁹ At the same time, the lack of clear, objective, and transparent eligibility criteria creates room for local officials to target marginalized communities for buyouts—whether for pernicious reasons, such as to rid an area of certain types of neighborhoods; well-intentioned reasons, such as to offer assistance to those who need it most; or practical reasons, such as to purchase as many properties as possible with limited funds.

Thus, procedural justice in climate adaptation processes would address both the harm-from-staying and the harm-from-relocating justice problems. For affected communities to exercise true self-determination, several procedural elements are key. First, planning must begin well before disaster strikes. Without the time pressure, upheaval, and emotional vulnerability of the postdisaster period, communities would be able to engage in meaningful deliberation and consensus-building around their futures as well as integrate broader community development goals into climate adaptation discussions.⁵⁴⁰ Predisaster planning would also facilitate faster relocation in the aftermath of disasters and resolve the tension between government officials' view of managed retreat as hazard mitigation, which operates on a relatively long timeline, and residents' view of managed retreat as recovery, which is needed quickly after disasters.⁵⁴¹ Although amendments to the Stafford Act are needed to disentangle managed retreat from postdisaster funding streams and fully enable proactive rather than reactive approaches to relocation, local government officials need not wait for disaster to strike to begin planning processes in partnership with affected communities.

Second, communities must fully take the lead and hold decision-making power; mere community involvement or consultation in climate adaptation planning is not enough. Government agencies should develop mechanisms to facilitate full community leadership and ownership. Funding and other resources should be allocated so that marginalized communities have the capacity to engage in intensive, time-consuming planning processes as well as hire experts who can

538. See *supra* Part II.B.2.

539. See *supra* Part II.B.2.

540. Martin, *supra* note 76, at 90.

541. Binder et al., *Home Buyouts*, *supra* note 93, at 507.

assist with the technical aspects of planning. Perhaps above all, community-led decision-making will require flexibility, departure from the norm, and accommodation of residents' local contexts and unique circumstances.⁵⁴²

Third, rather than adopt managed retreat as a foregone conclusion, planning processes must begin with the question of which climate adaptation option is most appropriate for a particular community. Through iterative community visioning sessions,⁵⁴³ residents can brainstorm possible futures for their communities; compare the benefits and harms of managed retreat with those of other adaptation options, like coastal armoring and home elevation; conceptualize strategies for maximizing the benefits and minimizing the harms of retreat;⁵⁴⁴ establish frameworks for determining when protection-in-place is no longer feasible and retreat might be necessary;⁵⁴⁵ and ensure the preservation of cultural assets or historical memory by cocreating a shared vision of what their land should be or look like after retreat.⁵⁴⁶

Finally, as A.R. Siders has emphasized, transparency in managed retreat decision-making is critical for accountability, evaluation, and policy learning over time.⁵⁴⁷ Local government officials administering managed retreat programs receive very little guidance and, as a result, decisions are often shaped not only by legal, institutional, and resource constraints but also by “justice heuristics”—or “shortcut criteria such as ‘help the most people’”—that arise from individual administrators’ (often unconsciously held) worldviews and perceptions.⁵⁴⁸ “[T]he resulting plurality of approaches may promote justice” by enabling administrators to remain flexible and tailor their decision-making to local contexts; however, Siders notes, without transparency at every step of the decision-making process, justice heuristics remain invisible, preventing assessment of which views lead to which outcomes.⁵⁴⁹ Local agencies should develop systems for administrators to engage in

542. Loginova & Cassel, *supra* note 457.

543. PEW CHARITABLE TR., *supra* note 42, at 17.

544. Mach & Siders, *supra* note 409, at 1297.

545. Bronen, *supra* note 44, at 604.

546. See SHEPPARD ET AL., *supra* note 118, at 35 (“Coalescing around a common goal with local partners, stakeholder groups, and government agencies can help assemble a vision and potential for the site.”).

547. Siders, *The Administrator’s Dilemma*, *supra* note 493, at 285.

548. *Id.*

549. *Id.*

constant reflection, receive feedback, and maintain written records of their decision-making processes. Administrators should be prompted to surface the unconscious justice heuristics that guide their thinking, evaluate alternatives, and track the impacts and outcomes of their decisions at each step.

Ultimately, procedural justice is essential not only for addressing both sides of the justice paradox but also for realizing the other solutions outlined above: Affected communities must be at the forefront of reimagining and redesigning managed retreat to remedy historic injustices, ensure just compensation, and provide for whole-community relocation when it is desired. As one resident of Isle de Jean Charles responded when asked for his advice to government officials implementing climate-induced relocation programs: “[L]isten to the tribes; listen to the people; listen to the leaders of the communities.”⁵⁵⁰

CONCLUSION

Both of the justice problems with managed retreat—its inaccessibility for some marginalized communities and its harmful impacts on others—are symptoms of the same root causes: a market-based economic framework, our failure to seize managed retreat as an opportunity for transformation, and a lack of self-determination for communities whose lives and livelihoods are threatened by climate disasters. Thus, although the two sides of the justice paradox seem to point to opposite solutions, tackling these root causes will make managed retreat accessible to the communities who want it *and* enable others to pursue alternative adaptation strategies that are better-suited to their unique needs, circumstances, and histories.

However, identifying the fundamental flaws with our current approach to managed retreat is only the tip of the iceberg. If we are to adopt these structural shifts in our conception and implementation of climate adaptation, deep challenges lie ahead. Addressing these challenges is critical—not only because of the inevitability of managed retreat as a major climate adaptation strategy of the near future, but also because the implications of tackling the root causes of the justice paradox extend well beyond managed retreat. Other climate adaptation strategies—and many types of decision-making processes more broadly—are plagued by the same justice problems. Developing

550. How We Survive, *supra* note 484, at 15:30.

an alternative economic framework—one grounded in core tenets of justice rather than the logic of the market—is a massive undertaking, as is integrating managed retreat with broader goals like wealth generation and poverty reduction. In addition to the technocratic hurdles of redesigning distribution frameworks and coordinating across government agencies, thorny ethical issues arise: What does distributive justice—equitable distribution of benefits and harms—look like if managed retreat can be *both* a benefit and a harm?⁵⁵¹ What spatial and temporal scales should be used to think about distribution?⁵⁵² Should we consider the benefits and harms of managed retreat to the individual participants, the affected communities, the region, the state, the nation, or some or all of these?⁵⁵³ Should we consider benefits and harms in the short term, medium term, or long term, given that climate hazards will grow worse over time?⁵⁵⁴ These questions are relevant to many processes of distribution “that have no ideal outcomes” and instead involve trade-offs.⁵⁵⁵ Using managed retreat as an opportunity to redress historic and systemic injustices also raises complex questions—such as which injustices should be redressed—that arise in other reparations contexts.

Procedural justice in managed retreat is similarly fraught. Recognizing the need for self-determination is one thing, but defining its content and scope is another. Communities are not monolithic in their desires and aspirations; when visions for the future conflict and consensus cannot be reached, who decides which path the community takes? The implications of this question are especially significant given that community decisions about climate adaptation constrain the choices available to individual households. In the event of a collective decision to pursue relocation, households that wish to remain in place may be effectively forced to move; in the event of a collective decision to protect the community in place, relocation funding may not be available to households that wish to move. How should we navigate this tension between collectivism and individual autonomy? Finally, managed retreat can have ramifications not only for communities who move but also for adjacent communities who are left behind and for receiving communities where relocatees settle. Should these other

551. Siders, *The Administrator's Dilemma*, *supra* note 493, at 282.

552. *Id.* at 280.

553. *Id.* at 283.

554. *Id.*

555. *Id.* at 287.

stakeholders also have a seat at the table? These conundrums—how conflicts are resolved and decisions are made, how collective interests are determined, how individual choice is balanced with those collective interests, which stakeholders should have power and how much power—are endemic to participatory processes.

To lay the groundwork for this fundamental overhaul of climate-induced relocation in the United States, perhaps the most critical task is shedding the ideology and set of assumptions that infuse our current approach. Only by rejecting the logic of racial capitalism and embracing ideological diversity in how we conceptualize problems and solutions can we hope to expand the “inventory of possibilities”⁵⁵⁶ available to marginalized communities facing climate threats. From there, the transformative potential of managed retreat is limitless.

556. Marino, *supra* note 269, at 10.