Under Pressure, Facing the Rising Tide: The Legal and Humanitarian Crisis of Flood Prone Coastal Property

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Under Pressure, Facing the Rising Tide: The Legal and Humanitarian Crisis of Flood Prone Coastal Property

Ariana Levi*

TABLE OF CONTENTS

Introduction .............................................................................................................. 578

I. Background ........................................................................................................ 581
   A. Environmental and Climate Science:
      What Got Us Here? ......................................................................................... 581
      1. Louisiana as a Model for Global Climate Change Impacts ....................... 582
      2. Projections for the Rest of the Global Community ............................... 584
   B. Policy Considerations: The Highest and Best Use of Land in the Modern Era................................................................................... 586
   C. The Buyout Process Unpacked ................................................................. 590
      1. Federal Regulation and Funding for Buyouts .......................................... 590
      2. State Regulation and Appropriations for Buyouts ................................. 593

II. Analysis of Problem .......................................................................................... 596
   A. Criticism of Existing Buyout Programs ..................................................... 596
   B. Lack of Affordable Housing ...................................................................... 600
   C. Can’t Afford to Stay, Can’t Afford to Leave: Stress on Infrastructure from Climate Change Makes Coastal Homeownership Unaffordable ........................................... 603
   D. Disproportionately, Climate Change Impacts Low-Income and Minority Demographics. ................................................................. 607

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INTRODUCTION

Insanity is “doing the same thing over and over again and expecting different results.” Yet, the default standard for coastal properties repeatedly damaged by flooding and hurricanes is to rebuild them. The cycle continues in perpetuity: loss, rebuild, repeat. It is insanity to rebuild properties repeatedly destroyed by natural disasters. Repeat reconstruction and repairs of the same riparian, coastal, or low-lying properties show these “permanent” structures are no longer built in places fit for permanent residence.

The tide is rising, and pressure is mounting to find solutions for those imperiled by the effects of rapidly intensifying climate change and severe weather. As of 2014, nearly 125 million United States citizens lived in counties bordering the coast and the Great Lakes. Coastal flood risk is set

1. This quote, famously attributed to Albert Einstein, originates from the 12-step process for managing addiction, like alcoholism. For more on the history of this famous saying, see Insanity Is Doing the Same Thing Over and Over Again and Expecting Different Results, QUOTE INVESTIGATOR (Mar. 23, 2017), https://quoteinvestigator.com/2017/03/23/same/ [https://perma.cc/2LBG-WR23].
2. This accounted for nearly 40% of the population of the United States at the time the study was conducted. Anna Swanson, How So Many of The World’s
to cause a dramatic increase in both the exposure and vulnerability of coastal communities and the critical infrastructure these communities rely upon. The United States could save an estimated $1 trillion over the next century and prevent loss of life caused by flood disasters by relocating 1 million coastal properties. Few places in the United States are as familiar with, and vulnerable to, the destruction of climate change as Southern Louisiana. Hurricanes Ida, Laura, and Delta left Southern Louisiana with a bruised psyche. After taking a merciless beating two hurricane seasons in a row, discourse on the reality of climate change has reached a zenith.

By 2050, it is estimated that climate change will displace 1.2 billion people worldwide. Under current population growth trends, that is equivalent to displacing 12% of the global population. Estimates vary in terms of the immediacy of the climate refugee crisis. According to a 2021 World Bank report, climate change events will displace 200 million people over the next 30 years. As a result, the planet faces a problem that stands to be the greatest humanitarian crisis in modern times.

In the past, discussions of the potential devastation of climate change, rising sea levels, and people being displaced by increasingly severe and

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3. “Rising sea levels and land subsidence are combining, and will continue to combine, with other coastal flood factors, such as storm surge, wave effects, rising coastal water tables, river flows, and rainfall, some of whose characteristics are also undergoing climate related changes.” SWEET ET AL., GLOBAL REGIONAL SEA LEVEL RISE SCENARIOS FOR THE UNITED STATES 1 (2022), https://aambpublicoceanservice.blob.core.windows.net/oceanserviceprod/hazards/sealevelrise/noaa-nos-techrpt01-global-regional-SLR-scenarios-US.pdf [https://perma.cc/C8XH-KJW2].

4. The $1.16 trillion in savings would come from averting property damage payments arising from federally subsidized flood insurance and other disaster relief plans over the next 100 years. This number doesn’t include the market savings for industries like insurance. Thomas Frank, Removing 1 Million Homes From Flood Zones Could Save $1 Trillion, SCI. AM. (Apr. 27, 2020), https://www.scientificamerican.com/article/removing-1-million-homes-from-flood-zones-could-save-1-trillion [https://perma.cc/Y5KD-27QZ].


6. Id.

frequent natural disasters (“climate refugees”) were merely hypothetical—but such is no longer the case. Now is the time to begin preemptive planning for the inevitable inland migration before life on the coast is no longer sustainable. In some places, the eleventh hour has already arrived. Places like Southern Louisiana and Southwest Florida may serve as the proverbial “canary in the coal mine” as to what the world will look like in the next 30 years. Gone are the days of affording and allowing insurance companies to repeatedly fund rebuilding homes in areas particularly susceptible to climate change impacts and using Federal Emergency Management Agency (FEMA) appropriations to fund flood mitigation and repair projects. In light of climate change and increased climate events, the solution to sustainability problems associated with living in coastal areas is to use federal and state appropriations to buy out homeowners from flood-prone structures and relocate people to less imperiled places, instead of allocating money towards rebuilding after a disaster.

This Comment begins with an analysis of the impacts of climate change on coastal residential properties in Part I. As a result of increasingly frequent severe weather events, like hurricanes, human displacement from coastal residential properties on a magnitude never-before-witnessed is on the horizon. Part II briefly explains the environmental factors underlying the crisis facing the coastline, indicating that the “de facto cycle” of loss, rebuild, repeat puts stress on necessary infrastructure that is no longer sustainable to continue maintaining permanent communities on hurricane-devastated coastlines.

Part III proposes a multi-pronged solution to sustainability problems associated with living in flood prone areas: Phase 1: Voluntary Buyouts; Phase 2: Modifying Tax Policy to Dramatically Increase Taxes on Properties Not Voluntarily Bought Out and Tax Incentives to Move; and Phase 3: Eminent Domain. Using federal and state appropriations to buyout homeowners from flood-prone structures and relocate people to less at-risk locations instead of using money to rebuild after a disaster will both save on the economic cost of repeat rebuilding and minimize the risk of loss of life due to natural disasters.

A buyout is a voluntary process in which flood-prone properties can be sold by property owners to the state or local government. In exchange for money to extinguish any existing mortgage and buy a property in a lower risk location, the flood-prone property is demolished, and the land

reverts back to its natural state. Incidental to the buyout process, the converted land becomes permanently ineligible for development.

These buyouts can be conducted under the existing framework in place at both the federal and state levels. There is funding readily available for disaster relief, flood mitigation efforts, and repairs that can be allocated towards buying out properties instead of taking other flood mitigation endeavors. While the upfront costs associated with buyouts may be more expensive than the de facto regime, in the near future, buyouts will save the United States, as well as the state of Louisiana, money. For the equivalent cost of rebuilding a single property destroyed by flooding or in a severe storm, that property owner can be permanently moved to a location carrying less risk. The question in these coastal and flood-prone communities is not whether a storm will strike again, but when. This plan avoids a climate refugee crisis by proactively evacuating people from the coastline in a controlled manner before another devastating storm or flooding event makes coastal living impossible.

In order to incentivize voluntary movement, this plan discusses the viability of adverse incentives, such as taxational consequences. As a last resort, this plan proposes the use of eminent domain in accordance with historic precedent to avoid the disaster of incomplete buyout projects.

To prove the viability of this plan, this Comment analyzes the pitfalls and criticisms of the buyout process and the stress the current scheme places on infrastructure. Recent climate change predictions and environmental science reveal that there is no other long-term sustainable solution for coastal communities absent moving inland to properties less imperiled by the risk of repeat flooding. The historical precedent to bolster the use of buyouts in flood-prone communities across the entire nation on both a voluntary and forced land acquisition basis through eminent domain supports and proves this plan’s viability.

I. BACKGROUND

A. Environmental and Climate Science: What Got Us Here?

It is important to examine the science behind the threat that climate change and intensifying coastal storms pose to coastal communities.
1. Louisiana as a Model for Global Climate Change Impacts

Louisiana is an ideal model for global climate change because the conditions in the state are predicted to parallel what is set to occur in much of the populated coastal areas around the globe. Coastal Louisiana is losing land faster than anywhere else on the planet. One 2020 study forecasted that, at the current rate of subsidence and sea level rise in the Mississippi River Delta, not only would Louisiana’s remaining coastal wetlands eventually succumb to the onslaught of the rising tide, but so would most of the land south of Interstate 10.

Roughly half of the United States’ wetlands have vanished in the past 200 years. United States wetland losses are greatest in Louisiana, where about 1,800 square miles of wetlands (geographically equivalent in size to the state of Delaware) have been lost since 1932. To put this into perspective, Louisiana, on average, has lost a football field of coastline per environmental science behind climate change, see the cited references in footnotes to follow.

12. Climate is the global or regional average over a long period of time (30 years or more) of: temperature, humidity, and rainfall. Climate change refers to changes in trends of data regarding temperature, humidity and rainfall. On the other hand, global warming is “the long-term heating of Earth’s surface observed since the pre-industrial period (between 1850 and 1900) due to human activities, primarily fossil fuel burning, which increases heat-trapping greenhouse gas levels in Earth’s atmosphere.” What Is Climate Change?, NAT’L AERONAUTICS & SPACE Admin., https://climate.nasa.gov/what-is-climate-change [https://perma.cc/LH46-6RQX] (last updated Jan. 30, 2024).


16. Id.
hour since 1985. This rate increases during major hurricanes, during which a football field of land can be lost in mere minutes. Studies show that destruction of coastal wetlands and increased flooding in Southern Louisiana have been instigated by nearly three centuries of human influence and development.

Several processes in the Mississippi River Delta cause Louisiana’s coast to be lost to the rising tide at such haste. First, there is a natural subsidence process in river deltas that occurs over time. Much of Southern Louisiana and its outlying barrier islands and wetlands were formed by the Mississippi River depositing sediment while meandering and seasonally flooding as a part of the delta cycle. In river deltas around the world, it is normal for the subsidence rate to be faster than that of surrounding riparian land. However, the geological formation of the Mississippi River Delta and Earth’s surrounding crust creates the perfect storm for increased subsidence rates in much of coastal Louisiana. Historically, sediment dispersion by the Mississippi River, during its meandering flow to the coast and seasonal flooding, would result in coastal land gain and outpace the rate of subsidence. However, because of a combination of human impact, sea level rise, and increased severe


18. Id.

19. Human impact has accelerated the rate of coastal land loss. Much of the prior human-created damage to Louisiana’s coastal marshes has come from the oil and gas industry’s drilling and dredging activities. Dredging of canals through the marshland has increased the rate of their destruction. For more information, see Land Loss, RESTORE THE MISS. RIVER DELTA, https://mississippi-river-delta.org/our-coastal-crisis/land-loss/ [https://perma.cc/AV77-QRXG] (last visited Feb. 17, 2024).

20. According to NOAA, subsidence is the “sinking of the ground because of underground material movement” and frequently is the result of removing ground water, oil, mineral or natural gas resources or other fracking and mining activities. What Is Subsidence?, supra note 14. See Land Loss, supra note 19.

21. Id.


24. Land Loss, supra note 19.
hurricane activity, the natural replenishment cycle of the Delta has been lost.

2. Projections for the Rest of the Global Community

Presently, 40% of the global population lives within less than 100 kilometers of the coast, with most of this population living at an elevation of less than 10 meters. According to a 2013 U.S. Census Bureau study, tens of millions of Americans live in areas that are at risk of coastal flooding; nonetheless, more continue to move to the coast every year. Coastal flood risk is set to cause a dramatic increase in both exposure and vulnerability of coastal communities and the critical infrastructure they rely upon.

In February of 2022, the National Oceanic and Atmospheric Administration (NOAA) partnered with experts and academics across the country to deliver a frightening prediction for the world by 2100. Over the next 30 years, the relative sea level along the contiguous United States coastline is expected to rise as much as it has over the last 100 years. As a result of continuous warming of the Earth’s atmosphere, it is projected

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25. Human impact refers to human activities like natural resource mining, dredging canals, and building levees and dams. By locking the Mississippi River into a single bed, it no longer can meander and disperse sediment through a lifegiving network of bayous and seasonal flooding. In addition, oil and gas mining and canal digging in Southern Louisiana’s wetlands have led to increased subsidence rates and saltwater intrusion, which destroys critical marsh vegetation. Land Loss, supra note 19.

26. In non-metric terms, 100km is equivalent to approximately 62.14 miles and 10 meters is equivalent to approximately 32.8 feet. Percentage of Global Population Living in Coastal Areas, UNITED NATIONS (June 15, 2007), https://www.un.org/esa/sustdev/natlnfo/indicators/methodology_sheets/oceans_seas_coasts/pop_coastal_areas.pdf [https://perma.cc/W4ZL-B7QG].

27. Sweet et al., supra note 3, at 1.

28. Id. “Rising sea levels and land subsidence are combining, and will continue to combine, with other coastal flood factors, such as storm surge, wave effects, rising coastal water tables, river flows, and rainfall, some of whose characteristics are also undergoing climate related changes.”

29. The National Oceanic and Atmospheric Administration partnered with the United States Environmental Protection Administration; the National Aeronautics and Space Administration; the Department of Defense; the University of Hawaii; the U.S. Army Corps of Engineers; the US Geological Survey; Rutgers University; the Federal Emergency Management Agency; and Florida Institute of Environment at Florida International University. Id.

30. Sweet et al., supra note 3, at 1.
that sea levels will continue to rise over the coming decades, even with successful climate mitigation efforts.\textsuperscript{31} Sea levels rise as a result of warmer global temperatures, largely because of land-based ice sheets and glaciers melting.\textsuperscript{32}

Higher seas amplify natural processes like storm surges, high tides, coastal erosion, and wetland subsidence.\textsuperscript{33} Rising sea levels, referred to in this Comment as “the rising tide,” mean that coastal areas can expect inundated flooding from normal day-to-day phenomena, like high tides and winds at rates higher than previously expected in the last century.\textsuperscript{34}

As our planet warms due to a combination of its natural heating cycle and human impact, more rain and severe weather can be expected. For hurricanes, warmer air holds more moisture, which means more rain.\textsuperscript{35} Warmer oceans result in larger, more devastatingly powerful storms.\textsuperscript{36} Warmer ocean waters also mean these storms can rapidly and unpredictably intensify due to the extra energy available to fuel them.\textsuperscript{37} The most recent devastating superstorm to strike the coast of Southwest Florida, Hurricane Ian, destroyed much of the coastal area near Fort Myers Florida, while flooding a majority of Central Florida. Hurricane Ian dropped an estimated 5–10% more rainfall than expected, absent global

\begin{itemize}
\item[31.] Climate mitigation efforts are ways society is shifting to “greener” more environmentally friendly practices. Efforts would include steps made to reduce human consumption of petroleum products; efforts to reduce production of greenhouse gasses and hydrogen emissions through burning more energy efficient fuel sources and modifying industrial and agricultural practices; etc. \textit{Id.}
\item[32.] \textit{Id.}
\item[33.] Sea level rise results in amplification of natural processes like high tides and storm surge because the baseline elevation of the ocean is higher in comparison to coastal land elevations. For more, see \textit{Id.} at 2. Storm Surge is caused by a hurricane or other large storm traveling over open ocean; these powerful storms act like a “bulldozer” collecting water and pushing it up onto land in front of the storm. Bonnie Berkowitz & Artur Galocha, \textit{What is Storm Surge?}, WASH. POST (Sept. 26, 2022, 1:30 PM), https://www.washingtonpost.com/weather/2022/09/26/what-is-storm-surge/ [https://perma.cc/XP9M-WDTA].
\item[34.] \textit{Sweet et al., supra note 3, at 2.}
\item[35.] \textit{Id.}
\item[37.] Because of extra heat stored in the water, there is more energy available to fuel and strengthen a hurricane. For more information on this process, see \textit{Id.}
climate trends towards warmer temperatures. In recent years, an unprecedented number of category 4, or stronger, storms wreaked havoc on United States coastlines.

B. Policy Considerations: The Highest and Best Use of Land in the Modern Era

As a matter of public policy, one tenet of property law is to put land to its highest and best use. There are conflicting ideals about what the highest and best use of a given plot of land may be. For instance, land valuation in real estate for both taxation and condemnation purposes uses several tests for determining the highest and best use of a given tract of land. The four standards for determining the highest and best use of land in real estate valuation are: (1) is the tract physically possible for the desired use; (2) is the desired use of the tract of land legally permissible; (3) is the desired use financially feasible; and (4) is the desired use the most profitable or maximally productive use for the given tract of land.

38. Id.
39. These storms include Harvey, Irma, Michael, Laura, Ida, and Ian. Each of these storms since 2017 “rapidly intensified,” meaning the wind speed of the storm increased by at least 35 miles per hour within 24 hours. For more information on the science behind rapid intensification in hurricanes, see Scott Dance & Kasha Patel, How Climate Change is Rapidly Fueling Super Hurricanes, WASH. POST (Sept. 29, 2022), https://www.washingtonpost.com/climate-environment/2022/09/29/ian-hurricane-rapid-intensification-climate/ [https://perma.cc/T46H-6QHH].
41. Physical possibility looks at the physical nature of the tract of land and determines whether the desired use is possible given the plot’s physical nature. For instance, it may not be feasible to build a residential subdivision on marshland, or a building project may not be possible given the size of the lot. Legal permissibility looks to local covenants and zoning restrictions and determines whether the desired use is acceptable under the legal regime at issue. Financial feasibility looks at the cost associated with the project and what the needs of the community are. Financial feasibility also takes into account whether the given plan would be economically wasteful. For instance, if the town already has an airport nearby then condemning land for use as a second airport may be economically wasteful. See id.; see also Paul Esajian, Highest and Best Use in Real Estate: Definitions & FAQs, FORTUNEBUILDERS, https://www.fortunebuilders.com/highest-and-best-use/ [https://perma.cc/3EBV-UJ3W] (last visited Feb. 1, 2024).
The four prongs of the highest and best use analysis under the traditional framework aim to put a given tract of land to its most profitable and beneficial use. This analysis contains both subjective and objective components. The objective component evaluates the legality, physical possibility and financial providence of a given desired use for a tract of land. The subjective element is based upon the opinion or desired use of the evaluator. A particular parcel of property may have different optimal uses depending on the needs of the person asked. Often, a particular tract of land has several potential highest and best uses, not just one.

In valuing land based upon its highest and best use, non-pecuniary elements such as social and historical value or the value of preserving natural lands are often not considered. Historically, the United States viewed development as the paramount goal for land use. The historical view is evinced by romantic American ideals such as manifest destiny and taming the West, which dominated early iterations of United States property law. Land ownership has been central in the “American Dream” since the very beginning. However, hundreds of years of romanticizing private land ownership. For instance, individual land ownership was encouraged through the promise of free land for settlers under the Homestead Act of 1862. Enacted during the Civil War, the Homestead Act promised “that any adult citizen, or intended citizen, who had never borne arms against the U.S. government could claim 160 acres of surveyed government land. Claimants were required to live on and ‘improve’ their plot by cultivating the land. After five years on the land, the original filer was entitled to the property, free and clear, except for a small registration fee. Title could also be acquired after only a six-month residency and trivial improvements, provided the claimant paid the government $1.25 per acre.”

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42. Id.
43. Id.
44. Id.
45. HIGHEST AND BEST USE, 1 TAX. CAL. PROP. § 17:6 (4th ed.).
46. Esajian, supra note 41.
47. After gaining independence, American isolationism led to a focus on inward expansion. The idea of continental expansion grew, as evidenced by endeavors such as the Louisiana purchase and the Lewis and Clark Expedition. The founding father, Thomas Jefferson, dreamed of an America full of small farmers who were self-sufficient living on the land. While this idea transformed in the modern era, development has been encouraged and largely treated as the best use of American land. Manifest Destiny, HISTORY, https://www.history.com/topics/westward-expansion/manifest-destiny [https://perma.cc/5ADB-2D6B] (last updated Nov. 15, 2019); see also Whitney Griswold, The Agrarian Democracy of Thomas Jefferson, 40 AM. POL. SCI. REV. 657 (1946).
48. There is a long-standing history of the U.S. Government incentivizing private land ownership. For instance, individual land ownership was encouraged through the promise of free land for settlers under the Homestead Act of 1862. Enacted during the Civil War, the Homestead Act promised “that any adult citizen, or intended citizen, who had never borne arms against the U.S. government could claim 160 acres of surveyed government land. Claimants were required to live on and ‘improve’ their plot by cultivating the land. After five years on the land, the original filer was entitled to the property, free and clear, except for a small registration fee. Title could also be acquired after only a six-month residency and trivial improvements, provided the claimant paid the government $1.25 per acre.” Homestead Act (1862), NAT’L ARCHIVES, https://www.archives.gov/milestone-documents/homestead-act [https://perma.cc/N599-P432] (last
urbanization and development has caused people to build in places now unfit for permanent structures.

For instance, many United States cities rely on levees for flood protection from neighboring rivers.\textsuperscript{49} Two examples in Southern Louisiana include New Orleans and Baton Rouge. Nationwide, there are more than 100,000 miles of levees.\textsuperscript{50} The overall insufficient maintenance of the United States levee system—\begin{small}which received a “D” rating on the American Society of Civil Engineers’ 2018 national infrastructure report card—\end{small}exacerbates this problem.\textsuperscript{51} While levees may adequately shield properties from seasonal flooding, studies show that levee systems increase the risk of flooding under certain situations.\textsuperscript{52} By confining rivers to a single bed, rivers are unable to naturally spread into the floodplain.\textsuperscript{53} Instead, levees cause rising rivers to flow faster and raise the river’s height, making flooding worse when a levee breaches.\textsuperscript{54} Additionally, levees create a false sense of security for those living behind their looming walls, which spurs more development in the river floodplain and places property owners at greater risk of loss due to catastrophic flooding.\textsuperscript{55} An infamous example of the risk failing levees pose to urban communities in the river floodplain

\begin{itemize}
  \item[50.] \textit{Id.}
  \item[51.] \textit{Id.}
  \item[52.] Mallea, \textit{supra} note 49.
  \item[53.] \textit{Id.}
  \item[54.] Levees concentrate water that would otherwise occupy a 5- to 6-mile-wide floodplain and forces it into a narrow passageway. This causes the water in the riverbed to flow faster and higher. Rebecca Hersher, \textit{Levees Make Mississippi River Floods Worse, But We Keep Building Them}, NPR (May 21, 2018, 11:15 AM), https://www.npr.org/2018/05/21/610945127/levees-make-mississippi-river-floods-worse-but-we-keep-building-them [https://perma.cc/D9KU-T9UC].
  \item[55.] \textit{Id.}
\end{itemize}
is the 2005 super-storm, Hurricane Katrina, impacting Southern Louisiana. An estimated 80% of New Orleans and 95% of St. Bernard Parish flooded in August 2005 due to failing flood mitigation structures.\(^{56}\) Fifteen feet of flooding from storm surge filled low-lying areas such as the Lower Ninth Ward due to levees and floodwalls falling in over 50 places.

Barrier islands present another example of places unsustainable for continued human inhabitance. In late September of 2022, Hurricane Ian slammed into Southwest Florida in nearly the same location devastated by Hurricane Charley in 2004.\(^{57}\) Hurricane Ian leveled much of the chain of barrier islands near Cape Coral, Florida, encompassing the islands of Pine Island, Matlacha, Sanibel, Captiva, and Fort Myers Beach.\(^{58}\) Florida is not the only place human development has spread to barrier islands. Other examples of inhabited barrier islands in the United States span from the Jersey Shore to the Outer Banks of North Carolina, Southern Louisiana, and the Texas Gulf Coast.\(^{59}\) Coastal flood risk from hurricanes is not limited to barrier islands and extends to other coastlines throughout the continental United States and the world.

With the looming threat of climate trends, it is time to shift policy considerations driving property law away from development and towards prioritizing natural spaces, smarter eco-friendly methods of building, and developing in more sustainable places. As a result of hundreds of years of prioritizing land development, human beings now expand development into places no longer sustainable for continued habitation. The only option, besides perpetuating the loss, rebuild, repeat cycle, is to buy property

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owners out of these doomed structures. This process is known as a "buyout."

C. The Buyout Process Unpacked

Buyouts are voluntary processes where property owners sell their flood-prone properties to the state or local government. In exchange for money to extinguish any existing mortgage and buy a property in a less risky location, the flood-prone property is demolished, and the land is reverted to its natural state. Incidental to the buyout process, the converted land is permanently designated as ineligible for development.

1. Federal Regulation and Funding for Buyouts

A buyout is not as straightforward as other real estate transactions between private parties, as they often involve many moving parts. At the federal level, there is a complex administrative regime at play for approving, organizing, and executing buyouts. No single agency is responsible for buyouts; the primary administrators responsible for buyout programs consist of the Federal Emergency Management Agency (FEMA) and the Department of Housing and Urban Development (HUD). The federal government engages in buyouts of flood-prone properties nationwide on both voluntary and mandatory bases. Eminent domain is used for mandatory property acquisitions. Federal buyouts have been conducted under the existing framework since the 1930s and 1940s. Historically, flood-prone properties were bought out to make way for dams and other flood control structures.

60. Property Buyouts Can Be an Effective Solution for Flood-Prone Communities, supra note 8.
61. Id.
62. Id.
63. Id.
64. Id.
65. Eminent domain is the government’s exercise of power to take private property and convert it to public use. The Fifth Amendment of the United States Constitution requires that the government provide “just compensation” to property owner’s whose property is taken via eminent domain. Eminent Domain, CORNELL L. SCH. LEGAL INFO. INST., https://www.law.cornell.edu/wex/eminent_domain [https://perma.cc/U9TA-LRA7] (last visited Feb. 12, 2024); Property Buyouts Can Be an Effective Solution for Flood-Prone Communities, supra note 8.
66. Id.
67. Id.
For instance, eminent domain has been used to force buyouts for the maintenance of navigable waterways, and for the creation of public parks to preserve the natural watershed—one example being Rock Creek National Park in Washington D.C. Much like New York City’s Central Park, many large cities in the United States use eminent domain and buyouts of private property to create public lands preserved in their natural state. In Shoemaker v. United States, the Supreme Court stated that legislation appropriating the funding for land acquisition for projects like Rock Creek Park will be upheld “by authority of law, whether advantageous to the public for recreation, health or business,” as taken for a public use. In addition, there is historical precedent for the federal government using voluntary buyouts to relocate at-risk residents from repeatedly flooded properties.

In the late twentieth century, federal funding efforts began focusing more on flood mitigation efforts than on post-disaster buyouts. Devastating flooding from the Mississippi and Missouri Rivers ravaged the Midwestern United States in 1993, prompting congressional action. In 1993, Congress created the Hazard Mitigation and Relocation Assistance Act of 1993 (HMRA) by amending the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988 (Stafford Act) to

70. In upholding the constitutionality of condemning—using eminent domain to take land to create a park protecting the natural watershed in Washington D.C. through the creation of Rock Creek Park—the Supreme Court relied upon a string of Case Law which set the precedent for takings for the common good and use of persons. Shoemaker, 147 U.S. at 297.
71. Shoemaker, 147 U.S. at 297. For more on the viability of eminent domain for the purpose of removing property owners from unsuitable building locations, see the eminent domain section of this paper.
72. For examples, see Floodplain Buyout Case Studies, Env’t Law Inst., https://www.eli.org/sustainable-use-land/floodplain-buyout-case-studies [https://perma.cc/U9BQ-MBRX] (last visited Feb. 1, 2024). This source details 13 successful buyout projects used to acquire properties subject to repeat flooding to return the land to its natural state for flood mitigation purposes.
73. Property Buyouts Can Be an Effective Solution for Flood-Prone Communities, supra note 8.
allow for more federal funding for long-term hazard-mitigation measures.\textsuperscript{75} FEMA utilized the HMRA of 1993 to implement the Hazardous Mitigation Grant Program (HMGP), which is commonly used for flood prone property buyouts.\textsuperscript{76}

FEMA is the primary federal agency offering federal hazard mitigation assistance out of three separate hazard mitigation assistance grant programs: the Hazard Mitigation Grant Program (HMGP), the Pre-Disaster Mitigation (PDM) Program, and the Flood Mitigation Assistance Grant Program (FMA).\textsuperscript{77} These programs are designed to reduce or eliminate the number of long-term flood risk structures, including properties insured by the National Flood Insurance Program (NFIP).\textsuperscript{78} Buyouts orchestrated with FEMA funding through the HMGP are almost exclusively limited to flood zones and must be voluntary by the property owner, technically feasible, and cost effective.\textsuperscript{79} Additionally, acquired properties must permanently remain open and the deed conveyed to either the local government or another accepted entity, like a land trust.\textsuperscript{80}

Disaster relief orchestrated with funding through FEMA’s HMGP is designed to reduce or prevent future losses from natural disasters. Projects seeking funding must provide a long-term solution to the problem, conform to the state’s hazard mitigation plan, benefit the disaster-stricken area, solve a problem, be cost-effective, and meet environmental requirements.\textsuperscript{81} FEMA buyouts are orchestrated on a cooperative basis with state governments. After a presidentially declared disaster, a state governor must apply for HMGP funding by submitting eligible projects to their FEMA Regional Office for review regarding eligibility and compliance with federal laws and regulations.\textsuperscript{82} Funding through FEMA’s HMGP is provided on a cost sharing basis, whereby 75\% of funding is provided.
federal and 25% of funding is state appropriations.\textsuperscript{83} Though cost sharing basis periodically change, it predominantly places the financial burden on the federal government to back funding for buyout projects.\textsuperscript{84}

The second major federal administrative orchestrator of buyouts is HUD. Major programs utilized by HUD include: the Community Development Block Grant (CDBG), Community Development Block Grant Disaster Recovery, and Community Development Block Grant Mitigation (CDBG-MIT).\textsuperscript{85} HUD largely offers state and local governments the ability to use grant funding for flood mitigation projects, including purchasing flood damaged and flood prone properties.\textsuperscript{86} Availability of HUD funding under the founding statutory scheme is fluid, with appropriations largely dependent upon congressional findings of need after a disaster.\textsuperscript{87}

2. State Regulation and Appropriations for Buyouts

In addition to a complex federal administrative regime, buyouts can also be organized exclusively at the state level or through a combined effort by state and federal agencies.\textsuperscript{88} Louisiana’s use of buyouts in response to the flooding Southern Louisiana experienced in 2016 is an example of cooperative state and federally funded buyouts.\textsuperscript{89} Epic slow-moving rainstorms caused catastrophic, record breaking inland flooding to Southern Louisiana and Mississippi in August of 2016.\textsuperscript{90} Some areas of

\textsuperscript{83} Id.
\textsuperscript{84} Recently, the Biden Administration announced a new 90% federal, 10% state appropriation cost sharing adjustment. This provision was codified in H.R. 2471, which is the Consolidated Appropriations Act of 2022. The provision is applicable to all emergency or major declared disasters declared or having occurred between January 1, 2020 and December 31, 2021. FEMA Announces 90/10 Cost Sharing Adjustment, FEMA, https://www.fema.gov/press-release/20220318/fema-announces-9010-cost-share-adjustment [https://perma.cc/FWU7-SZUC] (last updated Mar. 18, 2022).
\textsuperscript{85} Property Buyouts Can Be an Effective Solution for Flood-Prone Communities, supra note 8.
\textsuperscript{86} Id.
\textsuperscript{87} Id.
\textsuperscript{88} Id.
Southern Louisiana near Baton Rouge recorded upwards of 31.39 inches of total rainfall by the time the storms cleared.\textsuperscript{91} The Great Floods of 2016 are not the first devastating flood events Southern Louisiana experienced.\textsuperscript{92} Over the last 20 years, Louisiana has experienced 28 declared flood and hurricane related disasters, costing an eye watering $16 billion in public assistance funding.\textsuperscript{93} Following historic flooding from rainfall in 2016, the Louisiana Watershed Initiative (LWI) was formed through an executive order by Governor John Bel Edwards in 2016. The LWI is governed by the Council on Watershed Management and reforms Louisiana’s approach to flood control, prevention, and mitigation.\textsuperscript{94}

Following the LWI’s creation, Louisiana applied for and received a $1.2 billion flood mitigation grant from the federal government through the HUD.\textsuperscript{95} The LWI stated its plan to use the HUD Flood Mitigation Grant to “fundamentally change Louisiana’s approach to statewide flood mitigation activities.”\textsuperscript{96} The grant states that by “administering this grant, the state and its various jurisdictions and political subdivisions will coordinate expenditures and activities through the LWI to improve statewide floodplain management within watershed regions.”\textsuperscript{97} The grant’s goal includes “shifting development patterns, enhancing the public’s knowledge of flood risk, and encouraging activities that use the natural and beneficial functions of the watershed and associated floodplains.”\textsuperscript{98}

\begin{itemize}
\item \textsuperscript{91} Id.
\item \textsuperscript{93} Id.
\item \textsuperscript{94} The LWI is using cutting edge technology and going beyond traditional methods of flood mitigation to incorporate nature-based solutions. By understanding the unique characteristics of the floodplains and watersheds within the state, the LWI’s goal is to use projects that are custom tailored to the place they are executed to maximize their efficiency. Id.
\item \textsuperscript{95} CDBG-MIT Action Plan, supra note 89.
\item \textsuperscript{96} Allocations, Common Application, Waivers, and Alternative Requirements for Community Development Block Grant Mitigation Grantees, 84 FR 45838 (Aug. 30, 2019) (available at https://d10zxfp0rexhae.cloudfront.net/docs/CDBG-MIT-Master-AP-Approved-2_20_20.pdf [https://perma.cc/S7TB-4K8G]).
\item \textsuperscript{97} Id.
\item \textsuperscript{98} The LWI aims to move towards preventative methods of flood mitigation because they acknowledge the repeat cycle of disaster and recovery is unsustainable. CDBG-MIT Action Plan, supra note 89.
\end{itemize}
Due to Louisiana’s diverse and complex flood risk profile, Louisiana represents a unique microcosm for studying the success and viability of different flood mitigation approaches. In 2018, the Bipartisan Budget Act congressionally allocated $1,213,917,000 of CDBG-MIT federal funds to the State of Louisiana for the purpose of funding mitigation activities as specified in Public Law 115-123 and FR-6109-N-02. To spend these funds, Louisiana and its political subdivisions are required to submit an Action Plan for approval by HUD.

Part of Louisiana’s reform plans through the LWI’s reform include a new HUD approved plan to initiate buyouts in the neighborhoods that experienced the most severe flooding during the 2016 floods. As of late 2022, the LWI has organized seven buyout projects across the state. The LWI’s statewide buyout program allocated $87 million to offer eligible property owners more than the post-disaster fair market value of their property in order to incentivize homeowners to relocate to areas with lower flood risk. The program operates on a voluntary basis, meaning homeowners are under no obligation to sell their properties to the state. The statewide buyout program aims to relocate low to moderate income property owners from areas at risk of repeat future flooding. As of fall 2022, there were no LWI buyout projects focused on at-risk coastal communities, such as those outside of levee flood protections, like Grand Bayou, Ironton, and Grand Isle.

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99. Louisiana has a diverse and complex flood risk profile because their risk of flooding does not come from one type of disaster. Flooding in Southern Louisiana is caused by flooding rain driving river flooding, hurricanes, storm surge, etc. This means the state needs to take a more individualized area specific approach to tackle the multiple flood threats present both inland and coastal developments. MASTER ACTION PLAN FOR THE UTILIZATION OF COMMUNITY DEVELOPMENT BLOCK GRANT MITIGATION FUNDS (CDBG-MIT), Docket No. FR-6109-N-02 (Aug. 30, 2019); approved Feb. 20, 2020 (available at https://d10zxfp0rexahe.cloudfront.net/docs/CDBG-MIT-Master-AP-Approved-2_20_20.pdf [https://perma.cc/DQ5P-ZLZ3]).

100. Id.

101. Id.


103. Id.


105. Id.

106. Id.

107. Id.
II. ANALYSIS OF PROBLEM

A. Criticism of Existing Buyout Programs

One criticism that existing buyout programs face is their inequitable facilitation; meaning, the method through which buyouts have been historically conducted is discriminatory towards low-income socioeconomic residents and persons of color. A 2019 National Public Radio (NPR) investigation exposed that, nationwide, white communities receive more post-disaster buyouts than communities of color.\(^{108}\) Currently, money available for federal disaster aid is paid out based upon a cost-benefit analysis.\(^{109}\) This means that properties worth more money are often paid out first in priority, as opposed to paying out disaster relief based upon need.\(^ {110} \)

The problem is that buyouts of the magnitude required under purely a cost-benefit analysis are not viable. In looking at places most in need of buyouts, low-income minorities and elderly people who cannot afford to relocate own the most at-risk properties.\(^ {111}\) The risk of using a pure cost-benefit analysis to determine eligibility status for buyouts is that at-risk people will either be trapped in their current houses or their communities will disintegrate through abandonment.\(^ {112}\) Examples of these particularly vulnerable places in Southern Louisiana include places like Grand Isle, Grand Bayou, Ironton, and Brathwaite.\(^ {113}\) These programs must strike a


\(^{109}\) Id.

\(^{110}\) Id.

\(^{111}\) Low-lying areas are predominantly populated by low-income communities of color, which are most at risk of catastrophic flooding. Without financial resources to mitigate climate impacts through access to amenities like air conditioning and cars, these at-risk people are forced to face climate effects head on. Kelly Anne Smith, *How Communities of Color Are Hurt Most by Climate Change*, FORBES ADVISOR (last updated June 7, 2021, 7:00 AM), https://www.forbes.com/advisor/personal-finance/communities-of-color-and-climate-change/ [https://perma.cc/L3L4-VEGX].

\(^{112}\) Id.

\(^{113}\) Most of these communities are outside of the levee system and face flooding threats in the future. Many of the people living in these communities are descendants of freed slaves and Native Americans. They are reliant upon the disappearing lands that they live on, and their communities are repeatedly devastated by hurricanes and seasonal flooding. Nobel, *supra* note 13.
delicate balance to avoid unduly targeting low-income people of color out of fear of abandoning them in their flood prone structures.

Another criticism of buyouts is that the process is too costly to be efficiently used as a solution for disaster prone areas. Congressional support has been shown for the efficacy of buyouts, and there have been federal efforts to streamline the process through attempts to pass legislation streamlining buyouts and increasing eligibility for homeowners of repeatedly flooded property. While there was partisan opposition because of the cost of large-scale buyouts, proponents of streamlining the buyout process estimated that the buyouts would cost between 2% to 24% of the current cost of repeatedly rebuilding flood prone properties. The criticism that buyouts are more expensive than the temporary “band-aid” efforts of the repeated rebuild cycle, such as repairing, raising property levels, or increasing insurance premiums, are short sighted. By expending the one-time cost of buying out repeat flood-prone properties, costs and risks to both life and property are reduced in the long run. Natural flooding processes occur regardless of whether the land is developed, and by removing permanent structures, there is no longer a burden on the government and both public and private insurance agencies to fund futile repeat rebuilding efforts.

Buyouts are also criticized for being traumatizing, destructive of cultural identity, and perpetuating historical insensitivities towards forced movement of communities. However, while that may sometimes be a valid concern for forced movement of communities, the buyouts discussed here are for individual neighborhoods, streets, and properties. In addition, the risk these communities face inherently includes the risk of lasting trauma. Studies show that surviving a severe natural disaster produces long lasting trauma and can cause Post Traumatic Stress Disorder. Destruction from natural processes, such as subsidence caused by flooding and hurricanes, can also result in fracturing cultural identity. When tackling a problem of this nature, side effects and growing pains will ensue. The best way to

117. Disaster causes cultural shifts and changes through scattering members of a community and because of the collective psychological, economic and societal impact. For more on cultural shifts following disaster using post-Katrina New Orleans as a case study, see Loretta Pyles & Tonya Cross, Community Revitalization in Post-Katrina New Orleans: A Critical Analysis of Social Capital in an African American Neighborhood, 16 J. CMTY. PRAC. 383 (2008).
manage these concerns is to weigh the costs of removal against the
benefits. Local governments and state lawmakers are equipped to
communicate regarding the benefits and detriments of movement when
discussing options.

Criticisms of this type have been the strongest in the context of moving
indigent communities of Native Americans and long-standing creole freed
Black communities. One example is the displacement of the South
Louisiana community at Isle de Jean Charles. One example is the displacement of the South
Louisiana community at Isle de Jean Charles.118 Isle de Jean Charles was
a predominantly Native American community outside of the levee system
that was slowly sinking below sea level and at substantial risk of
destruction from natural disaster.119 One criticism of buyouts in discourse
surrounding solutions for the population at Isle de Jean Charles was that a
buyout would destroy the community’s cultural identity.120 Places like Isle
de Jean Charles are special cases that require unique treatment sensitive to
the identity of the community, but they are not representative of the
cultural sensitivity present in a majority of at-risk places.121

Even if buyouts fracture community identity, allowing residents to
remain in repeat flooding locations is not viable. For reasons previously
discussed, even if there are downsides to using buyouts, the benefits far
outweigh them. It is for the benefit of those at-risk communities that they
move to safer locations better suited for habitation given the risk natural
disasters pose not only to property but to life. For many at-risk
communities, their culture and way of life are already on the brink of
destruction due to natural processes and the effects of natural disaster.122

Finally, some critics think it would be better to put funding into coastal
restoration, building levees and raising property levels to stave off the
impacts of climate change. While these tactics have been widely

119. Id.
120. See id.
121. For more information on considerations at play in creating equitable plans for more culturally vulnerable communities, see Sarah Lipuma, Building Social Equity into Floodplain Buyouts (2021) (Master’s Project, Nicholas School of the Environment of Duke University) (on file with Dukespace through Duke University Libraries), https://dukespace.lib.duke.edu/dspace/bitstream/handle/10161/22686/Lipuma_FinalMP.pdf?sequence=1 [https://perma.cc/WK3Z-G78Q].
122. For more information on Louisiana’s threatened communities, see Nobel, supra note 13.
implemented in conjunction with tools like buyouts, they are not always viable long-term solutions. In Louisiana, the Coastal Protection and Restoration Authority (CPRA) is responsible for mitigation efforts, such as coastal restoration.\textsuperscript{123} The premise of the CPRA’s goal is to preserve the Louisiana coast as a storm barrier against hurricanes and slow the effects of climate change on Louisiana’s wetlands and barrier islands.\textsuperscript{124}

While it is a noble desire to save the place you call home, the problem with coastal restoration is that it is not a permanent solution. The same natural processes that destroy coastlines make rebuilding them impossible. Even the director of the CPRA acknowledged that the state is deadlocked in a losing battle. In a 2022 interview with National Geographic, Bren Haasse, coastal ecologist and Director of the CPRA, stated:

Our coast is sinking and there is simply not enough money and not enough resources and not enough sediment to do everything we want to do to save it. . . . The coast from tomorrow is going to be different than the coast from today, so we have a choice to make. Do we allow those changes to dictate to us how and where we live, or do we try and manage them the best way possible and live on and enjoy our coast on into the future?\textsuperscript{125}

The money spent on coastal restoration creates temporary solutions that will be washed away by the tide. Funded in part from fines collected following the Deepwater Horizon oil spill, the CPRA is spending billions of dollars to dredge and create barrier islands, berms and divert sediment in hopes of protecting Southern Louisiana communities from storm surge and hurricanes.\textsuperscript{126} Projects like coastal restoration and levees are temporary measures that create a greater danger for at-risk residents by making them less likely to evacuate in the face of a natural disaster because of the false trust they place in flood preventative infrastructure.\textsuperscript{127}

\begin{itemize}
  \item \textsuperscript{123} Id.
  \item \textsuperscript{124} Id.
  \item \textsuperscript{125} Id.
  \item \textsuperscript{126} Kezia Setyawan, \textit{A Look at Louisiana’s Restored Barrier Islands, the State’s Largest Coastal Project to Date}, NEW ORLEANS PUB. RADIO (July 22, 2022), https://www.wwno.org/coastal-desk/2022-07-22/a-look-at-louisianas-restored-barrier-islands-the-states-largest-coastal-project-to-date [https://perma.cc/JNF8-UFYY].
\end{itemize}
While some may find it a valid option to mitigate the effects of climate change through tactics like those used by the CPRA, the sobering truth is that they are futile except for potentially delaying the inevitable. Appropriations for the current $50 billion plan to save the Louisiana coast would be better used towards funding buyouts for some of the most at-risk homeowners outside of the levee system.\textsuperscript{128}

The pride of coastal communities and sense of home in Southern Louisiana is unique. While it is painful to even consider leaving the barrier islands outside of the levee system and other flood prone places, it is necessary. One option to help mitigate the psychological and economic effects of this migration is to continue lessened coastal restoration efforts coupled with moving. While buyouts will help fix the human plight of the destruction of coastal and flood prone land, the impact on native species from the loss of these places remains devastating. This criticism leans towards continuing costly coastal restoration efforts to try to delay the loss or impact on native species as they lose their habitat to climate change.\textsuperscript{129}

\textbf{B. Lack of Affordable Housing}

One major hurdle for buyouts is determining where to relocate displaced people. The main goal of the buyout process is to allow the bought-out homeowner to move to a less at-risk location. The existing affordable housing crisis and rising costs in properties on higher ground makes this a challenge. The affordable housing crisis arises from there being a greater demand for housing at a price point affordable for middle-to-low-income people than there is housing available in that price point.\textsuperscript{130}

\textsuperscript{128} Of the $50 billion allocated towards funding the latest coastal protection and restoration plan in Louisiana, $13 billion in funding comes from the settlements arising out of the 2010 Blue Horizon BP oil spill. Nobel, \textit{supra} note 13.

\textsuperscript{129} One example of an endangered species benefiting from CPRA’s coastal restoration efforts is the endangered Louisiana iconic brown pelican. The pelicans’ continued existence is threatened by the loss of the barrier islands they nest on due to subsidence, storm surge, and erosion. As of 2022, only six brown pelican nesting islands remained. \textit{Climate Change and Vanishing Islands Threaten Brown Pelicans}, NBC NEWS (July 27, 2022), https://www.nbcnews.com/science/environment/climate-change-vanishing-islands-threaten-brown-pelicans-rcna40200 [https://perma.cc/7VXR-UK27].

\textsuperscript{130} Khan et al., \textit{The Rental Housing Crisis is a Problem That Needs Supply Solutions}, CTR. FOR AM. PROGRESS (Aug. 22, 2022), https://www.americanprogress.org/article/the-rental-housing-crisis-is-a-supply-problem-that-needs-supply-solutions/ [https://perma.cc/KK3P-3PZ5].
As coastal urban areas begin to take climate change more seriously, prices for sought-after properties built upon higher ground quickly rise.\textsuperscript{131} In cities on the frontline of the battleground against hurricanes and rising sea levels, lower income housing on higher ground is replaced with wealthy housing and investment properties.\textsuperscript{132} For instance, in post-Katrina New Orleans, neighborhoods that did not flood during Katrina attracted investors and a wave of new residents.\textsuperscript{133} This pushes less affluent residents out of their neighborhoods. For instance, one of the original low-income residents of these sought after neighborhoods saw her tax bill increase twenty-fold due to property values rising.\textsuperscript{134} As a result, she was forced to leave her home to find more affordable housing elsewhere in the city.\textsuperscript{135} One major proponent anticipated to further this problem in urban places includes elderly retirees fleeing flood-prone coastal properties for higher ground.\textsuperscript{136}

Housing available at higher elevations in flood prone areas is not the only place with a shortage of affordable housing. Nationwide, there is an insufficient pool of housing available for middle-to-low-income Americans.\textsuperscript{137} The COVID-19 pandemic exacerbated the affordable housing shortage because home prices have surged to new highs since 2020.\textsuperscript{138} Prospective homebuyers and renters are concerned with affording


\textsuperscript{132} Id.

\textsuperscript{133} In New Orleans after Hurricane Katrina, U.S. Census demographic data, found that the highest-ground areas—census tracts with a median elevation of a meter or more—shifted from about 58\% White and 35\% Black in 2000 to 69\% White and 21\% Black by 2019. In addition, population has dramatically and continually declined in the area of the city that sustained the worst Katrina damage, New Orleans East. Tolan, \textit{supra} note 131.

\textsuperscript{134} Id.

\textsuperscript{135} Some experts are now calling this process “climate gentrification” whereby wealthier people fleeing from climate-risky areas spur higher housing prices and more aggressive gentrification in safer areas. Id.

\textsuperscript{136} Id.

\textsuperscript{137} Id.

\textsuperscript{138} This is largely caused by vacancies reaching their lowest point in nearly half a century due to COVID lockdowns and eviction moratoriums. Post-COVID rental and housing markets are a return of the previous demand issue, whereby there is insufficient available housing to meet the needs of the American people. Khan et al., \textit{supra} note 130.
housing in the market for the 2020s. Roughly half of Americans say that a lack of affordable housing in their communities is a major problem. As of January 2019, the United States had 37 homes available for every 100 low-income renters, equivalent to an affordable housing deficit of seven million homes.

The housing market crash during the 2008 Great Recession largely contributed to the affordable housing shortage. The 2008 market crash pushed many would-be home buyers out of the market and caused a decline in new housing builds. New housing builds waned following the market decline because approval rates for both single family and multifamily dwelling projects fell after the Great Recession. Households pushed out of the buying market by lack of housing availability, financing challenges, and foreclosures from the crash were forced into the rental market. While the late 2010’s brought a resurgence of multifamily building projects, building has not kept up with the population demand for housing. Additionally, vacancy rates reached their lowest consistent assessment since the 1950s. For the first three financial quarters in 2021, homeownership vacancies dropped to less than 1%.

Low vacancy ratings for homeownership means a lack of available homes for would-be buyers. As a result, would-be buyers are forced to either enter the rental market or stay in their existing homes, further reducing the available supply. The rental market is not insulated from the affordable housing shortage either. In the latter half of 2021, rental

139. Katherine Schaeffer, A Growing Share of Americans Say Affordable Housing is a Major Problem Where They Live, PEW RSCH. INST. (Jan. 18, 2022), https://www.pewresearch.org/fact-tank/2022/01/18/a-growing-share-of-americans-say-affordable-housing-is-a-major-problem-where-they-live/ [https://perma.cc/T7Z3-8RA5].
140. Id.
141. Khan et al., supra note 130.
142. Id.
143. Id.
144. Id. Multifamily building projects were hit significantly hard in the years following the Great Recession. Id.
145. Id.
146. Id.
147. Id. A vacancy rate shows the shares of rental and housing units that are readily available. A low vacancy rate means there is a small supply of available housing. Id.
vacancies fell to their lowest since 1984, at a less than 6% vacancy rate. As demand outpaces the supply of available rental housing, affordable rental housing becomes harder to find with rent prices surging.

While affordable housing is an issue, there are statutory schemes in place attempting to incentivize low-cost affordable housing projects and multifamily builds to meet the current housing demand. The latest is President Joe Biden’s Housing Supply Action Plan. This initiative seeks to close the housing gap within the next five years. While this plan’s viability exceeds the scope of this Comment, it is important to note the plan’s built-in mechanisms: (1) incentivize smarter zoning; (2) foster new financing mechanisms; (3) foster building more homes; and (4) take preventative measures to minimize the market share owned by corporate investors to put homes back into the market for individual purchasers.

The Biden Housing Supply Action Plan is significant for Americans because most of the wealth for middle- and low-income Americans is tied to one’s ability to own a home. Tackling the problem of the affordable housing crisis is multifaceted and analyzing solutions to this problem exceeds the scope of this Comment. In light of increased building initiatives and programs to support homebuyers, it is possible that sufficient housing availability is on the horizon.

C. Can’t Afford to Stay, Can’t Afford to Leave: Stress on Infrastructure from Climate Change Makes Coastal Homeownership Unaffordable

The effects of climate change put stress on the infrastructure upon which coastal communities and property owners rely. Degradation of necessary infrastructure results in devastating consequences for coastal residents.

The property insurance system is stressed to its breaking point by climate change. Insurance is regulated on two separate levels in the U.S., with homeowner’s insurance structured on a state level and flood

149. Khan et al., supra note 130.
150. Id.
151. Id.
153. Id.
154. Id.
155. It is important to keep this in mind when considering where to put bought out property owners and tenants. Khan et al., supra note 130.
insurance mostly structured on a federal level through FEMA.\footnote{156} Severe weather events, like hurricanes, impact the availability and cost of homeowner protections like home, flood, and wind insurance. The cost of providing insurance to the most risky properties pushes insurers into bankruptcy.\footnote{157} As a result of the economic risk of insuring imperiled properties, private insurers are backing out of the insurance market in hard hit forums and causing premiums for property insurance to skyrocket.\footnote{158} As a result, homeowners in some Southern Louisiana locations saw their property insurance premiums double or triple following the 2020 and 2021 hurricane seasons, making such homeowners fear they soon will be unable to afford their homes.\footnote{159}

Congress mandates that all federally regulated or insured mortgage lenders require flood insurance for mortgaged property in areas at-risk of flooding.\footnote{160} The combined cost of flood insurance and homeowner’s


158. Places like Southern Louisiana and Florida are struggling with coverage deficits left in the insurance market by insurance companies pulling out. For more on Louisiana’s insurance crisis as of fall, 2022, see John Schuppe, \textit{Louisiana Faces an Insurance Crisis, Leaving People Afraid They Can’t Afford Their Homes}, NBC NEWS (Sept. 16, 2022, 8:17 AM), https://www.nbcnews.com/news/us-news/louisiana-homeowners-insurance-crisis-hurricanes-rca46746 [https://perma.cc/USY6-WFSQ].

159. \textit{Id.}

insurance, in addition to an existing mortgage payment, will make property ownership unsustainable in some areas as prices balloon. As a result of price increases, some homeowners must decide whether to keep insurance on paid off property. Prior to Hurricane Ian, fewer than 48% of homeowners in federally designated floodplains in central and southwest Florida had flood insurance coverage.161 Uninsured and underinsured homeowners face significantly more barriers in repairing their homes after a storm, especially since homeowners receiving federal disaster assistance must obtain flood insurance at the address of the home—even if it is destroyed and replaced by a new one.162 In addition, to sell a home rebuilt with federal disaster assistance, new owners must be informed that coverage by flood insurance is mandatory.163 Statistically, residents with higher valued homes are more likely to carry flood insurance.164

The NFIP recently underwent a restructuring, where it switched from offering subsidized rates to offering actuarially sound rates which is significant for homeowners.165 Premiums are set to rise under this new “Risk 2.0” restructuring of the NFIP.166 While insurance companies are subject to a statutory limit regarding the extent premiums can annually increase for homeowners, new purchasers will be immediately subject to

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163. Id.

164. This statistic concerns homeowners who carry flood insurance voluntarily, meaning they are not under an obligation to have flood insurance coverage, which is usually mandated by mortgage lenders. Residents who voluntarily carried flood insurance on property outside of the 100-year floodplain were found on average to be “more highly educated, living in relatively expensive homes, and a long-time resident who thinks about flood hazard relatively infrequently.” Samuel D. Brody et al., Understanding the Motivations of Coastal Residents to Voluntarily Purchase Federal Flood Insurance, 20 J. RISK RSCH. 760 (2015).


166. Frank, supra note 4.
the current actuarially sound rates.\textsuperscript{167} While FEMA may advertise Risk 2.0 as an equitable plan, the restructured rates will actually be much costlier for some homeowners in coastal communities as the NFIP starts charging higher rates for properties expensive to replace or particularly vulnerable to rising sea levels and rapidly intensifying storm surges.\textsuperscript{168}

While the switch to an actuarially sound rate program has been criticized, the NFIP, as of 2018, was $20 billion in debt.\textsuperscript{169} Shockingly, 2\% of American properties accounted for 24\% of NFIP spending—of these properties, more than 30,000 of them have flooded five times each, with some flooding upwards of 30 times.\textsuperscript{170} Each time, the NFIP issued funding under the homeowner’s insurance policy to repair or rebuild the property.\textsuperscript{171}

In addition to placing increased stress on the insurance system, climate change also puts stress on other areas of critical infrastructure. All facets of infrastructure—from fire to emergency medical services, transportation, electrical, and telecommunications—face increasing burdens and costs due to increasingly severe weather conditions.\textsuperscript{172} After Hurricane Ida, all eight of the transmission lines that New Orleans relies upon failed.\textsuperscript{173} Back-to-back hurricanes hitting Southern Louisiana have cost the State north of a billion dollars in grid repairs and improvements.\textsuperscript{174}

The current system for dealing with natural disasters, by default, prefers rebuilding damaged or destroyed property after a natural disaster. After a storm blows through, property owners are expected to file FEMA claims for reimbursement of spoiled groceries, and homeowners insurance

\textsuperscript{167} For more information on statutory caps to flood insurance and limits on premium increases, see HORN, supra note 164, at 11–13.

\textsuperscript{168} Frank, supra note 4.


\textsuperscript{170} Id.

\textsuperscript{171} Id.

\textsuperscript{172} Particularly for aging infrastructure, severe weather places significant wear on bridges, roads, power grids and more. \textit{Is Your Fire and EMS Department Ready for Climate Change?}, FEMA (June 30, 2021), https://www.usfa.fema.gov/blog/ci-063021.html. [https://perma.cc/UVW3-4T58].


\textsuperscript{174} “Massive costs have followed each hurricane: up to $600 million after Gustav in 2008, $500 million for Isaac in 2012, $1.7 billion for Laura in 2020 and, that same year, $250 million for Zeta.” Id.
or NFIP claims for funding to repair their damaged home. The idea that post-disaster destruction means an obligation to rebuild is embedded in the psyche of residents in imperiled coastal communities. However, with the current state of the insurance market, alongside a host of other factors, de facto rebuilding no longer presents a viable option for coastal communities.

D. Disproportionately, Climate Change Impacts Low-Income and Minority Demographics.

Natural disasters unduly affect poor and minority citizens. Low-income people are less likely to possess the resources and tools required to evacuate ahead of a severe weather event and are less likely to evacuate far. The inability to evacuate and the lack of access to lifesaving resources for socioeconomically vulnerable people means that places of higher income inequality are more likely to experience mass casualties.


176. In Louisiana, after the island was demolished by Hurricane Ida the Mayor of Grand Isle stated, “I’ve always said if there is one grain of sand to plant the American flag, we’re not going anywhere.” In Grand Isle, over half of the permanent residents did not return after the storm and many residents can no longer afford to insure their properties in light of post-Ida premium rises. Margaret Orr, Grand Isle: A Broken Island Still Reeling from Hurricane Ida Destruction, WDSU6 NEWS, https://www.wdsu.com/article/louisiana-grand-isle/40934033# [https://perma.cc/LYH7-T5FV] (last updated Aug. 29, 2022). President Joe Biden and Florida governor Ron DeSantis have pledged to rebuild Fort Myers beach and other areas heavily damaged by hurricane Ian in Southwest Florida. Josh Boak & Seung Min Kim, Biden Promises to Rebuild Hurricane-Ravaged Florida: ‘We’re Not Going to Leave’, GLOBAL NEWS (Oct. 5, 2022, 8:52 AM), https://globalnews.ca/news/9177740/joe-biden-hurricane-ian-florida/ [https://perma.cc/LX8P-B2YW].

177. Current stressors on infrastructure in places ravaged by recent hurricanes has shown that it no longer is possible for insurers to repeatedly rebuild houses in at-risk locations. The cost of repeatedly rebuilding infrastructure and providing humanitarian relief post-disaster in these places is not sustainable. The billions spent on repairs and relief efforts would be better spent moving people inland to less at-risk locations.

following a severe climate event, like a hurricane. Socioeconomic vulnerability links to increased wait time for restoration of necessary utilities, like power following a hurricane.

Not only are low-income citizens and minorities disproportionately affected by natural disasters, but they may also be the most difficult population to buy out of their properties. In Louisiana, generations of poverty, lack of education, and access to estate planning assistance creates complicated co-ownership schemes via intestate succession. Due to the high cost of filing a succession in court and monetary bars to accessing attorneys, many low-income heirs never obtain legal paperwork solidifying their interest in the property. This problem results in fractured ownership, unmarketable titles, and barriers to community rebuilding efforts in Southern Louisiana.

179. Just like Sanibel, Captiva and Fort Myers, places of greater income inequality are more likely to see mass casualty events following a hurricane. Certain groups, like the elderly and poor minorities, are more likely to die in a severe climate event like a hurricane because they lack the ability or resources to evacuate. Id. at 4.

180. Following a hurricane, many post-storm deaths in the Southern parts of the United States are caused by heat exposure due to widespread grid failure. "Socioeconomically vulnerable" refers to marginalized or politically powerless groups like the urban or rural poor, minorities, the elderly and disabled persons. For a deep dive on socioeconomic vulnerability and its link to wait times for grid restoration in poor, minority communities, see Mitsova et al., Socioeconomic Vulnerability and Electric Power Restoration Timelines in Florida: The Case of Hurricane Irma, SPRINGER NAT. B.V. (July 18, 2018), https://par.nsf.gov/servlets/purl/10066853 [https://perma.cc/3PX7-HUPY].

181. Intestate succession occurs when someone dies without a will. Intestacy is the default legal framework created for transferring a deceased person’s property to their family members (heirs). Christy Kane et al., Addressing Heirs’ Property in Louisiana: Lessons Learned, POST-DISASTER (2019), https://www.srs.fs.usda.gov/pubs/gtr/gtr-srs244/gtr_srs244_010.pdf [https://perma.cc/Z9GP-7H94].

182. Id.

183. Multiple unidentified co-owners in a tract of immovable land is known as fractured ownership. Ownership interest in some of these estates is split between dozens of unidentified intestate heirs. This makes it hard for the owner in possession to sell or transfer their interest, to obtain loans for repairs, and more. Id.

184. Unmarketable title means that because of the lack of documentation, it would be extremely difficult to sell the property and it likely would sell for far below market value due to the defects in the title of the property. Id.

185. Id.
Many low-income, often minority, homeowners have been ineligible for federal disaster relief funding due to the high prevalence of property inherited intestate. Keeping this in mind, one challenge facing buyout programs is evidentiary. To properly acquire ownership of the property, the property will need to be acquired and purchased from the proper person(s). It is significant to consider how property will be acquired from fractured interest property in order to minimize any detrimental impact connected to taking familial lands because a homeowner’s largest asset of generational wealth is usually their home. There is also an emotional component attached to familial land that may be stronger than the emotional ties attached to other normal residential land because ownership has passed through multiple generations.

III. Solution

The solution to resolve the cycle of loss, rebuild, repeat is a multi-prong approach: Phase 1: Voluntary Buyouts; Phase 2: Dramatic Tax Increases; and Phase 3: Eminent Domain. In Phase 1, to incentivize voluntary movement, the homeowner should be offered the fair market value of the property, plus an “incentive bump” to encourage voluntary exodus from flood prone property. Persons who relocate in Phase 1 will be eligible for the most financial assistance and support. Next, in Phase 2, tax increases would further incentivize movement from flood prone properties. Taxation is largely policy-oriented and is frequently used to limit or incentivize behaviors of citizens. Increased taxes would help offset the burden on the government to continue providing utilities, insurance, and infrastructure in at-risk communities as the population and taxable population dwindle. In Phase 3, remaining property owners’ properties will be condemned using eminent domain, being bought out at the fair market value. As a last resort, instating other measures to incentivize the movement of existing property owners will minimize the number of properties requiring forced movement.

A. Phase 1: Use Federal and State Appropriations to Buyout At-Risk Property Owners and Relocate Them to Less Risk Averse Locations

The disaster cycle of loss, rebuild, repeat is no longer viable for coastal communities on the frontier of climate change. Environmental and climate

186. Eligibility for FEMA federal relief funding pre-Katrina used to be contingent upon being able to prove ‘clear title’ to the damaged property. This requirement has since been amended, requiring property owners only show an interest in the property to be eligible for funding. Id.
Science forecasts predict global warming trends and rising sea levels to bring stronger, more devastating storms and coastal flooding.\textsuperscript{187} Under the current framework, where the de facto standard is rebuilding flooded and storm damaged property, the cost of continued rebuilding efforts is not cost effective. For the same price as the cost of completely rebuilding a property once destroyed by flooding, it is possible to permanently move that homeowner from the flood prone area they currently reside in. In addition, providing insurance to properties that are the most at risk of destruction from severe weather events spurred on by climate change is no longer affordable nor sensible.

Not only is the current cycle no longer affordable, but the scale of impacted properties is growing at an impossibly sustainable rate. It is estimated that 1.2 billion people will be displaced because of the effects of climate change by 2050.\textsuperscript{188} That is equivalent to displacing 12% of the global population under current population growth trends.\textsuperscript{189} Projections regarding the immanency of this crisis vary. According to a 2021 World Bank report, over the next 30 years climate change events will displace 200 million people.\textsuperscript{190} To avoid a refugee crisis, it is time to begin moving people away from the coast and into lower risk, habitable locations.

The solution to the pending refugee crisis and other problems associated with living in coastal areas is to use federal and state appropriations to buyout homeowners from flood prone structures. In Louisiana, the LWI can orchestrate buyouts for coastal properties. There is already funding available for coastal buyouts through the $1.2 billion grant Louisiana received from the HUD in 2018.\textsuperscript{191} In addition, funds for other projects, such as coastal restoration and flood mitigation efforts, could divert towards buying out coastal properties.

\textsuperscript{187} See, e.g., \textsc{Sweet et al.}, \textit{supra} note 3. The discourse surrounding the certainty of global climate trends towards warmer weather, more severe storms and increased flood risk is almost universal. While there is still controversy about the amount \textit{human influence} has played into this phenomenon, the fact that the global flood and severe weather risk is increasing is now widely accepted globally by scientists studying environmental processes.

\textsuperscript{188} \textit{Climate Refugees: The World’s Forgotten Displacement Crisis}, \textit{supra} note 5.

\textsuperscript{189} \textit{Id.}

\textsuperscript{190} Clement et al., \textit{supra} note 7.

\textsuperscript{191} MASTER ACTION PLAN FOR THE UTILIZATION OF COMMUNITY DEVELOPMENT BLOCK GRANT MITIGATION FUNDS (CDBG-MIT), Docket No. FR-6109-N-02 (Aug. 30, 2019); approved Feb. 20, 2020 (available at https://d10zxfp0rexhae.cloudfront.net/docs/CDBG-MIT-Master-AP-Approved-2_20_20.pdf [https://perma.cc/DQ5P-ZLZ3]).
The downside of the existing scheme in Louisiana for funding buyouts is that it is strictly voluntary. The goal of evacuating and removing flood prone properties from the coastline cannot be met if holdouts are allowed to opt out of selling their property to the local government. As long as people live on the coast, it will be necessary to provide them with access to indispensable infrastructure such as power, water, telephone, and emergency medical services. This increases the burden on state and local governments, especially as the taxable population decreases after a disaster.

1. Phase 1 Valuation for Buyouts: Utilize The “True” Fair Market Value of The Property, Plus an “Incentive Bump” to Encourage Voluntary Relocation to Less At-Risk Areas.

One difficult endeavor with buyouts is property valuation for buyout purposes. Typically, when houses are sold in the open market, their selling price reflects the fair market value. Fair market value is the price a seller is “willing to accept and a buyer is willing to pay on the open market in an arm’s length transaction . . .” A host of factors impact the open market for real property, including supply and demand, desirability of the location of real property, and risk of natural disaster—i.e., hurricanes, flooding, and wildfires. On average, home values typically decline in the aftermath of a flooding event. One instance where such an effect can be seen is the housing market in New York following Hurricane Sandy in 2012. In New York, homes impacted by Hurricane Sandy’s flooding and those not impacted, but in nearby flood zones, saw a significant decrease in value.

However, studies show that the housing market does not respond homogeneously to natural disasters. One 2016 study revealed that lower priced houses experience a steeper drop in value after a natural disaster than higher priced homes. Not only does home value matter for property

192. Open Market is defined as “[a] market in which any buyer or seller may trade and in which prices and product availability are determined by free competition.” Open Market, BLACK’S LAW DICTIONARY (9th ed. 2009).


195. Id.

196. Id.

197. Lei Zhang, Flood Hazards Impact on Neighborhood House Prices: A Spatial Quantile Regression Analysis, 60 REG’L SCL & URB. ECON. 12, 13 (2016).
value stability, but neighborhood demographics do as well.\textsuperscript{198} A 2009 study focused on housing market recovery since 1992’s Hurricane Andrew devastated Miami, Florida.\textsuperscript{199} The study found that minority neighborhoods with fewer white residents took longer to recover than their predominantly Anglo-Saxon counterparts.\textsuperscript{200} In addition, this study found that major natural disasters are likely followed “by housing market volatility, high rates of property abandonment, and uneven housing recovery.”\textsuperscript{201}

Dips in housing value often prevent low income and minority homeowners from affording to move after a disaster.\textsuperscript{202} Drops in home value make it challenging for low-income homeowners to pay off their mortgages and afford a down payment on a new property.\textsuperscript{203}

While the assumption may be that flooded and hurricane damaged properties immediately depreciate in value, in some markets, devastating events attract investors who greatly spike the value of post-disaster properties.\textsuperscript{204} Investors looking to make a big payoff from rebuilding and subsequently reselling damaged property in newly rebuilt areas flock to places like Fort Myers, Florida, after a mass devastation event like Hurricane Ian.\textsuperscript{205} In addition, many storm victims are unwilling to move away and look for either temporary or replacement housing near their destroyed properties to live in while their homes are repaired, thus driving demand upwards for intact property.\textsuperscript{206} The combination of investors and locals looking to buy drives the market artificially upward due to

\begin{footnotesize}
\begin{enumerate}
\setcounter{enumi}{198}
\item Id.
\item Id.
\item Id. at 570.
\item Id.
\end{enumerate}
\end{footnotesize}
temporary changes in demand. Additionally, properties bought post-disaster are often bought at an artificially inflated value because of investor influence. The post-storm increases in market value in sought after places like the Florida coastline can last an upwards of 12 to 18 months.

As a result of the unpredictability of market trends following a disaster and in the interest of furthering market stability and equality, the best way to incentivize buyouts follows the model currently used by the LWI in Louisiana’s statewide buyouts of flood prone properties. Not every market artificially increases after a disaster, so using a post-disaster fair market value for properties undercuts equalizing the impact of buyouts across both wealthy and low-income properties. Using a post-storm fair market value for buyouts may result in lining the pockets of wealthier property owners while beguiling lower income homeowners, depending upon the desirability of the location of the property for investment. Under the LWI model, property owners are offered the fair market value of their property pre-storm plus an extra lump sum to incentivize voluntary buyouts. In evaluating property for buyouts, it will be important to keep in mind the factors that impact the market value of properties after a storm.

It is desirable to have a built-in incentive for homeowners to sell their properties to the state instead of on the private market to avoid the perpetuation of the loss, rebuild, repeat cycle. Incentivizing the sale of property limits the need for using eminent domain to forcibly move property owners from lands subject to repeat disasters. Voluntary sales of property are likely to be less controversial and subject to less emotional and psychological damage for the subjected homeowners than forced sale.

B. Phase 2: Increased Taxes for Holdouts to Adversely Incentivize Movement from Buyout Targeted Areas Through Punitive Fiscal Pressure and Positively Encourage Buyouts through Revenue Code Reform

Tax is an area of law historically based on policy. Taxes are used to both incentivize and de-incentivize behaviors through offering either tax deductions or increasing taxes on certain activities, behaviors, or conveniences. Tax has proven to be a powerful way to influence behavior.

207. Friedman, supra note 204.
208. Id.
209. Id.
Much of this Comment takes an approach seeking to limit the effects of climate change and buyouts on homeowners; however, increasing taxes on temporary holdouts may be necessary. One fundamental tenet of tax law in the United States is the idea that the tax placed on the tax payee should be commensurate with what the payee can afford to pay.\textsuperscript{211} While it might sound counterintuitive to increase taxes on property owners in repeat flood prone properties, it will help offset the increased burden on the government to provide necessary infrastructure to holdouts who remain after the initial voluntary buyout window closes.

One common issue with existing purely voluntary buyouts is known as “checkerboarding.”\textsuperscript{212} This phenomenon occurs when holdouts refuse to sell their properties to the government and the buyout project is unable to be completed.\textsuperscript{213} Most commonly, this occurs when a neighborhood is offered the chance to be bought out of disaster struck properties in a flood prone area and homeowners resist selling their properties.\textsuperscript{214} The result of this is insufficient buyouts to accomplish the goal of restoring marsh land, flood plains, or coastal land to their natural state to serve as storm breaks or reservoirs for what would otherwise be flood water.\textsuperscript{215} One reason incomplete buyout can occur is that the buyout has too large of a scope and includes properties less impacted by flooding. When this occurs, the most flood prone properties are bought out voluntarily, leaving slightly less afflicted homeowners refusing to buy.\textsuperscript{216}

There is precedent for income tax incentivizing the perpetuation of the repetitive loss cycle. One example incentivizing rebuilding is Internal

\begin{itemize}
    \item \textsuperscript{212} This incidence is called checkerboarding because the resulting landscape looks like a checkerboard pattern of neighboring plots of open space and developed land. Daniel Cusick, Leave No House Behind in Flood Buyout Programs, Group Says, SCI. AM. (Feb. 28, 2019), https://www.scientificamerican.com/article/leave-no-house-behind-in-flood-buyout-programs-group-says/ [https://perma.cc/GH22-ADAX].
    \item \textsuperscript{213} Id.
    \item \textsuperscript{214} Id.
    \item \textsuperscript{215} Id.
    \item \textsuperscript{216} This criticism arose in the wake of the Harris County, Texas buyouts organized to buy out properties that flooded during hurricane Harvey. Over 74,000 properties in the Houston area were damaged or destroyed by hurricane Harvey flooding in 2017. Of the 74,000 afflicted properties, 3,500 had been the source of repetitive flood loss claims—totaling an estimated $634 million in rebuilding costs between 1978 and 2017. The effects of the incomplete buyout resulting in 6,000 holdouts and the concerns with checkerboarding are discussed more in depth—see Daniel Cusick, supra note 212.
\end{itemize}
Revenue Code (IRC) Section 165 regarding casualty losses. IRC Section 165 allows taxpayers to deduct losses exceeding 10% of their adjusted gross annual income. However, the 10% barrier is often waived in the wake of a natural disaster. For Southern Louisiana residents affected by Hurricane Ida, the 10% requirement was waived and any qualifying loss from the disaster could be claimed, regardless of proportion to income.

Casualty losses include the personal casualty loss incurred from the destruction of property due to a federally declared disaster. The amount of loss is equivalent to the uncompensated amount remaining at the time it is claimed by the homeowner, this means the loss is equivalent to what the homeowner has not been reimbursed for by another entity, such as insurance. In addition to the property that the homeowner is ordered to demolish or relocate from following a disaster, any loss attributable to the qualifying disaster will be treated as a casualty loss.

Allowing casualty loss deductions in the IRC Section 165 framework incentivizes rebuilding in disaster prone areas. The ability to deduct destroyed or damaged property from income is significant because it virtually eliminates the risk of financial loss from building in a flood or disaster-prone area. Because the loss is deductible from adjusted gross income, the amount of taxable income a taxpayer has decreases overall—thereby decreasing the amount of taxes they pay. The homeowner is

...
restored by either being able to claim (1) the difference in the fair market value of the property immediately before and after the disaster, or (2) the individual’s basis in the property.222

On the other hand, IRC Section 139 incentivizes remaining in disaster prone areas by allowing for reimbursement of certain expenses incurred because of a natural disaster. Under this section, qualified disaster relief payments are not included in determining gross income.223 This means the reimbursement places the homeowner in the same position they were in before incurring the eligible disaster related cost. The homeowner gets a benefit from receiving qualifying disaster payments because they can freely repair their damaged property or freely purchase eligible necessities post-storm.224 Under this model, almost all of the burden for the cost of disaster repairs is placed upon the government instead of the homeowner. While this approach minimizes the hardship on the taxpaying afflicted homeowner, it deprives the government of additional income tax revenue while also increasing the cost of a disaster on the local, state, and federal governments by incentivizing people to apply for mitigation payments for repairs.

Importantly, IRC Section 139 also exempts a qualified disaster mitigation payment from income taxation for any amount paid to the

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222. Basis is equivalent to a person’s financial interest in an item of taxable property. Basis is used in valuing the taxable or deductible amount of losses, gains, sales, exchanges or other transfers of property. See Topic No. 703, Basis of Assets, IRS, https://www.irs.gov/taxtopics/tc703 [https://perma.cc/YG79-XTBZ] (last updated Jan. 12, 2024) (more on basis); see Christine Manolakas, The Tax Law and Policy of Natural Disasters, 71 BAYLOR L. REV. 1, 6 (2019) (more on the downfalls and specifics of casualty loss deductions).

223. Pertinent to this paper, a qualified disaster is a federally declared disaster under IRC Sect. 165(i)(5)(A) or a disaster determined by applicable federal, state or local authorities to warrant assistance. The definitions given in IRC §139 would encompass natural disasters such as flooding, hurricane damage, fires, earthquakes and more. See I.R.C. §139.

224. Expenses covered under the qualified disaster payment relating to a qualifying disaster event include reimbursements for expenses relating to: (1) reasonable and necessary personal, family, living, or funeral expenses; (2) reasonable and necessary expenses incurred for the repair or rehabilitation of a personal residence or repair or replacement of its contents to the extent that the need for such repair, rehabilitation, or replacement; etc. A qualified disaster mitigation payment also includes any amount paid in accordance with the Stafford Act or the National Flood insurance program. These expenses are reimbursable and excluded from gross income so long as they stem from a qualifying disaster, are not also paid for under an insurance policy, and are paid by the federal, state or local government. See id.
homeowner in accordance with the Stafford Act or the NFIP. However, the IRC Section 139 exemption does not include proceeds received for the sale or disposition of property. This is significant because the sale of land to the government in a buyout would still be taxed, just like the sale of any other parcel of property. In this manner, homeowners are adversely incentivized to stay and rebuild property in at-risk areas because of the tax consequences of selling them in a buyout. In light of the loss deduction available in IRC Section 165, the current tax framework incentivizes staying and rebuilding.

Instead of incentivizing rebuilding, reallocating some of the allowable deductions towards creating deductions for relocating would be beneficial. One of the most significant changes that would incentivize buyouts would be to amend IRC Section 139 to exclude money received to buyout or dispose of property pursuant to the Stafford Act or the National Flood Program from income. This change would allow property owners to transfer their flood prone property to the government without having to claim the purchase proceeds as income. By having to claim the proceeds as income, it reduces the money homeowners have free of tax liability to obtain replacement housing. Under the proposed framework, the bought-out property is taken out of the market in areas no longer suitable for continued habitation. To treat the sale of flood prone property the same as transfers of other real property for tax purposes unfairly impacts the owners of flood prone property and disincentivizes the government buying out property.

This tax policy shift will help to reallocate incentives towards relocating to encourage buyouts. Additionally, increasing taxes on property owners who remain in flood prone locations would encourage voluntary buyouts as well. Providing necessary infrastructure to places repeatedly struck by disaster is significantly more costly for the local government, given the increased cost of repeat repairs. This strategy spreads tax appropriations thinner and makes providing upkeep of necessary infrastructure, schools, police, fire, and emergency medical services more difficult for state and local governments.

225. Id. §139(g)(2).
226. Id.
In addition, post-disaster relocation and partially successful buyouts deplete the tax base in any given community. Fewer residents generate less tax revenue, making it more difficult to serve depleted coastal communities. For behaviors thought unwise, harmful, or costly to public health and safety, there is bountiful precedent allowing for the taxation of those choices. There are additional taxes on alcohol, gambling winnings, firearms, unhealthy foods, cigarettes and more. These taxes adversely impact the person who carries out the tabooed activity, known colloquially as “sin taxes.” Not only is there precedent for additional taxation on the above listed, but there is also precedent for additional taxes on things considered averse to the environment—such as increased taxes on highway tractors and gasoline.

Holdouts who remain after the initial voluntary buyout window ends create detrimental impacts on society and themselves as the individual. By remaining in flood prone properties, they are exposed to the continued risk posed by natural disasters and flooding. In addition, they increase the burden on local and state governments by remaining. Penalizing holdouts by raising taxes on repeatedly flooded property is justified to offset the cost of them remaining placed upon local and state government. This incentivizes voluntary movement without resorting to condemnation using eminent domain.

C. Phase 3: Exercising Eminent Domain to Condemn Holdout Property for Public Use in Order to Remove Remaining Holdouts

America is the land of the free, and there is hesitancy with forcing a property owner to relocate even if it is the right choice. Governments can exercise eminent domain power to acquire ownership of private property

228. See Lipuma, supra note 121, at 12.
230. Id.
231. Id.
232. Between 1974 and 2004, 19,959 people died as a result of natural disasters. The areas with the greatest mortality risk are “the South Atlantic and Gulf coasts, the lower Mississippi River valley, the northern Great Plains, south-central and southwestern Texas, and the Rocky Mountain West.” Kevin Pollard, Which Types of Disasters are the Deadliest in the U.S.? The Answer is Surprising, POPULATION REF. BUREAU (Jan. 5, 2011), https://www.prb.org/resources/which-types-of-disasters-are-the-deadliest-in-the-u-s-the-answer-is-surprising/ [https://perma.cc/Q3XH-GTDN].
for the purpose of converting it to public use. The Fifth Amendment limits the government’s ability to take private land by requiring property owners to receive just compensation for their property. Just compensation has been upheld to be equivalent to the property’s appraised fair market value.

Another limit on exercising eminent domain power is that the taken property must be designated for public use. The Court broadly interprets the Fifth Amendment to allow the government to seize property if it will serve to increase the general public welfare. The landmark United States Supreme Court opinion, *Kelo v. City of New London*, expanded eminent domain by allowing the government to take private land so long as it is rationally related to a conceivable public purpose. There is longstanding historical precedent authorizing the use of eminent domain for restoring land to its natural state.

For instance, eminent domain has been used to force buyouts for the maintenance of navigable waterways, and for the creation of public parks to preserve the natural watershed—one example being Rock Creek National Park in Washington D.C. Another example is illustrated in *United States v. Eighty Acres of Land in Williamson County*, in which a federal court upheld the use of eminent domain to acquire ownership of forested land around a stream to use for flood mitigation and prevent

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233. Exercises of eminent domain power are often known as ‘taking.’ *Eminent Domain*, supra note 65.

234. Just compensation is a term of art first seen in the Supreme Court case *Kohl v. United States*, 91 U.S. 367 (1875). The term was clarified in later progeny. *Id.*

235. Valuation typically doesn’t include any sentimental or other unique value the property has to the owner and instead is strictly based upon the value of the property in the open market. *Amendment 5.5.8 Calculating Just Compensation*, CORNELL L. SCH. LEGAL INFO. INST., https://www.law.cornell.edu/constitution-conan/amendment-5/calculating-just-compensation [https://perma.cc/W3DX-5V9H] (last visited Feb. 3, 2024).

236. *See, e.g.*, *Kelo v. New London*, 545 U.S. 469 (2005) where the Court allowed government seizure of private property to turn into a private development. Facilitating economic development was sufficient justification to constitute public use.

237. *Id.*


erosion.\footnote{United States v. Eighty Acres of Land in Williamson County, 26 F. Supp. 315 (E.D. Ill. 1939).} Nationwide, eminent domain has been used for the creation of public parks, conservation areas, necessary infrastructure projects such as transportation projects and creation of public buildings.\footnote{History of the Federal Use of Eminent Domain, supra note 238.} Even NASA’s Kennedy Space Center at Cape Canaveral, Florida is the result of the successful exercise of eminent domain.\footnote{Gwathmey v. United States, 215 F.2d 148 (5th Cir. 1954).}

It is likely that eminent domain would be viable for relocating flood prone property owners given the longstanding historical precedent authorizing similar endeavors. FEMA’s authorizing grant supports this conclusion. In 1933, Congress passed the National Industrial Recovery Act of 1933, and a couple of years later, it passed the Federal Emergency Relief Appropriation of 1935.\footnote{National Industrial Recovery Act of 1933, Pub. L. No. 73-67, § 201, 48 Stat. 195, 200–01 (1933).} In § 201 of the National Industrial Recovery Act, Congress authorizes the President to create FEMA.\footnote{National Industrial Recovery Act § 201.}

Section 202 authorizes FEMA to carry out public works projects facilitating the:

(b) conservation and development of natural resources, including control, utilization, and purification of waters, prevention of soil- or coastal erosion, development of water power, transmission of electrical energy, and flood control (c) any projects of the character heretofore constructed or carried on either directly by public authority or with public aid to serve the interests of the general public.\footnote{National Industrial Recovery Act § 202.}

To complete such public works projects, Congress granted the President authorization to:

(1) to construct, finance, or aid in the construction or financing of any public-works project included in the program prepared pursuant to section 202 (section 402) . . . (3) to acquire by purchase, or by exercise of the power of eminent domain, any real or personal property in connection with the construction of any such project.\footnote{National Industrial Recovery Act § 203.}
These sections authorize the use of eminent domain for the perpetuation of public works and have been interpreted to allow eminent domain for projects like flood mitigation and hazard reduction.248 Case law establishes flood control as a matter of public interest on the national scale. It has been recognized and declared to be important to national welfare.249 In United States v. Eighty Acres of Land in Williamson County, the court stated that even though the effects of the taking would only be local in benefit, its transformation into public conservation land to avoid erosion and function as flood mitigation was for the benefit of all people.250

Similar to the historic public works taking cases—whether the taking was for transportation, public parks, or flood mitigation—using eminent domain to remove residual holdouts from repeatedly flood prone properties serves to benefit the general welfare of the entire population. It would be a disservice to gloss over the sour taste eminent domain left in the embittered communities adversely impacted by the historical exercise of the power. Keeping in mind the injuries in the collective psyche, eminent domain can be conducted in an equitable and just way. In this proposal, eminent domain is used as a last resort to move property owners who have been repeatedly incentivized to move. Their properties will be purchased at fair market value and converted into public lands used for flood mitigation, restoration of the natural floodplain, and as conservation areas. In turn, this benefits neighboring properties and communities outside of the floodplain by creating reservoirs for flood water to enter. This approach does not adversely impact homeowners whose property is taken through eminent domain since their property is already subject to repeat flooding and destruction from severe weather.

One caveat focuses on the importance of notice. If this framework is to be utilized, to avoid unduly prejudicing new bona fide purchasers during the pendency of the proceeding for removing flood prone property owners, it is necessary to cloud the title of property designated to be on the chopping block for either buyouts or forced relocation for eminent domain. By filing notice of the pending proceeding in the public record, any would-

249. See 16 U.S.C. § 590a and following sections.
be buyers will be on notice that the property may be subject to a buyout or condemnation via eminent domain. Doing this puts them on notice that their property interest would be in jeopardy.

CONCLUSION

Using federal and state appropriations to buyout homeowners from flood prone structures and relocate people to less at-risk places, instead of using money to rebuild after a disaster will both save on the economic cost of repeat rebuilding and minimize the risk of loss of life due to natural disasters.

After analyzing the viability and long-term success of other proposed solutions, none are viable for successful execution to solve the problems facing repeatedly destroyed properties and at-risk displaced residents. Coastal restoration and other mitigation efforts may have some temporary beneficial effects, but their ephemeral effects are insufficient to stem the rising tide. Instead, a more drastic solution is required, involving: Phase 1: Voluntary Buyouts; Phase 2: Modifying Tax Policy to Penalize Properties Not Voluntarily Relinquished During Buyouts and Offer Tax Incentives to Move; and Phase 3: Eminent Domain. By executing the proposed buyout process, the harm facing buyout targeted communities can be reduced. There are risks to consider, such as the importance of preserving cultural identity and using equitable buyout tactics. Regardless, it is possible to successfully execute large scale buyouts within the existing disaster mitigation and relief framework.