

FOR THE SAKE OF THE SMITH ISLAND CAKE: A REINTERPRETATION OF THE STAFFORD ACT TO FACILITATE CULTURALLY INFORMED COMMUNITY BUYOUTS AND RELOCATION

CHLOE SHOSTAK *

INTRODUCTION

“You can never really go home again,” is a commonly understood reference to the unrelenting change that accompanies the passage of time. However, this saying takes on a new significance when facing climate change and sea level rise, where entire communities may soon be physically unable to return to their homes as they are lost beneath the sea. This note looks at one such community on Smith Island, Maryland, the ways in which the current buyout program of the United States failed it, and provides recommendations for how this system may be improved in preparation for the impending wave of Americans displaced by climate change.

A. Sea Level Rise

As greenhouse gas emissions have skyrocketed in the past century, oceans have absorbed more than 90 percent of the increased atmospheric heat they create.¹ But this is not without a drastic impact on the oceans themselves; as their temperature goes up, so does the global average sea level.² This change is primarily attributable to two processes spurred by climate change: thermal expansions and melting ground ice.³ About half the sea level rise of the past 25 years can be linked to thermal expansion: the simple principle that when water heats

Copyright © 2022 Chloe Shostak

* Duke University School of Law, J.D. expected 2022. First and foremost, I would like to thank Professor Ryke Longest for his mentorship and guidance throughout the creation of this note. I am indebted to Professor Stephen Rody for inspiring this work. Finally, I thank my colleagues at the Duke Environmental Law and Policy Forum for their incredible support and assistance.

1. Nat’l Oceanic and Atmospheric Admin., *Is sea level rising?* U.S. DEP’T OF COMMERCE (last visited Dec. 14, 2021), <https://oceanservice.noaa.gov/facts/sealevel.html>.

2. *Id.*

3. *Id.*

up, it expands, causing the world's oceans to take up more space.⁴ Simultaneously, persistently higher temperatures resulting from global warming have caused decreases in snowfall due to shorter winters and more summer melting than is typical, resulting in glaciers and ice sheets melting and running off into the sea.⁵ All in all, sea level around the world has risen over eight inches since 1880, with about three of those inches occurring in the last 25 years.⁶

There is no end in sight to this upward trend, and sea levels continue to creep up at a rate of about one-eighth of an inch per year.⁷ However, there is some scientific debate over exactly how far this process will go by the end of the century. The Intergovernmental Panel on Climate Change predicts oceans will rise somewhere between 10 and 30 inches by 2100 with global temperatures warming by 1.5 °C.⁸ A separate study using data from NASA and European sources points toward the higher end of this range, indicating a rise of 26 inches by the end of the century.⁹

While some may scoff at a promised change of less than a foot, it is no laughing matter. The upward creeping high tide can damage coastal habitats inland, cause erosion, flood wetlands, contaminate aquifers and agricultural soil with salt, and destroy the habitats of fish, birds, and plants.¹⁰ Perhaps most immediately concerning to those who have made their homes by the water is that higher sea levels allow storms to reach further inland, move more slowly, and drop more rain.¹¹ This leads to more frequent and severe nuisance flooding, which is estimated to be between 300 and 900 percent more common in United States coastal communities than it was even 50 years ago.¹² While flooding can be disruptive to daily life, and damaging to property, it can also be deadly.¹³ A study examining all deaths during Atlantic hurricanes between 1963 and 2012 found roughly half of them were the direct result of storm surges.¹⁴ A storm surge is an abnormal

4. Christina Nunez, *Sea level rise, explained*, NAT'L GEOGRAPHIC (Feb. 19, 2019), <https://www.nationalgeographic.com/environment/article/sea-level-rise-1>.]

5. *Id.*

6. *Id.*

7. Nat'l Oceanic and Atmospheric Admin., *supra* note 1.

8. Christina Nunez, *supra* note 4.

9. *Id.*

10. *Id.*

11. *Id.*

12. Nat'l Oceanic and Atmospheric Admin., *supra* note 1.

13. *Id.*

14. Christina Nunez, *supra* note 4.

rise in the ocean level generated by a storm's wind pushing water inland, over and above the typical astronomical tide.¹⁵ A surge can start before a storm makes landfall, and can quickly extend several miles inland.¹⁶

As a result of the increasing risks, many coastal cities are planning adaptations that make their communities more resistant to this flooding.¹⁷ These include building seawalls, rerouting roads, and planting vegetation to absorb water.¹⁸ This is all taken at considerable cost, and for some communities, is still not enough.¹⁹ Individual residents in low-lying coastal communities have already begun to move to higher ground.²⁰ The compiled effects of disaster upon disaster battering the often below the poverty line communities who make their home along the shore leave them no time to recover.²¹ At a certain point entire communities will have no choice but to admit that their home has become unfit for human inhabitation.

B. Climate Refugees and Internally Displaced Persons

Hazards resulting from the increasing frequency of extreme weather events, including abnormally heavy rainfall, environmental degradation, and sea-level rise, cause more than 20 million people to move from their homes each year.²² The term "climate refugee" is frequently used in literature about this issue; however, it is important to note it is not endorsed by the United Nations High Commissioner for Refugees (UNHCR), and it prefers the label "persons displaced in the context of disasters and climate change."²³ To fit the internationally accepted definition of refugee, a person must have crossed an international border "owing to well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion."²⁴ Occasionally there is an overlap

15. Michael Levenson, *Storm surges can threaten lives and damage property.*, N.Y. TIMES (Aug. 29, 2021), <https://www.nytimes.com/2021/08/29/us/storm-surge.html>.

16. Science X Network, *What is a storm surge and why is it so dangerous?*, PHYS.ORG (May 3, 2019), <https://phys.org/news/2019-05-storm-surge-dangerous.html>.

17. *Id.*

18. *Id.*

19. *Id.*

20. Michael Levenson, *supra* note 15.

21. The United Nations High Commissioner for Refugees, *Climate change and disaster displacement*, UNHCR (2021), <https://www.unhcr.org/en-us/climate-change-and-disasters.html>.

22. *Id.*

23. *Id.*

24. G.A. RES. 429(V), Text of the 1951 Convention Relating to the Status of Refugees (Dec. 14, 1950).

between those termed climate displaced persons and those termed refugees. Refugees who have been displaced by force, qualifying them for such a status, are especially vulnerable to the effects of climate change, and the United Nations increasingly recognizes the impacts it may have on these vulnerable populations.²⁵ People already displaced for reasons unrelated to flooding and other natural disasters often find themselves residing in climate change “hotspots” which may result in a second displacement and a much lower probability of a return home.²⁶ In recognition of this, an overwhelming majority of the United Nations General Assembly voted in favor of a global compact declaring “climate, environmental degradation and disasters increasingly interact with the drivers of refugee movements.”²⁷ Even more promising, the UNHCR has begun to utilize its resources to help those displaced by climate change rooted disasters. In 2020 it deployed aid teams to assist the roughly three million people affected by Hurricane Eta in Central America and southern Mexico.²⁸

Presumably the reason the definition of refugee has not been expanded to include climate displaced persons despite the United Nation’s recognition of their plight is because climate change primarily affects people inside their own countries, and typically creates internally displaced people long before it reaches a level where it would cause displacement across borders.²⁹ Internally displaced people (IDPs) have been forced to leave their homes but stay within their own country and remain under the protection of their own government, and because of this, they cannot receive international aid.³⁰ Therefore, the relocation of those displaced by rising sea levels in the United States is the responsibility of our government alone – no one will be coming to help us. While mass migrations may still be a few decades away, there are already many communities literally struggling to stay afloat, and the systems in place that could facilitate their relocation have been utterly unequipped for the task. It is essential to look to their unmet needs and adapt the current buyout framework of the United States,

25. See The United Nations High Comm’r for Refugees, *supra* note 21. (needs parenthetical)

26. *Id.*

27. THE UNITED NATIONS HIGH COMM’R FOR REFUGEES, *Part II, Global compact on refugees*, GAOR Supplement No. 12 (A/73/12 (Part II)) (Sept. 13, 2018).

28. The United Nations High Comm’r for Refugees, *Climate change and disaster displacement*, UNHCR (2021), <https://www.unhcr.org/en-us/climate-change-and-disasters.html>.

29. *Id.*

30. The United Nations High Comm’r for Refugees, *Internally Displaced People*, UNHCR (2021), <https://www.unhcr.org/en-us/internally-displaced-people.html>.

the traditional manner in which relocations have been carried out, to meet them. Smith Island is a true prototype of future small-town America in this sense.

I. SMITH ISLAND

A. History and Background

Captain John Smith (of Jamestown infamy) first charted the archipelago in 1608, but there is evidence of seasonal occupation by Native American communities that goes back more than 12,000 years.³¹ In 1872, the Reverend James A. Massey described Smith Islanders as “an almost amphibious race.”³² Smith Island is Maryland’s last inhabited island that is unattached to the mainland by bridge.³³ It is in the Chesapeake Bay, 12 miles directly west of the town of Crisfield, across the arm of the Bay called Tangier Sound.³⁴ Today, Smith Island is comprised of dozens of smaller islands, some of them simple clusters of marsh plants, that are divided by tidal channels.³⁵ The whole area is about 8,000 acres (around 3 by 5 miles), of which roughly 900 acres located on the southern portion of the island are habitable.³⁶ Most of the remaining dry land makes up the Martin National Wildlife Refuge, a gift to the federal government from the late Glenn L. Martin, which does not allow visitors.³⁷ No point on the island is more than five feet above sea level, and the average elevation is roughly two feet above sea level.³⁸

The majority of the families on the island have either the surname Evans or Tyler; the vast majority of modern residents are direct descendants of the first English families to permanently settle on the island in 1686.³⁹ This long and insular history has led the island to develop an incredibly unique culture and dialect.

31. Sandie Marriner, *Smith Island Center: About*, CRISFIELD & SMITH ISLAND CULTURAL ALL., INC. (last visited Dec. 14, 2021) <http://smithisland.org/about>.

32. Steven A. Eades & Pauli Zmolek Eades, *Smith Island, MD*, SMITHISLAND.US, <http://smithisland.us/about.htm> (last visited Dec. 13, 2021).

33. William G. Scheller, *Island of Calm*, WASH. POST (March 12, 2000), <https://www.washingtonpost.com/wp-dyn/content/article/2000/03/09/AR2005033106815.html>.

34. *Id.*

35. *Id.*

36. *Id.*

37. William G. Scheller, *supra* note 33.

38. *Id.*

39. Wayne T. Gilcrest, *Smith Island*, THE AM. FOLKLIFE CTR., <https://memory.loc.gov/diglib/legacies/loc.afc.afc-legacies.200003127/default.html> (last visited Dec. 9, 2021).

The island chain has three villages with a total population of about 200 year-round residents.⁴⁰ The largest village, Ewell, hosts The Cultural Center.⁴¹ Ewell is connected to the village of Rhodes Point by bridge, with the village of Tylerton located on a neighboring, unconnected island.⁴² The Smith Islanders have their own dialect, believed to most commonly resemble that of the original Jamestown settlers.⁴³ It is a blend of the Elizabethan era English of the Island's original inhabitants and a distinctive vowel usage that has evolved over centuries of isolation.⁴⁴ Smith Island is most well known in greater Maryland for its cake, a distinct eight-to-fifteen layer crispy confection, which has since been declared Maryland's state dessert.⁴⁵

Almost everything and everyone that comes to Smith Island does so via boat.⁴⁶ Throughout the summer, cruises and passenger ferries offer daily roundtrip passage to the mainland, and the passenger ferries continue to make trips between Smith Island and the mainland on a limited basis during the off season.⁴⁷ Cars are typically not used nor needed on the Island's 2.2 miles of paved road, but a handful of residents do have unregistered vehicles brought over on barges.⁴⁸ However, the two primary modes of transportation for islanders are far and away boating and walking, with golf carts and bicycles acting as secondary methods.⁴⁹

The Island has no local government or police to maintain order, but it is far from lawless chaos.⁵⁰ Smith Island's community is politically and socially active: in 2020 when Smith Island's last voting precinct was closed by election officials, residents organized a letter writing campaign in which the majority of adult islanders participated.⁵¹ A one-

40. Sandie Marriner, *supra* note 31.

41. *Id.*

42. *Id.*

43. *Id.*

44. Steven A. Eades & Pauli Zmolek Eades, *supra* note 32.

45. Maryland State Archives, *Maryland State Dessert - Smith Island Cake*, MARYLAND MANUAL ON-LINE (Oct. 15, 2020), <https://msa.maryland.gov/msa/mdmanual/01glance/symbols/html/dessert.html>.

46. Sandie Marriner, *supra* note 31.

47. *Id.*

48. Joel McCord, *Police are cracking down on violations, but Smith Island says it won't squeal*, THE BALT. SUN (Sept. 19, 1991); *see also Smith Island: Maryland's Disappearing Island*, LOVICARIOUS (Oct. 1, 2019), <https://www.lovicarious.com/smith-island-maryland/>.

49. *Smith Island: Maryland's Disappearing Island*, LOVICARIOUS (Oct. 1, 2019), <https://www.lovicarious.com/smith-island-maryland/>.

50. Steven A. Eades & Pauli Zmolek Eades, *supra* note 32.

51. Matthew Prenskey, *'We're being silenced': Smith Island residents say Maryland took away*

room school building accommodates all the island's children until high school when they begin to travel via ferry to the mainland for their education.⁵² The residents take pride in having their own school – the children receive one on one teaching and all of the Island's adults pitch in to help instruct them.⁵³

The people of the Island are deeply religious, and each village has its own Methodist Church where local decisions are made, acting as hubs for all political and religious activity.⁵⁴ Tylerton United Methodist Church has 56 official members, and at any given Sunday morning service 40 to 75 congregants are present.⁵⁵ The islanders' religious beliefs are deeply and inextricably linked to the ocean. As one woman explained "Our food comes from the water. We never plant, only harvest, and yet God continues to provide. It is for this reason we know that we are blessed."⁵⁶

Most of the island's residents are watermen who make their living by crabbing and oyster dredging.⁵⁷ They leave as early as 4:00 in the morning to spend hours on the water, setting their crab traps and reeling in those that are full.⁵⁸ Once they have returned to their crab shanties and unloaded the day's catch, the crabs are transported to Tylerton where they are cleaned and packaged by the women's co-op to be shipped and sold on the mainland.⁵⁹ When crabbing season ends, oystering season begins, and while the catch is different, the daily routine of the islanders remains the same.⁶⁰

Until the 1990s, it was common for the young men of the island to leave the education system before finishing high school and become watermen, but making a living using traditional trapping practices has

their voting rights, USA TODAY (Oct. 16, 2020), <https://www.msn.com/en-us/news/us/we-re-being-silenced-smith-island-residents-say-maryland-took-away-their-voting-rights/ar-BB1a5xi8>.

52. Andrew Zaleski, *Smith Island Is Sinking Into the Chesapeake Bay Thanks to Climate Change*, NEWSWEEK (Nov. 11, 2015), <https://www.newsweek.com/smith-island-sinking-chesapeake-bay-thanks-climate-change-389131>.

53. Duke Marshall, *Smith Island far from closing door, moving on*, DELMARVA NOW., <https://www.delmarvanow.com/story/opinion/readers/2015/06/01/smith-island/28313299/> (last visited March 16, 2022).

54. Steven A. Eades & Pauli Zmolek Eades, *supra* note 32..

55. Duke Marshall, *supra* note 53.

56. *Smith Island: Maryland's Disappearing Island*, LOVICARIOUS (Oct. 1, 2019), <https://www.lovicarious.com/smith-island-maryland/>.

57. Rob Kunzig, *Maryland's Smith Island, Home to a Vanishing Dialect and Rising Sea Levels*, ATLAS OBSCURA (June 8, 2017), <https://www.atlasobscura.com/articles/smith-island>.

58. *Smith Island: Maryland's Disappearing Island*, LOVICARIOUS (Oct. 1, 2019), <https://www.lovicarious.com/smith-island-maryland/>.

59. *Id.*

60. *Id.*

become less feasible in the last three decades due to pollution.⁶¹ Sherri Marsh Johns, executive director of the Smith Island Cultural Center has noticed the impact this has had on the community: “The pattern seems to be that our young people stay until they have children—then economics force them to move for better jobs.”⁶² This is reflected by population statistics – the average age of Island residents in 2000 was 50 years old.⁶³ Most are retired watermen who have watched their children and grandchildren move to the mainland to find better-paying work.⁶⁴ In 1965 when oysters and crabs thrived in the Bay, the Island’s population was about 850; today it is less than a quarter of that.⁶⁵ However, its rapidly decreasing population is not the biggest threat to the Smith Island community.

B. Effects of Sea Level Rise

“In the worst-case scenarios, Smith Island could be gone in, let’s say by 2025, 2030 or so,” said Raghu Murtugudde, Professor at the University of Maryland’s Earth System Science Interdisciplinary Center.⁶⁶ “In the best-case scenario, if we slow everything down, if we took a lot of mitigating actions for reducing global warming, then it could go for another 50 years.”⁶⁷

According to a U.S. Army Corps of Engineers report, the island has lost almost 3,300 acres of wetlands in the last 150 years alone.⁶⁸ Maryland’s geology and the current of the Atlantic Ocean have

61. Chip Reid, *Crabs, Oysters disappearing on Maryland’s shrinking island*, CBS NEWS (June 27, 2013),

<https://www.cbsnews.com/news/crabs-oysters-disappearing-on-marylands-shrinking-island/>.

Andrew Zaleski, *Smith Island Is Sinking Into the Chesapeake Bay Thanks to Climate Change*, NEWSWEEK (Nov. 11, 2015), <https://www.newsweek.com/smith-island-sinking-chesapeake-bay-thanks-climate-change-389131>.

62. Andrew Zaleski, *Smith Island Is Sinking Into the Chesapeake Bay Thanks to Climate Change*, NEWSWEEK (Nov. 11, 2015), <https://www.newsweek.com/smith-island-sinking-chesapeake-bay-thanks-climate-change-389131>.

63. Ben Giles, *Scientists Warn of Smith Island’s Demise, Residents Are Skeptical*, THE BAYBEAT (April 20, 2010), <https://chesapeakebay.umd.edu/article/scientists-warn-smith-islands-demise-residents-are-skeptical/>.

64. *Id.*

65. Chip Reid, *Crabs, Oysters disappearing on Maryland’s shrinking island*, CBS NEWS (June 27, 2013),

<https://www.cbsnews.com/news/crabs-oysters-disappearing-on-marylands-shrinking-island/>.

66. Ben Giles, *Scientists Warn of Smith Island’s Demise, Residents Are Skeptical*, THE BAYBEAT (April 20, 2010), <https://chesapeakebay.umd.edu/article/scientists-warn-smith-islands-demise-residents-are-skeptical/>.

67. *Id.*

68. *Id.*

resulted in sea levels in the Chesapeake Bay rising twice as fast as the global average (about 3 mm per year), which could result in an increase by as much as two feet within 35 years, and possibly up to five feet by 2100.⁶⁹ Simultaneously, the land in the Chesapeake Bay region is sinking due to an occurrence known as post-glacial subsidence, caused by the land finally settling after thousands of years of continental shifting.⁷⁰ Together, the subsidence and sea level rise have increased the size and power of the waves and storm surges that erode the Island's shores and damage its vegetation and natural barriers.⁷¹ Currently, the banks of Smith Island are eroding at a rate of 2 feet per year on average,⁷² with this number reaching 8 to 12 feet per year in some spots.⁷³ A 2008 report predicted that even if this were not the case, by 2100 the island will be "almost completely under water."⁷⁴

Already, the effects of sea level rise are impacting daily life on the Island. At high tide, the elevation of Smith Island Road, the island's main road connecting Ewell and Rhode's Point, is zero feet above sea level.⁷⁵ In the morning the 2 mile stretch of road can be traveled easily, but by the midafternoon high tide it is almost always flooded.⁷⁶ The channels that separate the islands, that the locals refer to as "ditches" or "guts," have become large enough to sail a boat through.⁷⁷ The tide

69. Ron Cassie, *The Sea Also Rises*, BALT. (Jan. 2015), <https://www.baltimoremagazine.com/section/sciencetechnology/the-sea-also-rises/>.

70. Ben Giles, *Scientists Warn of Smith Island's Demise, Residents Are Skeptical*, THE BAYBEAT (April 20, 2010), <https://chesapeakebay.umd.edu/article/scientists-warn-smith-islands-demise-residents-are-skeptical/>.

71. *Id.*

72. Andrew Zaleski, *Smith Island Is Sinking Into the Chesapeake Bay Thanks to Climate Change*, NEWSWEEK (Nov. 11, 2015), <https://www.newsweek.com/smith-island-sinking-chesapeake-bay-thanks-climate-change-389131>.

73. *Smith Island Environmental Restoration*, U.S. ARMY CORPS OF ENG'RS- BALT. DIST. (Feb. 1, 2015), https://www.nab.usace.army.mil/portals/63/docs/FactSheets/FY15_Factsheets/MD-SmithIsEnvironRestorationSomersetCounty-CG.pdf.

74. Andrew Zaleski, *Smith Island Is Sinking Into the Chesapeake Bay Thanks to Climate Change*, NEWSWEEK (Nov. 11, 2015), <https://www.newsweek.com/smith-island-sinking-chesapeake-bay-thanks-climate-change-389131>.

75. Carlin Stiehl, *Maryland's watermen navigate challenges old and new during the COVID-19 pandemic*, CHESAPEAKE BAY PROGRAM (August 13, 2020), https://www.chesapeakebay.net/news/blog/marylands_watermen_navigate_challenges_old_during_covid.

76. *Smith Island: Maryland's Disappearing Island*, LOVICARIOUS (Oct. 1, 2019), <https://www.lovicarious.com/smith-island-maryland/>.

77. Ben Giles, *Scientists Warn of Smith Island's Demise, Residents Are Skeptical*, THE BAYBEAT (April 20, 2010), <https://chesapeakebay.umd.edu/article/scientists-warn-smith-islands-demise-residents-are-skeptical/>.

is even beginning to make its way to the “safest” of the buildings on the island, with the schoolhouse being flooded twice in the past decade.

78

C. Current Actions Being Taken to Protect the Island from the Effects of Sea Level Rise

When Hurricane Sandy tore through the Chesapeake in 2012, Maryland’s Department of Housing and Community Development thought one of the best uses for the \$8.6 million of federal storm recovery aid they had received was to offer to buy Smith Island properties to allow the residents to move to the mainland and “out of harm’s way.”⁷⁹ This amount was earmarked to repair the 927 homes in Somerset county that were damaged by the hurricane, of which nine were on the Island.⁸⁰ This funding came with federal guidelines specifically dictating it should not be used to repair places likely to flood again.⁸¹

The buyout offer was poorly received by the Island residents who are used to weathering storms, and only a handful of whom had actually had property damaged as a direct result of Sandy.⁸² Perhaps more upsetting to its residents than the offer itself, was the idea that it symbolized the state “giving up” on their community.⁸³ When asked about the offer, John Tyler, a lifelong waterman and resident of Smith Island, said “[i]t could help my pocketbook, but it’s not going to help my peace of mind, I love Smith Island. You can’t put a dollar value on what it means to me.”⁸⁴

However, this anger represented an underlying fear that not everyone would feel this way. Tyler and similarly minded islanders feared that so many people would take the offer that it would no longer be tenable to live on the Island, as the few stores and services they had would shut down.⁸⁵ Some felt so strongly they organized a campaign against the buyout by making a website and social media profiles and

78. *Id.*

79. Timothy B. Wheeler, *Smith Islanders debate buyout offered by state*, THE BALTIMORE SUN (May 12, 2013), https://www.baltimoresun.com/news/environment/bs-gr-smith-island-buyout-20130512-story.html?int=lat_digitaladshouse_bx-modal_acquisition-subscriber_ngux_display-ad-interstitial_bx-bonus-story.

80. *Id.*

81. *Id.*

82. *Id.*

83. *Id.*

84. *Id.*

85. *Id.*

writing letters to state and local representatives.⁸⁶ They felt the money could be best used in a project that would protect Rhodes Point, as the narrow island to Smith's west that previously protected it was rapidly eroding away.⁸⁷ After all, they could see the positive effects of man-made defenses already built on the Island's shore: a jetty protects the western edge of Ewell, while a riprap and bulkhead blocks Tylerton from the waves.⁸⁸

State and County officials tried to clarify they did not mean to depopulate the island, only to offer a hand to those who may want to live closer to services that were not available on the Island, such as doctors and drugstores.⁸⁹ John R. Griffins, the state natural resources secretary at the time, blamed the backlash on a "miscommunication."⁹⁰ A minority of islanders approved of the program's basic theory, believing it would help their elderly neighbors who wanted to be closer to health services but could not sell their homes.⁹¹ But, even without the more personal aspects of the decision to move, the buyout program did not appeal to the islanders on a fiscal level. Jerry Smith's home in Rhodes Point was damaged more than any other on the island by Sandy.⁹² However, the state only assessed his home at \$47,000, so even if it purchased the home outright he would be unable to afford a home on the mainland.⁹³

Taken together, it was no surprise the buyout program was dropped from the recovery plan before it ever went into effect. By May 30, 2013, the money allocated to the buyout was cut in half from its original \$2 million, with the other \$1 million being shifted to housing rehabilitation.⁹⁴ This was part of an effort to recognize the differing views of the islanders, but only a week later, property buyouts were

86. *Id.*

87. Andrew Zaleski, *Smith Island Is Sinking Into the Chesapeake Bay Thanks to Climate Change*, NEWSWEEK (Nov. 11, 2015), <https://www.newsweek.com/smith-island-sinking-chesapeake-bay-thanks-climate-change-389131>.

88. *Id.*

89. Timothy B. Wheeler, *Smith Islanders Debate Buyout Offered by State*, THE BALTIMORE SUN (May 12, 2013), https://www.baltimoresun.com/news/environment/bs-gr-smith-island-buyout-20130512-story.html?int=lat_digitaladshouse_bx-modal_acquisition-subscriber_ngux_display-ad-Interstitial_bx-bonus-story.

90. *Id.*

91. *Id.*

92. *Id.*

93. *Id.*

94. Marissa Nash, *Sandy recovery plan includes Smith Island buyouts*, WBALTV11 (Mary 30, 2013), <https://www.wbalTV.com/article/sandy-recovery-plan-includes-smith-island-buyouts/7080783>.

removed entirely from the state's Hurricane Sandy recovery plan as a direct result of the continued public opposition.⁹⁵

Despite never being implemented, the perceived threat of the buyout program caused the islanders to rally and organize into a de facto government called Smith Island United.⁹⁶ On the "Who We Are" portion of their self-managed website, they say "We have a strong belief in our faith, our family, and our community," and that it is their "responsibility to ensure that this island, its people, and its culture are around 400 years from now."⁹⁷ Smith Island United is led by a nine-member Executive Committee, comprised of two full-time and one part-time residents from each of the island's three communities.⁹⁸ Smith Island United has been incredibly successful in advocating for federal and state actions that protect the Island's shoreline.

In 2015 Somerset County launched the Smith Island Community Vision Process in partnership with Smith Island United. Over nine months, the Vision Process surveyed the community and held community meetings that allowed them to identify the residents' greatest priorities.⁹⁹ Upon completing this process, they had five goals:

Goal #1: Sustain and grow the watermen's livelihood as the foundation of the economy, tourism, and a traditional way of life.

Goal #2: Build a more diverse local economy for Smith Island that leverages the island's tourism potential.

Goal #3: Develop and maintain infrastructure that is resilient, supports the local economy, and increases the quality of life.

Goal #4: Develop and maintain a reliable and sustainable transportation system that meets the needs of residents and increases tourist opportunities.

Goal #5: Grow the population of Smith Island's villages with a focus on year-round residents.¹⁰⁰

In the years following the Community Vision Process, Smith Island has doggedly pursued these goals. Smith Island United opened

95. The Associated Press, *Smith Island Buyouts Removed From Recovery Plan*, CBS BALTIMORE (June 7, 2013), <https://baltimore.cbslocal.com/2013/06/07/smith-island-buyouts-removed-from-recovery-plan/>.

96. Ron Cassie, *The Sea Also Rises*, BALTIMORE (Jan. 2015), <https://www.baltimoremagazine.com/section/sciencetechnology/the-sea-also-rises/>.

97. *Who We Are*, SMITH ISLAND UNITED, <https://www.smithislandunited.com/> (last visited Apr. 29, 2022).

98. *Id.*

99. Consensus Building Institute, *Smith Island Vision Plan*, CBI.ORG (Sept. 18, 2015), <https://www.cbi.org/news/smith-island-vision-plan/>.

100. Smith Island Community Vision Steering Committee, *Smith Island Vision Plan*, SMITH ISLAND UNITED (Aug. 2015), [https://www.smithislandunited.com/files/Doc%20-%20SIU%20-%20Vision%20Plan%20\(compressed\).pdf](https://www.smithislandunited.com/files/Doc%20-%20SIU%20-%20Vision%20Plan%20(compressed).pdf).

discussions about the feasibility of another daily ferry with the Maryland Transit Authority, obtained funds for increased tourism signage, and coordinated funding for a new apprenticeship program to recruit aspiring watermen and train them beneath Smith Island veterans.¹⁰¹ In 2016, Smith Island became a registered “sustainable community,” making it eligible for additional grants through a state economic development program.¹⁰² Perhaps due to all the media attention revolving around the proposed buyout, there was an explosion of approved funding for physical adaptations in the years following.

In February 2015, the U.S. Army Corps of Engineers began construction of the Smith Island Environmental Restoration Project in partnership with the State of Maryland’s Department of Natural Resources, getting approval for the project under the Water Resources Development Act (WRDA) of 2007.¹⁰³ The plans and specifications for the project were finished in July 2003 but had never been executed due to the lack of a non-federal sponsor for the cost sharing agreement.¹⁰⁴ The project called for the construction of a series of stone offshore segmented breakwaters along the Martin Wildlife Refuge, which would slow erosion and protect the area’s soft crab habitat.¹⁰⁵ The law governing the U.S. Army Corps of Engineers at this time required projects of this type to have a non-federal sponsor which would provide between 25 and 50 percent of the project’s total funding.¹⁰⁶ All in all, the project cost about \$19,280,000, with the federal government

101. Kristen Peterson, *Saving Smith Island: A Vision Plan to Save the Future*, MARYLAND DEPARTMENT OF NATURAL RESOURCES (March 20, 2016), <https://news.maryland.gov/dnr/2016/03/20/saving-smith-island/>.

102. Scott Dance, *At Smith Island, a chance to shore up the future*, THE BALTIMORE SUN (July 8, 2017), <https://www.baltimoresun.com/maryland/bs-md-smith-island-jetty-20170707-story.html>.

103. U.S. Army Corps of Engineers- Baltimore District, *Smith Island Environmental Restoration*, U.S. ARMY CORPS OF ENGINEERS (Feb. 1, 2015), https://www.nab.usace.army.mil/portals/63/docs/FactSheets/FY15_Factsheets/MD-SmithIsEnvironRestorationSomersetCounty-CG.pdf.

104. *Id.*

105. Kristen Peterson, *Saving Smith Island: A Vision Plan to Save the Future*, MARYLAND DEPARTMENT OF NATURAL RESOURCES (March 20, 2016), <https://news.maryland.gov/dnr/2016/03/20/saving-smith-island/>.

106. See Office of the Assistant Secretary Civil Works, *Memorandum for the Director of Civil Works: Implementation Guidance for Section 2008 of the Water Resources Development Act of 2007 - Revision of Project Partnership Agreement; Cost Sharing, Section 2008 (c)*, DEPARTMENT OF THE ARMY (May 18, 2011) (“Absent a specific provision of law directing different cost sharing percentages, cost sharing of water resources development projects is governed by sections 101, 102, and 103 of WADA 1986, as amended.”); see also Water Resources Development Act of 1986, Sec. 103, Pub. L. No. 99-662 (1986).

covering \$12,532,000 and the state government providing the remaining \$6,748,000.¹⁰⁷ Today, the breakwaters protect roughly 216 acres of wetlands and 504 acres of submerged aquatic vegetation, and have created 24 acres of new wetland and 1,440 acres of new submerged aquatic vegetation.¹⁰⁸ This set the precedent for Somerset County to funnel \$4.5 million into a similar “living shoreline” project preserving the Hog Neck barrier in 2016.¹⁰⁹

In September 2017, the U.S. Army Corps of Engineers awarded a contract for \$6.88 million to a company tasked with the construction of two jetties that would protect Rhodes Point.¹¹⁰ The federal navigation channel in Sheep Pen Gut would be realigned through dredging, and the jetties would prevent shoaling (the accumulation of sediment in a river channel that presents a potential danger to passing ships).¹¹¹ An additional 850 feet of stone sills along the shoreline would prevent future erosion and contain the dredged material needed for the project.¹¹² While the primary purpose of the project was improved navigation of the Chesapeake Bay, the project greatly benefited Smith Island’s wetlands.¹¹³ Native vegetation was planted on the dredged material behind the sill with the goal of creating an additional 5 acres of wetland, and the existing wetlands south of the channel finally had protection from the tides of the Atlantic.¹¹⁴ The Maryland Department of Natural Resources and Somerset County contributed about ten percent of the total cost of the project,¹¹⁵ with Somerset County’s contribution coming from the remainders of the Department of Housing and Urban Development Community Development Block Grant that it received in the wake of Hurricane Sandy.¹¹⁶ The project

107. *Id.*

108. U.S. Army Corps of Engineers – Baltimore District, *Smith Island Environmental Restoration*, U.S. ARMY CORPS OF ENGINEERS (Feb. 1, 2015), https://www.nab.usace.army.mil/portals/63/docs/FactSheets/FY15_Factsheets/MD-SmithIsEnvironRestorationSomersetCounty-CG.pdf.

109. Scott Dance, *At Smith Island, a chance to shore up the future*, THE BALTIMORE SUN (July 8, 2017), <https://www.baltimoresun.com/maryland/bs-md-smith-island-jetty-20170707-story.html>.

110. Sarah Gross, *Corps of Engineers awards contract for navigation project at Rhodes Point on Smith Island*, US ARMY CORP OF ENGINEERS (Oct. 2, 2017), <https://www.nab.usace.army.mil/Media/News-Releases/Article/1339687/corps-of-engineers-awards-contract-for-navigation-project-at-rhodes-point-on-sm/>.

111. *Id.*

112. *Id.*

113. *Id.*

114. *Id.*

115. *Id.*

116. Sarah Lazo, *Officials mark completion of jetties on historic Smith Island during*

was officially completed on June 21, 2018.¹¹⁷

It is an undisputable fact that Smith Island is on the cutting edge of sea level rise defense and accommodation. Unfortunately, despite these efforts they will soon also be on the cutting edge of the third course of action for a community faced with an encroaching water line: retreat.¹¹⁸ Even if widespread measures to combat climate change and prevent sea level rise were immediately taken around the world, it would make no difference to Smith Island. According to Donald Boesch, former President of the University of Maryland Center for Environmental Science and technical chair of a 2013 Maryland Climate Change Commission, “so much climate change and sea-level rise is ‘baked into the cake’ at this point . . . any action taken in the next 40 years likely won’t make any major impact in Maryland until the next century.” As Mike Tidwell, The Climate Group’s Executive Director, points out, “[n]o matter how much money the Army Corps spends on Smith Island, unchecked climate change will bring 3 feet or more of sea-level rise this century, it will overwhelm any barriers or other flood control measures the Corps can construct.”¹¹⁹

The phrase “managed retreat” refers to a plan in which defensive measures and accommodations are implemented to allow for a community’s gradual relocation to another location, and Smith Island is an ideal candidate for this process.¹²⁰ If the problems faced by their community were a solitary occurrence, then perhaps a loophole in a current program would be sufficient to facilitate their relocation. However, that is simply not the case.

A study by the University of Georgia determined that a sea level rise of approximately 35 inches by 2100 would displace 4.2 million Americans living in the continental United States.¹²¹ If this number seems shockingly high, it is because the populations within these

ceremony, U.S. ARMY CORPS OF ENGINEERS (June 21, 2018), <https://www.nab.usace.army.mil/Media/News-Releases/Article/1555862/officials-mark-completion-of-jetties-on-historic-smith-island-during-ceremony/>.

117. *Id.*

118. Ron Cassie, *The Sea Also Rises*, BALTIMORE (Jan. 2015), <https://www.baltimoremagazine.com/section/sciencetechnology/the-sea-also-rises/>.

119. Scott Dance, *At Smith Island, a chance to shore up the future*, THE BALTIMORE SUN (July 8, 2017), <https://www.baltimoresun.com/maryland/bs-md-smith-island-jetty-20170707-story.html>.

120. Ron Cassie, *The Sea Also Rises*, BALTIMORE (Jan. 2015), <https://www.baltimoremagazine.com/section/sciencetechnology/the-sea-also-rises/>.

121. Mathew E. Hauer, Jason M. Evans & Deepak R. Mishra, *Millions Projected to be at Risk From Sea-Level Rise in the Continental United States*, 6 NATURE CLIMATE CHANGE 691, 691 (2016).

vulnerable areas will, unrestricted, grow to about double their 2010 size by 2100.¹²² This strongly suggests that any mitigation or adaptation plans which have been budgeted out based on current populations severely underestimate the cost of the impending sea level rise.¹²³

One thing that will remain the same despite the much larger affected population, is the regionalized and localized nature of sea level rise's impact. The southeastern United States alone represents just under 70 percent of the entire projected populations at risk of inundation.¹²⁴ Of these states, almost half of the at-risk populations are in Florida, with Georgia, South Carolina, and Louisiana each representing over 10 percent of the coastal populations at risk.¹²⁵ On a local level, the medium percentage of the population subject to sea level rise risk across the United States' 319 coastal counties falls at only 3.5 percent, and this is under an extreme scenario of 1.8 meters of rise (approximately six feet or 71 inches).¹²⁶ However, there are several low-lying counties who represent very concerning outliers. For example, Tyrrell County in North Carolina, Monroe County in Florida, and Hyde County in North Carolina could see devastating impacts. Under the same 71 inches of rise, 94 percent, 88 percent and 82 percent of their respective projected population would be located on land at risk of inundation.¹²⁷

Therefore, Smith Island provides a unique opportunity to model a new buyout and relocation system informed by the practical issues climate displaced Americans face before their struggles become a national crisis for which we are unprepared.

II. CURRENT AND PAST BUYOUT PROGRAMS AND THEIR UNSUITABILITY FOR WIDESCALE RELOCATION

In the United States, government-sponsored retreat has already begun on a very small scale through voluntary buyouts of flood-prone properties overseen by the Federal Emergency Management Agency

122. *Id.*

123. *Id.*

124. *Id.* at 692.

125. *Id.*

126. *Id.*

127. *Id.*

(FEMA).¹²⁸ FEMA currently has two grant programs that assist with government purchases of damaged properties post-disaster: the Hazard Mitigation Grant Program (HMGP) and the Flood Mitigation Assistance (FMA) program.

The HMGP is by far the largest of FEMA's buyout programs, responsible for over eighty percent of FEMA's buyouts. The HMGP purchases flood prone structures and demolishes them, leaving the land they were on to be maintained as open space with the goal of minimizing future disaster-related expenses.¹²⁹ The program is funded by allocations in aid packages made in response to a state application after a major disaster under the Robert T. Stafford Disaster Relief and Emergency Assistance Act (The Stafford Act).¹³⁰ Individuals wishing to participate in the buyout apply to their local government, which conducts the necessary cost benefit analyses and title searches to determine applicants' eligibility.¹³¹ To qualify for this funding, each purchase must be cost-effective, with overall benefits outweighing the cost to the government of the acquisition.¹³² Despite this, FEMA is limited in that it can only provide communities with up to 75 percent of the cost of any given project, so the remainder must come from state or local sources.¹³³ Even more restrictive, only 15 percent of the total funding provided by FEMA in the wake of a disaster can be put towards hazard mitigation.¹³⁴

FEMA also administers the much smaller FMA, which provides funding to "reduce or eliminate the risk of repetitive flood damage to buildings insured by the National Flood Insurance Program."¹³⁵ The FMA covers many different types of flood mitigation, buyouts among them, and has received significantly less funding than the HMGP since it was created in 1994.¹³⁶

Historically, FEMA's proactive purchases have accounted for

128. Travis Brandon, *Sea Level Rise Planning For Socially Vulnerable Communities: A More Equitable Approach to Federal Buyout Programs*, 97 U. DET. MERCY L. REV. 435, 437 (2020) [hereinafter *Planning For Socially Vulnerable Communities*].

129. *Id.* at 439.

130. *Id.*

131. *Id.*

132. *Id.* at 440.

133. 42 U.S.C. § 5170c (2018).

134. *Planning For Socially Vulnerable Communities supra* note 128, at 440.

135. FEDERAL EMERGENCY MANAGEMENT AGENCY, FLOOD MITIGATION ASSISTANCE (FMA) GRANT (Dec. 13, 2021), <https://www.fema.gov/grants/mitigation/floods>.

136. *Planning For Socially Vulnerable Communities supra* note 129, at 441.

only a sliver of their buyouts.¹³⁷ These proactive steps were primarily funded by the Pre-Disaster Mitigation Grant (PDMG) program which allows the President to give “technical and financial assistance to States and local governments to assist in the implementation of predisaster hazard mitigation measures that are cost-effective[.]”¹³⁸ The program aimed to “reduce overall risk to the population . . . while also reducing reliance on federal funding to respond to future disasters.”¹³⁹ Despite its goals, funding for this program was limited, and property acquisition only received a portion of that limited funding.¹⁴⁰ The program ended as a result of amendments made by the Disaster Relief and Recovery Act of 2018.¹⁴¹

Filling in the funding gaps left by these programs has been the Department of Housing and Urban Development’s (HUD’s) Community Development Block Grant Disaster Recovery Program (CDBG-DR).¹⁴² Congress provides annual funding to the CDBG-DR, which HUD disburses to states with disaster affected areas that have “unmet recovery needs.”¹⁴³ These funds are specifically designed to supplement FEMA or other federal funds, and may serve as the state and local funding required by FEMA.¹⁴⁴ In order to receive one of the available grants, states must submit a disaster-recovery action plan to HUD for review and approval.¹⁴⁵ While at least 70 percent of CDBG funds must benefit low and moderate income residents, the grants do not have the same general requirements that FEMA funding does.¹⁴⁶ Unfortunately, congressional funding of the program varies widely from year to year, dropping from \$28 billion in 2018 to \$1.6 billion in 2019.¹⁴⁷

The buyout proposed to Smith Islanders was funded through a combination of HMGP disaster relief and a CBDG grant.¹⁴⁸ Their

137. *Id.*

138. *Id.* at 440.

139. *Id.*

140. *Id.*

141. PRE-DISASTER MITIGATION (PDM) GRANT, FEDERAL EMERGENCY MANAGEMENT AGENCY, (April 27, 2021), <https://www.fema.gov/grants/mitigation/pre-disaster>.

142. *Id.* at 442.

143. *Id.*

144. *Id.*

145. *Id.*

146. *Id.*

147. *Id.*

148. Press Release, Ben Cardin, U.S. Senator for Maryland, Cardin Says All Available Resources Should Support Maryland Victims Of Hurricane Sandy, (Dec. 5, 2012).

reaction made clear why these programs, which were not designed for buyouts, much less buyouts used to enable community relocation, are unsuitable for such a purpose. The offer made to the residents of Smith Island did not address the two main concerns of the residents in the wake of such an extreme event: maintaining their culture and being able to financially support themselves. If any of the residents had accepted the buyout, they would have been selling their homes for an amount that would have never allowed them to purchase a similar home on the mainland, moving away from the environment that provided them with their livelihood, and leaving behind their strong community.¹⁴⁹

The current programs may work well in situations where it would be beneficial for a few households to move from a lower elevation to a nearby spot at a slightly higher elevation, but they are woefully unsuited to address the relocation needs of entire communities. An entirely different framework will be needed to address the many community relocations in the country's future. While a buyout-based system may not be able to preserve culture and social networks in the same way as a traditional community location (where a government agency works with the community to purchase a new location for their home, and then builds the necessary housing and infrastructure), buyout-based systems may be the most achievable at the moment. Despite the politicized nature of climate change, buyout programs have traditionally received bipartisan support due to their cost saving results.¹⁵⁰ FEMA has estimated every dollar spent on hazard mitigation programs results in six dollars of avoided losses, largely because purchasing of repeatedly flooded houses prevents future NFIP payouts while simultaneously avoiding the backlash of taking the properties through eminent domain.¹⁵¹

Further, quick implementation is important, as time is of the essence both fiscally and culturally. From a fiscal perspective, the more time passes and the larger the population of these areas gets, the more expensive it will be to buy them out or facilitate a traditional relocation.

149. See Timothy B. Wheeler, *Smith Islanders debate buyout offered by state*, THE BALTIMORE SUN (May 12, 2013), https://www.baltimoresun.com/news/environment/bs-gr-smith-island-buyout-20130512-story.html?int=lat_digitaladshouse_bx-modal_acquisition-subscriber_ngux_display-ad-interstitial_bx-bonus-story; *Smith Island: Maryland's Disappearing Island*, LOVICARIOUS (Oct. 1, 2019), <https://www.lovicarious.com/smith-island-maryland/>; Smith Island United, *Who We Are*, SMITHISLANDUNITED.COM (2021), <https://www.smithislandunited.com/>.

150. *Planning For Socially Vulnerable Communities supra* note 128, at 443.

151. *Id.*

Even if the population of these communities somehow miraculously stayed the same, each passing year would increase their exposure to the damage and danger of sea level rise and their vulnerability to the economic costs of this inaction.¹⁵² Expensive projects will be undertaken to try to slow the creeping sea, as seen on Smith Island, only to be abandoned in the end. Perhaps of even more importance are the social and cultural costs of this delay. The closer to the point of complete uninhabitability a community's relocation is pushed, the less time there is for populations to prepare. They will be deprived of the time needed to come to terms with the decision to leave their home. In the interim, this home will be battered by increased storms and flooding, and items and locations of personal and cultural significance risk destruction that can be avoided by relocating them with the community. Therefore, a more socially aware and generous buyout program seems to be the clear answer to America's impending resettlement crisis.

III. THE BUILDING RESILIENT INFRASTRUCTURE AND COMMUNITIES GRANT PROGRAM

Perhaps in recognition of this, Congress passed the Disaster Recovery Reform Act in 2018, replacing the PDMG with the Building Resilient Infrastructure and Communities (BRIC) program.¹⁵³ This grant program seeks to “categorically shift the federal focus from reactive disaster spending toward research-supported, proactive investment in community resilience.” While a laudable step forward, the program does not explicitly discuss impacts of climate change or sea level rise, nor is it solely focused on buyout programs. Further, BRIC continues to fall vastly short of meeting the needs of the communities currently at risk. For the 2020 Financial Year, FEMA had \$700 million of funding, yet received 1,227 subapplications requesting an estimated \$4 billion of funding from the BRIC and FMA grant programs.¹⁵⁴ The program officially opened for application on September 30, 2020, and while FEMA announced the recipients of grants in July 2021, these communities did not begin to receive grant

152. Mathew E. Hauer, Jason M. Evans & Deepak R. Mishra, *Millions projected to be at risk from sea-level rise in the continental United States*, 6 NATURE CLIMATE CHANGE 691, 691 (2016).

153. CONG. RSCH. SERV., THE DISASTER RECOVERY REFORM ACT OF 2018 (DRRA): A SUMMARY OF SELECTED STATUTORY PROVISIONS R45819 (2019).

154. FED. EMERGENCY MGMT. AGENCY, BUILDING RESILIENT INFRASTRUCTURE AND COMMUNITIES FY 2020 SUBAPPLICATION STATUS (Dec. 13, 2021), <https://www.fema.gov/grants/mitigation/building-resilient-infrastructure-communities/after-apply/fy-2020-subapplication-status>.

money until December 2021.¹⁵⁵ Of the \$700 million in funding that will be distributed, only \$21.9 million will be put towards relocation efforts.¹⁵⁶ As with other FEMA programs, BRIC requires a cost sharing arrangement. Generally, BRIC requires 25 percent of the funding for any project to come from another source, with only 10 percent required when funding projects in “economically disadvantaged rural communities.”¹⁵⁷ These are communities of fewer than 3,000 residents having an average per capita income of less than 80 percent of the national per capita income.¹⁵⁸

Therefore, while BRIC is a more forward-thinking approach, it is not currently designed to manage community-wide buyouts on a large scale. However, the statutory language creating BRIC is incredibly broad and subject to interpretation. The Disaster Recovery Reform Act in 2018 replaced PDMG with BRIC not by specifically instructing FEMA to do so, but simply by amending the relevant section of the Stafford Act to create a new fund with new requirements.¹⁵⁹ The Amendment’s relevant changes were the adjusting of Section 203 governing Predisaster Hazard Mitigation that “If the President determines that a State or local government has identified natural disaster hazards in areas under its jurisdiction and has demonstrated the ability to form effective public-private natural disaster hazard mitigation partnerships, the President, using amounts in the National Predisaster Mitigation Fund established under subsection (i) of this section (referred to in this section as the “Fund”), may provide technical and financial assistance to the State or local government . . .” to read “. . . the President, using amounts in the National Public Infrastructure Predisaster Mitigation Fund established. . .”¹⁶⁰ Subsection (i) of the same section is then amended to reflect the differences between the two funds; primarily that the new fund allows the President to allocate money directly to it from the Disaster Relief fund, instead of requiring funding by Congressional appropriation.¹⁶¹ Therefore, BRIC could be adjusted with minimal political effort into a

155. *Id.*

156. *Id.*

157. *Id.*

158. *Id.*

159. H.R.302 - FAA Reauthorization Act of 2018, § 1234. Additional Mitigation Activities (2018).

160. *Id.*; 42 U.S.C. § 5133(c) (2018), 42 U.S.C. § 5133(c) (2013).

161. H.R.302 - FAA Reauthorization Act of 2018, § 1234. Additional Mitigation Activities (2018).

161. *Id.*; 42 U.S.C. § 5133(i) (2018), 42 U.S.C. § 5133(i) (2013).

trendsetting model for the resettlement of people internally displaced by climate change, one that truly addresses the needs of the communities utilizing it.

IV. RECOMMENDATIONS TO FACILITATE THE WIDESPREAD RELOCATION UNDER THE BUILDING RESILIENT INFRASTRUCTURE AND COMMUNITIES GRANT PROGRAM

By providing a list of their community goals, Smith Island residents have made clear what is most important to them, and therefore what would most entice them to relocate before Smith Island is in an even more dire state. BRIC, with minor changes, could provide a framework that would offer a buyout that effectively addresses their concerns, one that makes it financially feasible for them to relocate to a new home of comparable value, while also maintaining as much of their cultural and community ties as possible. The program can be made vastly more fiscally enticing by cutting out the price matching requirement, providing specific funding for resettlement, and adjusting the Benefit Cost Analysis used by FEMA to include quality of life factors. Culturally, BRIC could aid buyout participants in finding new homes as a community and funding the relocation of important pieces of cultural heritage.

A. Cutting out the Price Matching Requirement

The Price Matching Requirement on its surface appears to ensure there is state investment in the project the national government is funding, that it meets the needs of those in the community, and that it prevents wasting resources on projects that may be either unnecessary or unwanted. However, in practice, the requirement only provides an unneeded barrier for lower income communities or those without political capital. FEMA has acknowledged that the state applying for funding “[t]ypically requires those who would benefit from the mitigation project (homeowners, businesses, nonprofit organizations, or local communities) to provide the non-Federal cost share of the mitigation activity.”¹⁶² As an example of a typical cost sharing arrangement for one of their hazard mitigation assistance grants, FEMA identifies the needed 25 percent of “local funding” as being

162. FED. EMERGENCY MGMT. AGENCY, HAZARD MITIGATION ASSISTANCE COST SHARE GUIDE FOR APPLICANTS, SUBAPPLICANTS, AND FEMA (May 2016), https://www.fema.gov/sites/default/files/2020-08/fema_hma_cost-share-guide.pdf.

comprised of 20 percent National Flood Insurance Program payments, 1.7 percent private donations, and 3.3 percent payments made by the homeowner themselves.¹⁶³

When “local funding” in practice is homeowner and federal funding from other sources, this price sharing requirement runs counter to the very aims of Hazard Mitigation programs, especially to those of BRIC buyouts. The burden on homeowners makes them even less likely to participate in a buyout, and the rest of the funding comes from the same source, the federal government, but with more red tape and wasted time. A recent Natural Resources Defense Council (NRDC) study found that the median length of time for the completion of a buyout program following a flood disaster is 5.2 years.¹⁶⁴ Streamlining the sourcing of buyout funds would help reduce this wait, not only saving money through efficiency but also reducing the previously discussed financial costs of delay in the light of sea level rise. Therefore, eliminating this requirement and fully funding buyouts through BRIC would only result in a miniscule or no price increase to the federal government, and make the process much more accessible to homeowners and local governments.

B. Providing Specific Funding for Buyouts

As previously detailed, BRIC currently funds many types of resilience efforts, relocation being among the less common efforts. In fact, BRIC’s top project type by total cost in 2020 was simple flood control. Flood control programs received \$550 million in funding in fiscal year 2020, as compared to the \$21.9 million relocation programs received.¹⁶⁵ As seen in the interviews with residents of Smith Island, it makes sense that communities’ first attempt at resolving the issues they are facing would be traditional flood control methods such as sea walls and jetties. Unfortunately, as previously detailed, these precautions will only buy time. So, while basic flood control should still be recognized as important in allocating funding, it has to be acknowledged as a merely temporary solution until a buyout and relocation plan can be implemented. A substantial amount of BRIC funding must be earmarked for buyout and relocation purposes alone,

163. *Id.*

164. Ana Weber & Rob Moore, *Going Under: Long Wait Times for Post-Flood Buyouts Leave Homeowners Underwater*, THE NATURAL RES. DEF. COUNCIL (Sept. 2019), <https://www.nrdc.org/sites/default/files/going-under-post-flood-buyouts-report.pdf>.

165. FED. EMERGENCY MGMT. AGENCY, BUILDING RESILIENT INFRASTRUCTURE AND COMMUNITIES FY 2020 SUBAPPLICATION STATUS (Dec. 13, 2021).

to prevent endless resources being wasted on progressively more complex methods of flood control, that themselves will be lost to sea level rise eventually.

C. *Adjusted Benefit Cost Analysis*

The current Benefit Cost Analysis used by FEMA, at its core, evaluates the market value of the home in question and offers to purchase it from its owner for that amount if it falls under the amount they predict having to spend on emergency services in the future.¹⁶⁶ However, this grossly undervalues the worth that an individual's residency in their particular community has. The residents of Smith Island make clear that their biggest concern is the preservation of the watermen and their "traditional way of life," presumably because making their living through fishing is intertwined with their deeply held values of self-reliance, tradition, and faith.

If they are to maintain this way of life, it is vital that they be able to relocate to as similar of an environment as possible. To do so, they must be able to purchase homes farther north on the eastern seaboard in a location with convenient ocean access, if not on the waterfront. The recent economic decline of the waterman industry on the Island is due in no small part to the warming oceans pushing the Chesapeake's population of blue crabs further north.¹⁶⁷ Historically, blue crabs could be found from the Gulf of Mexico up through Cape Cod, Massachusetts.¹⁶⁸ However, between 2012 and 2014, scientists began to observe blue crabs in northern Maine and Nova Scotia.¹⁶⁹ They theorize that warmer ocean temperatures in 2012 and 2013, roughly 1.3 degrees Celsius higher than previous decades, have allowed the crabs to move north.¹⁷⁰ While it is unclear if this change is enough for the crabs to maintain standing populations so far from the equator as Canada, they are likely to flourish in the areas around New York City where water temperatures have experienced a significant increase in

166. FED. EMERGENCY MGMT. AGENCY, BCA REFERENCE GUIDE (June 2009), https://www.fema.gov/sites/default/files/2020-04/fema_bca_reference-guide.pdf.

167. Chip Reid, *Crabs, Oysters disappearing on Maryland's shrinking island*, CBS NEWS (June 27, 2013), <https://www.cbsnews.com/news/crabs-oysters-disappearing-on-marylands-shrinking-island/>.

168. David Samuel Johnson, *The Savory Swimmer Swims North: A Northern Range Extension of the Blue Crab *Callinectes Sapidus*?*, 35(1) J. OF CRUSTACEAN BIOLOGY 105, 105 (2015).

169. *Id.* at 107.

170. *Id.* at 105.

recent years.¹⁷¹

However, if Islanders are compensated for their homes with an amount limited by traditional cost benefit analysis, it will not be fiscally possible for them to purchase such properties. A different analysis is needed, one that recognizes the disparity between the value of their homes and the value of the livelihood and community their home enjoys. If a Smith Island Resident were to sell their home as part of a buyout, they should be able to purchase one with similar characteristics and advantages, not just a similar market price. If it cannot be arranged for the proceeds from the buyout to allow the homeowner to purchase a home with the same advantages, then these advantages must be compensated for.

For example, the majority of Smith Island residents are watermen, which fall under the federal labor category of fishermen, and fishermen make an average mean wage of \$33,310 annually.¹⁷² So, if a Smith Island waterman is not given the financial means to obtain housing in an area that would allow him to continue this manner of work, he should be compensated for his predicted wages through the end of his prematurely terminated career. However, this is less than preferable, as it does not begin to dissect the other non-qualitative things of value that members of these communities would be giving up by participating in the buyout. They will be leaving behind the shores they grew up on and the memories that the land that raised them holds. These are all factors that should be taken into account when considering the value of their homes.

Increased offers for the homes of those participating in buyouts that reflect these losses would be prevented by the statutory requirement that all measures be “cost-effective” if FEMA’s traditional cost benefit analysis system is used.¹⁷³ However, if FEMA moves forward evaluating properties for BRIC buyouts under a social welfare function-based benefit cost analysis system, these higher purchase prices would present no statutory problems. The social welfare function measures the distribution of well-being among the population and how any given policy will change this distribution.¹⁷⁴

171. Niina Heikkinen, *Blue Crabs Migrate North as Ocean Warms*, SCIENTIFIC AM., (March 31, 2015), <https://www.scientificamerican.com/article/blue-crabs-migrate-north-as-ocean-warms/>.

172. U.S. BUREAU OF LABOR STATISTICS, MAY 2020 NATIONAL OCCUPATIONAL EMPLOYMENT AND WAGE ESTIMATES (2021), https://www.bls.gov/oes/current/oes_nat.htm#45-0000.

173. 42 U.S.C. § 5133(e)(1)(A) (2018).

174. Matthew Adler, *Factoring Equity into Benefit-Cost Analysis*, THE REGULATORY REV. (April 26, 2021), <https://www.theregreview.org/2021/04/26/adler-factoring-equity-benefit-cost->

Many lists of the factors contributing to basic human welfare have been proposed, and all move beyond the consideration of life, health, and property as any individual's sole interest, including intangibles such as affiliation, play, and sensory input.¹⁷⁵ A better outcome for any given individual can be achieved by taking into account the entirety of their welfare, and not giving special priority to their physical safety alone.¹⁷⁶ An even more accurate analysis can be made when the population affected by a certain event is taken into account, as most welfare factors do not exist isolated and affecting only one individual.¹⁷⁷

While the social welfare function can be calculated in such a way as to be purely utilitarian, representative of the current Benefit Cost Analysis used by FEMA, it can also be used as a "prioritarian" system, which gives greater weight to well-being changes affecting the worst off.¹⁷⁸ This shift will place FEMA in a position to adjust their buyout offers to a price which includes all previously unaccounted for factors for the overall welfare of the country's population, while still meeting their positive benefit cost analysis requirements.

D. Assistance in Finding New Homes as a Community

Potentially the biggest barrier presented to a buyout of a small, insular community such as Smith Island is the community members' wish to stay together. While culture can, and often is preserved in a diaspora, it is generally less preferable than staying together. Ideally, residents would be able to organize themselves to move to the same new location. In order to best fit the community's needs this location should be approximately 8,000 acres and slightly further up the Eastern Seaboard than the Island is, somewhere between the southern edge of Delaware and New York City. These 8,000 acres would preferably be an uninterrupted block and at least partially along the shoreline. These are only the facially obvious wishes of a new location for the community; as with any effective solution, there are many factors that will only be identified by the community itself. However, coordinating the movement and wishes of this many people (even a group as small as the Smith Island Residents) is quite literally a full-time job. Luckily,

analysis/.

175. Matthew Adler, *Policy Analysis For Natural Hazards: Some Cautionary Lessons From Environmental Policy Analysis*, 56 DUKE L. J. 1, 11 (2006).

176. *Id.* at 13.

177. *Id.* at 25–26.

178. Matthew Adler, *Factoring Equity into Benefit-Cost Analysis*, THE REGULATORY REV. (April 26, 2021), <https://www.theregreview.org/2021/04/26/adler-factoring-equity-benefit-cost-analysis/>.

thousands of qualified individuals who would be perfectly suited for such a task graduate each year from Planning Accreditation Board accredited programs.¹⁷⁹ FEMA, which had a BRIC grant budget of \$78.3 Million for management costs in 2020, could easily employ a team of planners who could offer complimentary location scouting and negotiation services to communities identified for buyout potential by BRIC.¹⁸⁰ In the alternative, FEMA could connect the communities they are serving through BRIC with HUD funded organizations that provide community development services. Currently HUD's Capacity Building for Community Development and Affordable Housing program supplies funding for these services to the Local Initiatives Support Corporation, Enterprise Community Partners, Inc., and Habitat for Humanity International.¹⁸¹ This dialogue would greatly increase the agency of communities and their chosen leadership in the process and help rectify the perceived power dynamic of the federal government coming in to take their homes.

E. The Relocation of Pieces of Cultural Heritage

If the community chooses to relocate as a unit to a new location, it would also be fairly straightforward to work with community leaders to make sure important pieces of cultural heritage and of home follow. A community authority figure, such as a representative on the Smith Island Untied Council or local minister, may be in the perfect position to work with the FEMA planner to identify what is important to the community and make sure it is accounted for in the move. For example, the central placement of the Tylerton United Methodist Church in the new location, complete with the same furniture and ceremonial objects used by the Islanders' forebearers, may provide great comfort in the face of such a transition. While out of the realm of possibility for Smith Island, higher home purchase prices may allow other communities to pool a small percentage of each individual's buyout proceeds to pay for the relocation of culturally important buildings such as churches and community centers.

179. PLANNING DEGREES AND SCHOOLS, AM. PLANNING ASS'N (2021), <https://www.planning.org/choosingplanning/degrees/>.

180. FED. EMERGENCY MGMT. AGENCY, BUILDING RESILIENT INFRASTRUCTURE AND COMMUNITIES FY 2020 SUBAPPLICATION STATUS (Dec. 13, 2021) <https://www.fema.gov/grants/mitigation/building-resilient-infrastructure-communities/after-apply/fy-2020-subapplication-status>.

181. U.S. DEP'T. OF HOUSING AND URB. DEV., PROGRAMS OF HUD: MAJOR MORTG., GRANT, ASSISTANCE, AND REGULATORY PROGRAMS (2020).

V. CONCLUSION

Despite the herculean efforts of Smith Island United, the residents of Smith Island cannot stay in a place that will be permanently below the waterline in less than a century. Many more communities will follow. A buyout program encouraging community-wide retreat and relocation could be effective if it addresses all the community's self-identified goals. This can be done by removing the price matching requirement, providing specific funding for resettlement, shifting to a social welfare function-based benefit cost analysis, and facilitating the relocation of the community as a unit. Chris Cortina, the Department of Natural Resources planner that has served as a liaison between Smith Island and the state said it best, "[i]t is the community that will drive a path forward based on their culture, heritage, values and priorities."¹⁸²

182. Ben Giles, *Scientists Warn of Smith Island's Demise, Residents Are Skeptical*, THE BAYBEAT (April 20, 2010), <https://chesapeakebay.umd.edu/article/scientists-warn-smith-islands-demise-residents-are-skeptical/>.