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Paradise Lost?: A New Legal Theory to Combat Climate Change in South Carolina

Anna C. Parham

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**PARADISE LOST?: A NEW LEGAL THEORY TO COMBAT
CLIMATE CHANGE IN SOUTH CAROLINA**

Anna C. Parham*

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I. INTRODUCTION

Violet was an artist and small business owner in Charleston, South Carolina. She sold her artwork as well as locally made crafts in a store located on historic King Street in Downtown Charleston for five years. However, due to almost-daily tidal flooding, Violet was forced to close her store and abandon her dream because she simply could not afford to continue to pay the increasing cost of flood insurance or replace the thousands of dollars of

* J.D. Candidate, May 2021, University of South Carolina School of Law; B.A., University of South Carolina, *summa cum laude*, December 2017. Thank you to the University of South Carolina School of Law Associate Dean for Faculty Development and Professor Colin Miller for his extraordinary guidance and expertise in pursuing this paper. Thank you also to the entire team of the *South Carolina Law Review* for their excellent editorial work, and specifically to Kate Heil, my Student Works Editor, for her helpful feedback and kindness every step the way. Lastly, thank you to my loving and supportive parents for their steadfast encouragement in all of my endeavors.

inventory lost to flooding. Violet's story is not unique in the Lowcountry of South Carolina.¹

Gene was a fifth-generation farmer in Lake City, South Carolina. He grew corn, soy, and tobacco on land his family owned for over 100 years. However, due to rising temperatures and prolonged periods of both flooding and drought, Gene was forced to abandon his failing farm and turn to more profitable endeavors to keep food on the table for his family of five. He sold his family farm at a loss because the soil had become untenable and recent crop yields had proven unreliable due to climate change. Gene's story is not unique in the Midlands of South Carolina.²

Claire was a graphic designer living in the up-and-coming technological hub, Greenville, South Carolina. Her son, James, was getting ready to start kindergarten when he was diagnosed with severe asthma. James started school as planned, but within his first month of attending public school in the heart of Downtown Greenville, he was rushed to the hospital three times due to severe asthma attacks during recess. As James's asthma worsened, Claire had no choice but to abandon her lucrative career as a graphic designer and move James out of the city, away from the increased ground-level ozone concentration that exacerbates asthma in children. Claire's story is not unique in the Upstate of South Carolina.³

While the above stories are hypothetical, they come from an aggregation of hundreds of similar experiences of South Carolinians as the effects of climate change continuously alter their lives.⁴ South Carolina does not currently promise any environmental rights to its citizens, nor does it offer any substantial legal remedies for those citizens whose lives have been altered due to climate change.⁵

1. See U.S. ENVTL. PROT. AGENCY, 430-F-16-042, WHAT CLIMATE CHANGE MEANS FOR SOUTH CAROLINA (2016); see also Gregory Yee, *Charleston Continues to Face Significant Tidal Flooding Before Any Impact from Dorian*, POST & COURIER (Aug. 30, 2019), https://www.postandcourier.com/hurricanewire/charleston-continues-to-face-significant-tidal-flooding-before-any-impact/article_c527c6d8-cb53-11e9-a9e1-f770c393db44.html [https://perma.cc/ME67-UJDC].

2. Eva Moore, *What Climate Change Means for Columbia*, FREE TIMES (May 3, 2017), https://www.postandcourier.com/free-times/cover_story/what-climate-change-means-for-columbia/article_2bdc288-1465-5dfa-a67b-2ce37687353e.html [https://perma.cc/7Z4B-XAKM]; U.S. ENVTL. PROT. AGENCY, *supra* note 1.

3. Andrew Moore, *Floods, Heat Waves, and Air Pollution: New Report Details How the Upstate Will Be Impacted by Climate Change*, GREENVILLE J. (Dec. 5, 2018), <https://greenvillejournal.com/2018/12/05/122140/> [https://perma.cc/QQ7T-SNSC].

4. U.S. ENVTL. PROT. AGENCY, *supra* note 1.

5. See Audrey Wall, *State Constitutions and Environmental Bills of Rights*, COUNCIL OF ST. GOV'TS (Sept. 1, 2015), <https://knowledgecenter.csg.org/kc/content/state-constitutions-and-environmental-bills-rights> [https://perma.cc/R8XL-GDG7].

Multiple states⁶ have already passed legislation guaranteeing residents basic environmental rights such as the right to clean drinking water, the right to a healthy environment in which to live, and the right to freedom from unclean air.⁷ These states have recognized environmental rights as being on par with other political and civil liberties the U.S. Constitution guarantees.⁸ These environmental rights assurances concomitantly create a duty in the state governments to protect their citizens from the effects of climate change.⁹

Creating a duty in state governments through legislation is one hurdle, but ensuring that these governments actually carry out such duty is another hurdle in and of itself. Professor Chris Serkin of Vanderbilt University has offered a unique solution to this second, seemingly impossible hurdle of government inaction.¹⁰ Traditionally, only governmental actions that take property can trigger the Takings Clause.¹¹ Professor Serkin advocates for an inverse reading of the U.S. Constitution's Takings Clause that would essentially treat a government's failure to act in the face of an affirmative duty to act as a taking that the government must constitutionally compensate the landowner for in the eyes of the law.¹² In most states, including South Carolina, however, no such affirmative duty exists.¹³

This Note thus proposes the unique solution of marrying environmental rights amendments with Professor Serkin's Passive Takings theory. It argues that states like South Carolina that do not currently recognize environmental rights should pass environmental rights amendments. Then, citizens of states such as South Carolina can use these rights to protect themselves and their states from the growing threat of climate change.

Specifically, this Note identifies the effects of climate change in South Carolina and offers a potential legislative and legal remedy to South Carolinians who have felt the harsh effects of climate change firsthand. Part II of this Note will identify the ways in which climate change is altering South Carolina physically, economically, and culturally. Part III of this Note will explain how implementing legislation guaranteeing certain environmental

6. Paola Rosa-Aquino, *New Yorkers Might Soon Have a Constitutional Right to Clean Air and Water*, GRIST (May 1, 2019), <https://grist.org/article/new-yorkers-might-soon-have-a-constitutional-right-to-clean-air-and-water/> [https://perma.cc/SP7X-6SWK].

7. *Id.*

8. *Id.*

9. Sara Harvey, *What Are the Duties of State Government?*, CLASSROOM (June 27, 2018), <https://classroom.synonym.com/what-are-the-duties-of-state-government-12082173.html> [https://perma.cc/M7MA-6Y9V].

10. Christopher Serkin, *Passive Takings: The State's Affirmative Duty to Protect Property*, 113 MICH. L. REV. 345 (2014).

11. *Id.* at 345.

12. *Id.*

13. See Wall, *supra* note 5.

rights could lay the foundation of necessary environmental protection in South Carolina and create an impetus to combating climate change in South Carolina. Part IV of this Note will address the Takings Clause of the Constitution—particularly Professor Christopher Serkin’s view of an inverse application of the Clause¹⁴—in relation to climate change and governmental inaction. Part V of this Note will argue for the combined application of environmental legislation along with Professor Serkin’s interpretation of the Takings Clause to create substantial environmental protections for South Carolinians in the face of the mounting dangers climate change creates.

II. BACKGROUND

Climate change has already affected South Carolina in a myriad of ways and will continue to do so unless our state government and citizens are willing and able to take swift action.¹⁵ Specifically, climate change has altered and will increasingly and severely alter South Carolina physically,¹⁶ economically,¹⁷ and culturally.¹⁸

A. *Physical Effects of Climate Change in South Carolina*

1. *Physical Changes to South Carolina’s Landscape and Ecosystems Due to Climate Change*

Climate change has already physically altered South Carolina’s landscape, and this problem will only continue to grow.¹⁹ Most of the state has already experienced a warming of one-half to one degree (Fahrenheit) in the last century, and South Carolina’s coast has experienced a rise in sea waters by approximately 1.0–1.5 inches every decade.²⁰ Due to these changes in sea level and temperature, higher water levels have eroded South Carolina’s beaches and exacerbated coastal flooding.²¹ South Carolina’s land surface is

14. Serkin, *supra* note 10, at 345.

15. U.S. ENVTL. PROT. AGENCY, *supra* note 1.

16. Eddy Moore, *Climate Change and South Carolina*, COASTAL CONSERVATION LEAGUE, <https://www.coastalconservationleague.org/projects/climate-change-and-south-carolina/> [https://perma.cc/WU2E-7ABA].

17. *Id.*; Moore, *supra* note 3.

18. Oliver Milman, *Gullah Geechee: Distinct US Culture Risks Losing Island Home to Climate Crisis*, GUARDIAN (Oct. 23, 2019), <https://www.theguardian.com/environment/2019/oct/23/gullah-geechee-distinct-us-culture-risks-losing-island-home-to-climate-crisis> [https://perma.cc/8RXV-MDGZ].

19. U.S. ENVTL. PROT. AGENCY, *supra* note 1; Chris Adams, *Climate Change Hitting S.C.—The Environment*, STATE (S.C.), May 7, 2014, at 1.

20. U.S. ENVTL. PROT. AGENCY, *supra* note 1.

21. *Id.*

sinking rapidly; indeed, the aforementioned observed sea level rise relative to the land in South Carolina is greater than the global average sea level rise.²² Furthermore, if the atmosphere and oceans continue to warm at the current rate, the sea level along the coast of South Carolina is likely to rise one to four feet in the next century, which would completely alter the landscape of its pristine beaches and seaside communities.²³ Sea level rise will erode shorelines, inundate wetlands, and impair the operations of coastal infrastructure.²⁴

As sea levels rise, the lowest parts of the coast will submerge underwater and, as a result, become either tidal wetland or simply join the ocean's open water.²⁵ This transformation can have devastating effects on the local wildlife that depend on the steadfastness of these fragile coastal habitats and can result in a drastic change to the flora and fauna that is unique to South Carolina.²⁶ Many species of birds, shellfish, and fish depend on the coastal wetlands of South Carolina that the rising sea level threatens.²⁷ For example, salt marshes provide a vital habitat for shellfish such as clams, mussels, and oysters, and also serve as nurseries and feeding grounds for many fish.²⁸ Furthermore, these South Carolina salt marshes are important sources of food for birds, including the iconic South Carolina egret and the lesser-known endangered wood stork.²⁹ Beneath the waves, higher carbon dioxide levels could result in a more acidic ocean which could limit the growth of shellfish, corals, and crustaceans, and cause irreparable damage to South Carolina's aquatic food chain.³⁰

In addition to South Carolina's salt marshes and marine life being at risk due to climate change, South Carolina's beaches are at severe risk of extreme erosion as a result.³¹ Higher water levels make beach erosion more likely, as higher water levels increase the risk of storm waves submerging barrier islands or opening new inlets.³² The physical damage to South Carolina's beaches from climate change can have far-reaching impacts, including the decimation of some of South Carolina's most beloved sea-dwelling

22. *Id.*

23. *Id.*

24. *Climate Change Impacts in the Southeast*, U.S. ENVTL. PROT. AGENCY (Jan. 19, 2017), https://19january2017snapshot.epa.gov/climate-impacts/climate-impacts-southeast_.html [<https://perma.cc/7BVN-2HKS>].

25. U.S. ENVTL. PROT. AGENCY, *supra* note 1.

26. *Id.*

27. *Id.*

28. *Id.*

29. *Id.*

30. *See Adams, supra* note 19.

31. U.S. ENVTL. PROT. AGENCY, *supra* note 1.

32. *Id.*

creatures.³³ Rising sea levels that cause beach erosion can have devastating impacts on many animals that depend on South Carolina beaches for the survival of their species—including the official state reptile of South Carolina: the loggerhead sea turtle.³⁴ Loggerhead sea turtle populations are considered to be declining.³⁵ The loggerhead is listed as endangered on the “Red List” of the International Union for the Conservation of Nature and Natural Resources, and the Endangered Species Act lists certain population segments of loggerhead sea turtles as “Endangered.”³⁶ Loggerhead sea turtles face many challenges as a result of climate change, including the loss and degradation of nesting habitats due to sea level rise and erosion.³⁷ If sea levels continue to rise and South Carolina’s beaches continue to erode, the future of the loggerhead sea turtle, along with the future of a myriad of other marine species native to South Carolina, remains uncertain.³⁸

2. *Physical Impacts to the Health of South Carolinians Due to Climate Change*

Another physical impact of climate change in South Carolina that often goes overlooked is the worsening physical health of South Carolina’s citizens.³⁹ Projections show that climate change will stress human health in the Southeast and that higher temperature coupled with more frequent heat waves will increase heat stress, respiratory illnesses, and heat-related deaths.⁴⁰ Rising temperatures will also contribute to poor air quality, including the formation of ground-level ozone, which increases health risks to people with asthma or other respiratory illnesses.⁴¹ Scientists expect ground-level ozone to increase in urban areas of South Carolina, and the increase will likely lead to an uptick in emergency room visits for asthma, hospital admissions due to respiratory illnesses, and missed school days by children.⁴²

33. S.C. DEP’T OF NAT. RES., *LOGGERHEAD TURTLE, SUPPLEMENTAL VOLUME: SPECIES OF CONSERVATION CONCERN* (2015).

34. *Loggerhead Sea Turtle*, STATE SYMBOLS USA, <https://statesymbolsusa.org/symbol-official-item/south-carolina/state-reptiles/loggerhead-sea-turtle> [https://perma.cc/HM68-KYK9]; T. Michael Boddie, *How Beaufort County Volunteers Are Making Life Easier for Nesting Sea Turtles*, ISLAND PACKET UNTAMED LOWCOUNTRY BLOG (May 31, 2018, 5:00 PM), <https://www.islandpacket.com/news/local/news-columns-blogs/untamed-lowcountry/article212260609.html>; S.C. DEP’T OF NAT. RES., *supra* note 33.

35. S.C. DEP’T OF NAT. RES., *supra* note 33.

36. *Id.*

37. *Id.*

38. *See id.*

39. Moore, *supra* note 3.

40. *Climate Change Impacts in the Southeast*, *supra* note 24.

41. *Id.*

42. *Id.*

Climate change is already proving to be the cause of major health concerns in South Carolina.⁴³ According to the Environmental Protection Agency's National Toxic Air Assessment, approximately 28,000 tons of air pollutants are emitted each year across the Upstate of South Carolina alone.⁴⁴ In Greenville, nearly 13% of its adult population has asthma—a rate that is 40% higher than the general U.S. population.⁴⁵ Furthermore, asthma is Greenville's leading cause of hospitalization for children under the age of eighteen, accounting for 41% of all emergency room visits.⁴⁶

In addition to air quality issues, scientists also expect climate change to have major implications on the availability of clean water to South Carolinians.⁴⁷ As sea level rises, saltwater can mix farther upstream and farther inland in aquifers and wetlands.⁴⁸ The most serious and dangerous effect of this phenomenon is saltwater contaminating potable drinking water for communities throughout South Carolina.⁴⁹ To make matters worse, higher temperatures can increase evaporation and water loss from plants, potentially leading to reduced freshwater availability in general.⁵⁰ Due to these climate-related factors affecting the availability of freshwater, clean water availability is expected to decline in the future, resulting in more resource management and human health-related challenges.⁵¹

Furthermore, in coastal areas of South Carolina, warmer waters have been linked to the spreading of certain harmful bacteria, including an increased number of food poisoning cases due to the consumption of shellfish infected with *Vibrio parahaemolyticus* bacteria.⁵² Many of the diseases found to be plaguing South Carolina's shellfish in recent years had not been found in South Carolina's coastal waters before and likely only surfaced as a result of climate change.⁵³

As the temperature increases, the frequency of other climate-sensitive disease outbreaks is also expected to increase.⁵⁴ Harmful algal blooms and other disease-causing organisms may affect coastal and inland waters.⁵⁵ Algal

43. Moore, *supra* note 3.

44. *Id.*

45. *Id.*

46. *Id.*

47. *How the Climate Crisis Is Affecting North and South Carolina*, CLIMATE REALITY PROJECT: BLOG (Jan. 7, 2019, 7:30 AM), <https://www.climateRealityProject.org/blog/how-climate-crisis-affecting-north-and-south-carolina> [<https://perma.cc/SL45-PRZ2>].

48. *Id.*

49. *Id.*

50. *Climate Change Impacts in the Southeast*, *supra* note 24.

51. *Id.*

52. *Id.*

53. See Adams, *supra* note 19.

54. *Climate Change Impacts in the Southeast*, *supra* note 24.

55. *Id.*

blooms can increase the rates of ciguatera fish poisoning, which is an illness that occurs when humans eat fish infected by toxins produced by the algae.⁵⁶ Furthermore, climate change increases temperatures and drought, which compounds the likelihood of wildfires that can affect human health through poor air quality and even direct injury.⁵⁷

Climate change has already begun to wreak havoc on South Carolina physically—both through the physical alteration of South Carolina’s coastline and ecosystems and through the physical health impacts on South Carolina’s citizens.

B. Economic Effects of Climate Change in South Carolina

Climate change is expected to have major adverse effects on South Carolina’s economy, and in some ways, the economy already feels its effects.⁵⁸ Climate change threatens many intersections of South Carolina’s economy, including the tourism industry,⁵⁹ the agriculture industry,⁶⁰ and the real estate industry⁶¹—just to name a few.

Tourism is a vital component of South Carolina’s economy.⁶² With 2,876 miles of tidal coastline, South Carolina is a popular destination for beach lovers from all over the continental United States.⁶³ South Carolina has approximately 28.5 million domestic visitors per year, and those visitors generate millions of dollars through taxes and fees for state and local governments, as well as millions more in spending for local businesses.⁶⁴ The state’s tourism economy relies on the health and maintenance of its

56. *Id.*

57. *Id.*

58. Phil McKenna, *Climate Change Will Hit Southern Poor Hardest*, U.S. Economic Analysis Shows, INSIDE CLIMATE NEWS (June 29, 2017), <https://insideclimatenews.org/news/29062017/trump-voters-hardest-hit-climate-change-hihg-emissions-economic-analysis> [https://perma.cc/E6RJ-JTFV].

59. Adams, *supra* note 19.

60. U.S. ENVTL. PROT. AGENCY, *supra* note 1.

61. See Justin Worland, *Why ‘Once-in-a-Lifetime’ Flooding Keeps Happening*, TIME (Oct. 6, 2015), <https://time.com/4061371/south-carolina-flooding-climate-change/> [https://perma.cc/H8E6-R5GW].

62. Adams, *supra* note 19.

63. *The Coast Region*, DISCOVER S.C., <https://discoversouthcarolina.com/coast> [https://perma.cc/HK2T-EEN6]; Jennifer Plum Auvil, *Best Beaches in South Carolina*, TRAVEL CHANNEL, <https://www.travelchannel.com/interests/beaches/articles/best-beaches-in-south-carolina> [https://perma.cc/MKH2-9DXC].

64. Corey Hutchins, *Climate Change and S.C. Tourism*, CHARLESTON CITY PAPER (Jan. 6, 2010), <https://www.charlestoncitypaper.com/charleston/climate-change-and-sc-tourism/Content?oid=1672410> [https://perma.cc/7F39-ATQH].

welcoming coastline, but climate change has escalated concerns about the long-term sustainability of South Carolina's beaches.⁶⁵

Unfortunately, scientists have already found sea level rise to be threatening South Carolina's booming coastal tourism industry.⁶⁶ Rising sea levels threaten to flood developed South Carolina resorts, leading to a dip in revenue from tourists.⁶⁷ In fact, Myrtle Beach, currently one of the most popular tourist destinations in the country,⁶⁸ is among one of the areas in South Carolina that is most susceptible to sea level rise that will inevitably hurt its attractiveness to tourists.⁶⁹ Charleston, a South Carolina city that *Travel + Leisure* magazine ranked as the number one U.S. city for the seventh year in a row,⁷⁰ has already experienced a sea level rise of 3.5 millimeters per year due to climate change.⁷¹ Although 3.5 millimeters per year does not seem alarming upon first glance, it signals a rise of 1.03 feet over 100 years, which is higher than the global sea level rise projection of 0.6 feet and could result in devastating changes to the South Carolina coast.⁷²

According to Stuart Greeter, the president of the South Carolina Nature-Based Tourism Association, as temperatures and ocean levels continue to rise as climate change models predict, the outdoor tourism sector will feel the first casualties in South Carolina's economy.⁷³ In 2008, 80,000 South Carolinians relied on coastal tourism as their main source of income.⁷⁴ In addition to those 80,000 sandlappers⁷⁵ dependent on coastal tourism for their livelihood, many more South Carolinians make their living in industries closely tied to the wellbeing of South Carolina's waterways coupled with the booming tourist industry, such as those who work in the million-dollar boatbuilding industry.⁷⁶ Boatbuilders rely on both the tourism industry to supply their clientele and the

65. *Id.*

66. *Id.*

67. *See id.*

68. *Myrtle Beach*, DISCOVER S.C., <https://discoversouthcarolina.com/myrtle-beach> [<https://perma.cc/29SE-V5MW>].

69. Hutchins, *supra* note 64.

70. Patrick Phillips, *Travel + Leisure Names Charleston Best City in U.S. for 7th Year in a Row*, LOWCOUNTRY WEEKEND, <http://www.lowcountryweekend.com/travel-leisure-names-charleston-best-city-in-u-s-for-7th-year-in-a-row/> [<https://perma.cc/8BAA-HTZP>]; Lila Battis, *The 15 Best Cities in the United States*, TRAVEL + LEISURE (July 10, 2019), <https://www.travelandleisure.com/worlds-best/cities-in-us> [<https://perma.cc/E9TC-PZU7>].

71. Hutchins, *supra* note 64.

72. *Id.*

73. *Id.*

74. *Id.*

75. *Sandlapper*, MERRIAM-WEBSTER, <https://www.merriam-webster.com/dictionary/sandlapper> [<https://perma.cc/9JFL-LVYK>].

76. Hutchins, *supra* note 64.

health of South Carolina's coast and waterways to facilitate the need for their craft.⁷⁷

Furthermore, South Carolina's agricultural industry is highly susceptible to the negative impacts of climate change.⁷⁸ Declining freshwater availability, saltwater intrusion, flood-induced land loss, drought, and increasing temperatures are all effects of climate change that are expected to stress agricultural crops and decrease yields across the Southeast.⁷⁹ In the Midlands of South Carolina in particular, agriculture is big business, as Orangeburg and Lexington counties consistently rank among the top agricultural producers in the state.⁸⁰ Plants need rain and cold weather to thrive—in particular, fruit trees and berries need a certain number of cold days in order to reproduce and yield fruit.⁸¹ This means that higher temperatures coupled with longer periods without rain could spell trouble for the agricultural sector of South Carolina's economy.⁸² In 2017, a cold snap following an unseasonably warm February killed off nearly 90% of the state's peach crop, which is usually worth about \$90 million and has a \$300 million impact on the state's economy.⁸³ Besides reducing crop yields, unseasonably high temperatures also cause heat stress for dairy cows and livestock, potentially leading to forced relocation of the animals or shifts to more heat-tolerant breeds of livestock.⁸⁴ This kind of uncertainty surrounding the future of South Carolina's agricultural industry has caused many farmers to give up their farming careers altogether and abandon their family farms for more lucrative career prospects.⁸⁵

The adverse impacts of climate change on South Carolina's agricultural industry are not limited to only farmers.⁸⁶ Climate change affects what kinds of crops farmers are able to grow and, in turn, what crops are available for consumers.⁸⁷ Rising temperatures and increased flooding will limit what farmers can grow.⁸⁸ Additionally, increased carbon dioxide levels in the

77. *Id.*; Joey Holleman, *Tourism Has Reshaped—and Grown More Important—for Georgetown's Waterfront*, SOUTH STRAND NEWS (Dec. 28, 2016), https://www.southstrandnews.com/news/tourism-has-reshaped-and-grown-more-important-for-georgetown-s/article_c1892f1a-c926-11e6-9447-0b4869037d5a.html [https://perma.cc/48GC-VH5K].

78. *Climate Change Impacts in the Southeast*, *supra* note 24.

79. *Id.*

80. Moore, *supra* note 2.

81. *Id.*; Adams, *supra* note 19.

82. *See id.*

83. *Id.*

84. *Climate Change Impacts in the Southeast*, *supra* note 24.

85. Audrey Hudson, *How Disasters Are Creating Uncertain Future for Some SC Farmers*, SUN NEWS (S.C.), Nov. 17, 2016, at 17.

86. *See* Jen Christensen, *Food Will Be Scarce, Expensive, and Less Nutritious, Climate Report Says*, CNN (Aug. 9, 2019), <https://www.cnn.com/2019/08/09/health/ipcc-report-food-security-climate-scn/index.html> [https://perma.cc/6BHC-X3GS].

87. *Id.*

88. *Id.*

atmosphere adversely impact the nutrition of food.⁸⁹ In fact, wheat grown in high carbon dioxide levels will contain 6%–13% less protein, 4%–7% less zinc, and 5%–8% less iron, according to experiments.⁹⁰ Climate change scientists worry that undernourishment will be more prevalent as the effects of climate change worsen.⁹¹ Studies show that when individuals do not have enough nutrients in their diet, one's ability to function physically and cognitively will be severely diminished.⁹² Further, a nutrient-poor diet can lead to a greater risk of chronic disease and even death. Also, because the effects of climate change lessen the availability of crops as well as alter the nutritional value of crops, these risks will only increase as the climate crisis tightens its grip on the South Carolina agriculture industry.⁹³

Climate change has already had serious impacts on the real estate industry and is likely to continue to do so.⁹⁴ In South Carolina, coastal homes and infrastructure will flood more often as sea levels continue to rise, regardless of whether storms become more intense.⁹⁵ Rising sea levels are likely to increase flood insurance rates, while more frequent storms will increase the deductible for wind damage in homeowner insurance policies.⁹⁶ The projected national insurance costs associated with merely one foot of sea level rise by 2100 are roughly \$200 billion.⁹⁷ These rapidly increasing insurance costs associated with beachfront property, as well as concerns over rising sea levels, can discourage potential home buyers from buying real estate along the coast of South Carolina.⁹⁸ Concerns about sea level rise and increasing insurance costs are already threatening \$1.5 billion worth of property in Hilton Head, South Carolina.⁹⁹ In fact, Charleston has already seen homes drop in value by approximately \$266 million since 2005 as a result of concerns about climate change and sea level rise.¹⁰⁰

89. *Id.*

90. *Id.*

91. *Id.*

92. *Id.*

93. *See id.*

94. *See Worland, supra note 61; see also U.S. ENVTL. PROT. AGENCY, supra note 1* (explaining various impacts that climate change has on natural resources, human health, ecosystems, and agriculture in South Carolina).

95. U.S. ENVTL. PROT. AGENCY, *supra* note 1.

96. *Id.*

97. Adams, *supra* note 19.

98. Liz Knueven, *Climate Change Experts Agree on the Last Place They'd Invest for the Future: Waterfront Property*, BUS. INSIDER (Aug. 19, 2019), <https://www.businessinsider.com/why-not-buy-waterfront-property-climate-change-experts-2019-8> [<https://perma.cc/8K4L-ASK6>].

99. *Id.*

100. *Id.*

Already, as a result of frequent tidal flooding and sea level rise due to climate change, many coastal communities have seen real estate values plummet.¹⁰¹ First Street Foundation and Columbia University conducted a study which showed that among cities in seventeen coastal states, Charleston saw a greater loss in relative property value than nearly any other coastal city evaluated by the study.¹⁰²

The effects of climate change on the real estate industry are not confined to the coastal region of South Carolina, as the entire Palmetto State feels its effects through increased inland flooding and wildfires due to drought conditions.¹⁰³ “Since 1958, the amount of precipitation during heavy rainstorms has increased by 27% in the Southeast, and the trend toward increasingly heavy rainstorms is likely to continue.”¹⁰⁴ “Extreme rainfall events have increased in frequency and intensity in the Southeast,” and environmentalists project these extreme precipitation events to increase across South Carolina as a result of climate change.¹⁰⁵ This increase in extreme precipitation events and inland flooding can also raise the cost of flood insurance in inland regions of South Carolina and negatively affect the real estate industry.¹⁰⁶ As periods of drought become more common in the wake of climate change, warmer temperatures could increase the number and intensity of wildfires.¹⁰⁷ The Southeast leads the nation in the number of wildfires, with an average of 45,000 wildfires occurring each year, and increasing temperatures will only serve to exacerbate their frequency and intensity.¹⁰⁸

South Carolina has already been hit with major economic losses as a result of climate change and is at risk of even further economic losses if this threat remains unchecked.¹⁰⁹

101. Allison Rebecca Penn, *What Climate Change Means for Coastal Real Estate Values and Property Investors*, ALL PROP. MGMT.: REAL EST. TRENDS (June 24, 2019), <https://www.allpropertymanagement.com/blog/post/what-climate-change-means-for-coastal-real-estate-values/> [<https://perma.cc/P4LY-KANN>].

102. *Id.*; Press Release, First Street Foundation, *Rising Seas Erode \$15.8 Billion in Home Value from Maine to Mississippi* (Feb. 27, 2019) (on file with author).

103. See U.S. ENVTL. PROT. AGENCY, *supra* note 1; see also *Climate Change Impacts in the Southeast*, *supra* note 24 (explaining various impacts that climate change has on natural resources, human health, ecosystems, and agriculture).

104. See U.S. ENVTL. PROT. AGENCY, *supra* note 1.

105. Moore, *supra* note 3.

106. See Earth Available Realty, Inc., *Columbia SC Flood Insurance Rates Increase*, HOME BUYERS BLOG, <http://www.homebuyersblog.net/columbia-sc-flood-insurance-rates-increase/> [<https://perma.cc/XSG9-CHBY>].

107. *Climate Change Impacts in the Southeast*, *supra* note 24.

108. Adams, *supra* note 19.

109. See U.S. ENVTL. PROT. AGENCY, *supra* note 1; see also Hutchins, *supra* note 64 (explaining the effects climate change has had on South Carolina’s natural resources); Penn, *supra* note 101 (describing the impacts climate change has on real estate prices).

C. Cultural Effects of Climate Change in South Carolina

South Carolina has a rich cultural identity that is strongly tied to the Lowcountry of the Palmetto State.¹¹⁰ This cultural identity is attributed mainly to African-Americans who descended from enslaved Africans who were stolen from their homeland and forced to work on the plantations of coastal South Carolina.¹¹¹ Often referred to as “Gullah,” “Geechee,” or simply, “Gullah/Geechee,” this unique community of individuals have maintained a separate Creole language that is still commonly spoken today, as well as a distinct culture that includes many African traditions passed down through generations.¹¹²

Unfortunately, the climate crisis threatens to destroy the resilient and steadfast Gullah/Geechee Nation that has been a staple of South Carolina culture.¹¹³ As a result of climate change, fierce storms and rising sea levels have been gnawing away at the Gullah/Geechee community.¹¹⁴ After being battered by Hurricane Dorian, and most severely by Hurricane Matthew in 2016, the Gullah/Geechee Nation has been faced with extreme hardship in trying to recover financially from these major storms.¹¹⁵ In addition to the increased threat of hurricanes and tropical storms, periods of drought coupled with rising sea levels make the future of the Gullah/Geechee Nation uncertain, as the community mainly resides on a string of tidal and barrier islands called the Sea Islands, which were once the site of rice, cotton, and indigo plantations.¹¹⁶ The elected chieftess and head of state for the Gullah/Geechee Nation, Queen Quet, has sought help from the U.S. government and the United Nations to combat the ever-growing threat of climate change.¹¹⁷ In 2019, Queen Quet appeared in front of a congressional subcommittee to explain how the seafood supply is disappearing from the Sea Islands as the sea continues to warm and to warn that the Gullah/Geechee “will not continue to thrive or survive if [they] are displaced from the Sea Islands.”¹¹⁸ Queen Quet stated, “The very existence of the Gullah/Geechee [N]ation is threatened by the rapid erosion of our Sea Islands due to the sea-level rise issues brought on by climate change.”¹¹⁹

110. See NAT'L PARK SERV., 106TH CONG., LOW COUNTRY GULLAH CULTURE SPECIAL RESOURCE STUDY 13 (2005).

111. *Id.*

112. *Id.*

113. Milman, *supra* note 18.

114. *See id.*

115. *See id.*

116. *Id.*

117. *Id.*

118. *Id.*

119. *Id.*

The fate of the Gullah/Geechee Nation sheds light on a problem all too common among indigenous cultures finding themselves on the frontline of climate change—a lack of political influence to force change.¹²⁰ Historically, colonial dispossession and lack of political influence have forced communities such as the Gullah/Geechee onto lands vulnerable to drought or flooding, and now as a result, these communities face an overwhelming threat to their way of life due to climate change.¹²¹ While the Gullah/Geechee Nation is known for its resilience, the culture may face irreparable damage as a result of climate change.¹²² Kyle Whyte, an indigenous environmental issues expert from Michigan State University predicts that “[t]here will be tremendous stories of adaption and change as well as horrifying stories of losing homelands, family and cultural practices” because of climate change displacement.¹²³ The Gullah/Geechee Nation depends on the land and the sea comprising the Sea Islands to continue its storied cultural traditions, and with the Sea Islands in jeopardy due to the threat of climate change, the entire Gullah/Geechee culture is at risk of becoming one of South Carolina’s biggest casualties of the climate change crisis.¹²⁴

III. EXPLORING SOLUTIONS TO CLIMATE CHANGE THROUGH LEGISLATION

While the future of South Carolina’s physical, economic, and cultural wellbeing may seem to be at risk due to climate change, there is still hope for a better future. Environmental legislation attempting to combat the effects of climate change has been gaining traction throughout the nation, as New York, Montana, and Pennsylvania have already passed legislation recognizing environmental rights as being on par with political and civil liberties.¹²⁵ The state of New York recently adopted a constitutional amendment to amend the Bill of Rights in the New York State Constitution so that it includes the words: “[E]ach person shall have the right to clean air and water, and a healthful

120. *See id.*

121. *See id.*

122. *See id.*

123. *Id.*

124. *See id.*

125. Rosa-Aquino, *supra* note 6; *see* Rick Karlin, *New York’s Climate Change Bill Is Law*, TIMES UNION (July 18, 2019), <https://www.timesunion.com/news/article/Climate-change-bill-is-law-now-the-work-begins-14106149.php> [<https://perma.cc/P2ZE-QBGR>]; Barbara Goldberg, *New York Lawmakers Pass Aggressive Law to Fight Climate Change*, REUTERS (June 19, 2019), <https://www.reuters.com/article/us-climate-change-new-york/new-york-lawmakers-pass-aggressive-law-to-fight-climate-change-idUSKCN1TK2GT> [<https://perma.cc/42VW-KWYL>].

environment.”¹²⁶ According to New York State Senator David Carlucci, legislators adopted the amendment to encourage sound environmental decision-making and help prevent harmful environmental actions.¹²⁷ Senator Carlucci stated in regards to the constitutional amendment that a person’s “right to clean air, water, and a healthful environment is just as important as one’s right to worship freely or assemble.”¹²⁸

Meanwhile, the Montana Constitution provides for its citizens similar environmental rights as those contained in New York’s recent constitutional amendment, which includes the following: (1) environmental protection and improvement; (2) reclamation of lands disturbed by the taking of natural resources; (3) protection of water rights for all its residents; (4) maintenance of cultural resources; (5) implementation of a severance tax on coal; (6) establishment of a noxious weed management trust fund; and (7) preservation of harvest heritage with regards to wild fish and game in the state.¹²⁹

As a result of the 1972 ratification of Montana’s State Constitution, including Article IX’s guarantee of environmental rights, Montana was able to play a vital role in bringing several species of large mammals, especially big game, back from the brink of extinction.¹³⁰

In addition to the constitutional provisions of Montana and New York, Pennsylvania also has an Environmental Rights Amendment in its constitution:

The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment. Pennsylvania’s public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people.¹³¹

126. Press Release, David Carlucci, Senator, Green Amendment Passes in the New York State Legislature (April 30, 2019), <https://www.nysenate.gov/newsroom/press-releases/david-carlucci/green-amendment-passes-new-york-state-legislature> [https://perma.cc/VWV5-BGGW].

127. *Id.*

128. *Id.*; see U.S. CONST. amend. I. Senator Carlucci places the environmental guarantees of the new environmental legislation on par with the freedom of religion and assembly guarantees of the First Amendment of the U.S. Constitution. Press Release, David Carlucci, *supra* note 126.

129. MONT. CONST. art. IX, §§ 1–7.

130. *Back from the Brink: Montana’s Wildlife Legacy* (Montana PBS Mar. 8, 2009).

131. PA. CONST. art. I, § 27.

On May 18, 1971, Pennsylvania voters ratified Pennsylvania's Environmental Rights Amendment by a 4–1 margin.¹³²

Prior to the Environmental Rights Amendment's enactment in Pennsylvania, environmental regulation occurred only in reaction to disaster.¹³³ The Pennsylvania legislature's reaction to the typhoid fever outbreak of 1905 illustrates an example of this reactive legislation.¹³⁴ The outbreak of typhoid fever gripping Pennsylvania in 1905 was a result of raw sewage discharges in the state, and as a reaction, the legislature acted to bring about the first of the clean stream laws in Pennsylvania; however, the legislature specifically exempted coal companies from these early clean stream laws.¹³⁵ Coal companies in Pennsylvania were not brought within the law's grip until 1965 because, for a century prior, the Pennsylvania state government was operating under a Faustian bargain—it exchanged its environmental integrity for economic prosperity built upon exploiting its natural resources.¹³⁶

As Pennsylvanians grew more aware of the damage coal companies inflicted upon their environment, however, lawmakers were pressured into action.¹³⁷ In 1965, beginning with the law bringing coal within the clean stream laws, the Pennsylvania legislature began to undertake a series of actions to reverse the degradation of its state's environment.¹³⁸ These actions led to the passage of the aforementioned Environmental Rights Amendment in Pennsylvania.¹³⁹

Pennsylvania's Environmental Rights Amendment has largely been a successful legislative endeavor, as the state incorporated its principles into the operational programs of all Pennsylvania state agencies that relate to the environment.¹⁴⁰ Now, every person elected to any public office in the state of Pennsylvania must swear to uphold the Environmental Rights Amendment when he or she takes the oath of office.¹⁴¹ The Environmental Rights Amendment has also forced developers and others who have a negative impact on the environment to plan their projects in a way that minimizes

132. Franklin L. Kury, *Pennsylvania's Environmental Rights Amendment*, CONSERVATION ADVOCATE: PA. LAND TR. ASSOC., <https://conservationadvocate.org/pennsylvanias-environmental-rights-amendment/> [<https://perma.cc/R6VY-JBJE>].

133. *Id.*

134. *Id.*

135. *Id.*

136. *Id.*

137. *See id.*

138. *Id.*

139. *Id.*

140. *Id.*

141. *Id.*

adverse environmental effects.¹⁴² Now, Pennsylvania is at the forefront of combatting climate change, despite its sordid history of valuing its economy over its environment.¹⁴³

Currently, there are forty-four states that have some form of expression of environmental values in their constitutions, but only the three aforementioned states¹⁴⁴ have recognized the protection of environmental rights as an inalienable right.¹⁴⁵

South Carolina's current environmental welfare is at a tipping point, with climate change threatening to cause escalating harm in the coming years.¹⁴⁶ By enacting either a law or constitutional amendment which guarantees environmental rights as inalienable rights on par with other political and civil liberties, South Carolina legislators could create a catalyst for action against climate change, mimicking the reaction to the passage of Pennsylvania's Environmental Rights Amendment.¹⁴⁷ The republican-dominated¹⁴⁸ South Carolina legislature adopting an environmental rights amendment may seem like a faraway fantasy, but as climate change continues to adversely affect South Carolina, some legislators have already taken action.¹⁴⁹ Currently, legislators have prefiled a bill for the 2019 legislative session in South Carolina that, if passed, will put a referendum on the next statewide election ballot to allow voters to vote "yes" or "no" as to whether legislators should amend the South Carolina State Constitution to grant standing to individuals to conserve and protect the environment through an "Environmental Bill of Rights."¹⁵⁰ If enacted, the ballot would read:

South Carolina's environment is an asset to all current and future South Carolinians. Do you favor expanding the power of local

142. *Id.* This is quite revolutionary considering Pennsylvania's history of valuing economic growth over environmental protection.

143. See Justine McDaniel, *Here's What Pennsylvania Is Doing to Address Climate Change—and Why Politics Is Making It Difficult*, PHILA. INQUIRER, <https://www.inquirer.com/news/pennsylvania-climate-change-governor-wolf-carbon-state-action-20190918.html> [<https://perma.cc/GFN6-446K>].

144. New York, Montana, and Pennsylvania have recognized the protection of environmental rights as an inalienable right. MONT. CONST. art. IX, §§ 1–7; PA. CONST. art. I, § 27; Press Release, David Carlucci, *supra* note 126.

145. Press Release, David Carlucci, *supra* note 126.

146. See U.S. ENVTL. PROT. AGENCY, *supra* note 1.

147. Kury, *supra* note 132; see also Adams, *supra* note 19.

148. Emily Bohatch, *In a State That Votes Republican, These SC Counties Hit the Polls for Democrats*, STATE (S.C.) (June 5, 2018), <https://www.thestate.com/news/politics-government/election/article212557829.html>.

149. See *Environmental Bill of Rights*, SIERRA CLUB OF S.C., <https://www.sierraclub.org/south-carolina/legislation/2019/environmental-bill-rights> [<https://perma.cc/AYZ7-4QK5>].

150. *Id.*

governments to protect the environment and granting legal standing to the citizens of this State to enforce the conservation of the environment?

Yes: []

No: []

Those voting in favor of the question shall deposit a ballot with a check or cross mark in the square after the word “Yes,” and those voting against the question shall deposit a ballot with a check or cross mark in the square after the word “No.”¹⁵¹

The proposed bill is House Bill 3382,¹⁵² and its sponsors are Representatives Mandy Powers-Norrell (Lancaster), Seth Rose (Columbia), Bill Clyburn (Aiken), and J.A. Moore (North Charleston).¹⁵³ The bill has been referred to the House Judiciary Committee and is awaiting passage.¹⁵⁴

While an Environmental Bill of Rights may be a great place to start in combatting the effects of climate change in South Carolina, the state may still need to protect its citizens in the face of climate change.

IV. THE INVERSE TAKINGS CLAUSE AND CLIMATE CHANGE ACTION

The Fifth Amendment of the U.S. Constitution includes a provision known as the Takings Clause, which states that “private property [shall not] be taken for public use, without just compensation.”¹⁵⁵ In its conventional understanding, the Takings Clause protects property owners from significant, adverse government actions that change the law; however, Professor Christopher Serkin of Vanderbilt University School of Law argues that governments can violate the Takings Clause by failing to act in the face of a changing world, a phenomenon which he refers to as the Passive Takings Clause.¹⁵⁶ Professor Serkin defines the Passive Takings Clause as takings liability for regulatory inaction.¹⁵⁷ Under Professor Serkin’s Passive Takings

151. *Id.*

152. H.R.J. Res. 3382, 123rd Gen. Assemb. (S.C. 2019).

153. *Id.*

154. *H. 3382 Joint Resolution Summary*, S.C. LEGISLATURE, <https://www.scstatehouse.gov/billsearch.php?billnumbers=3382&session=123&summary=B> [<https://perma.cc/Q5W8-C7FP>].

155. U.S. CONST. amend. V.; Bill Funk, *CPR Perspective: The Takings Clause of the Fifth Amendment*, CTR. FOR PROGRESSIVE REFORM, <http://www.progressivereform.org/perspTakings.cfm> [<https://perma.cc/U55Q-NRNP>].

156. Serkin, *supra* note 10, at 345–46.

157. *Id.* at 346.

Clause theory, property owners could be constitutionally entitled either to governmental intervention on their behalf or to compensation if the government fails to act.¹⁵⁸

In his article, Professor Serkin uses sea level rise as an example of when the citizens could—and should—use the Passive Takings Clause.¹⁵⁹ Professor Serkin argues that some state and local governments are failing to take necessary steps to address the risks associated with sea level rise that climate change causes, partly because these governments worry that regulatory responses might trigger Takings Clause liability.¹⁶⁰ The establishment of new setbacks from the ocean or prohibiting seawalls could implicate the traditional Takings Clause analysis, and the threat of Takings Clause liability may discourage governments from adopting measures that would otherwise serve to minimize the adverse impacts of sea level rise.¹⁶¹

Allowing and even possibly incentivizing these hesitant governments to escape liability so easily through inaction, however, seems contrary to overriding public policy because coastal property is already subject to a number of environmental and land-use regulations.¹⁶² Professor Serkin goes on to argue that (1) this preexisting regulatory intervention means that the government should not be able to escape liability through inaction, and (2) immunizing the government from the consequences of inaction naturally discourages action.¹⁶³ Serkin then advocates for the Passive Takings Clause, pointing out that the Passive Takings Clause creates a vital counterbalance to the threat of traditional Takings Clause liability and actually serves to encourage otherwise reticent governments to reduce the overall costs of sea level rise.¹⁶⁴

The traditional school of thought surrounding the Takings Clause always involves some legal transition that interferes with a property owner's settled expectations.¹⁶⁵ Under the Passive Takings Clause theory, however, governmental interference with one's property does not *always* necessitate the government's changing of the law.¹⁶⁶ Instead, a stable legal rule combined with a change in the world¹⁶⁷ can interfere with a property owner's settled expectations just as much as an explicit legal change.¹⁶⁸ For example, when a

158. *Id.*

159. *Id.* at 348.

160. *Id.*

161. *Id.*

162. *Id.*

163. *Id.*

164. *Id.*

165. *Id.* at 352.

166. *See id.*

167. For our purposes, an environmental or ecological change.

168. Serkin, *supra* note 10, at 352.

government has longstanding prohibitions on physical barriers on beachfront property, beachfront homeowners without a way to armor their property in the wake of rapid sea level rise that climate change causes could be at an increased risk of losing their homes to increased storm surge, erosion, or total inundation.¹⁶⁹ In this illustration, the law does not change—the prohibition on physical barriers has remained consistent—the only change, then, is the ecological change that could very well threaten a total loss of the homeowner’s property.¹⁷⁰

In situations like the aforementioned example, although the regulation itself does not change, its application to the changed conditions in the world imposes new burdens to the property owner.¹⁷¹ In those situations, if the burdens prove to be severe enough, a property owner has a doctrinally plausible claim under the Passive Takings Clause theory despite the fact that—and often, because—the law has not changed or adapted to the changed condition(s).¹⁷² Viewed in terms such as those laid out in the aforementioned example, landowners can invoke the Passive Takings Clause in situations in which “a regulation was benign at the time it was adopted but comes to impose a significant, unexpected, and constitutionally problematic burden” because of ecological or environmental changes.¹⁷³

The Passive Takings Clause may seem simple, but it actually suggests a novel idea: in some circumstances, the government’s failure to change the law could trigger Takings Clause liability.¹⁷⁴ Put another way, “the government can violate the Constitution by failing to take affirmative steps to change preexisting law or by failing to protect property from the application of preexisting law.”¹⁷⁵ In fact, the crux of Professor Serkin’s Passive Takings Clause argument is the assertion that the “government’s relationship to property sometimes creates affirmative duties” and that “property owners are entitled either to summon the regulatory power of the state to act on their behalf or alternatively to receive compensation for the government’s failure to act or protect their property.”¹⁷⁶ Professor Serkin goes on to note that while positive law informs the expectations of property owners, regulations that apply unreasonably to property rights should not be immune from constitutional challenges merely because their enactment predated the formed expectations of property owners or their acquisitions of property.¹⁷⁷

169. *Id.* at 353.

170. *Id.*

171. *Id.*

172. *Id.*

173. *Id.*

174. *Id.*

175. *Id.* at 354.

176. *Id.*

177. *Id.*

The Passive Takings Clause is no outlandish theory—in fact, as Professor Serkin notes, the Passive Takings Clause is entirely consistent with existing Takings Clause and property law theory.¹⁷⁸ According to the economic argument in support of the Takings Clause, its purpose is to “force the government to internalize the costs of its actions.”¹⁷⁹ Such compensation serves as a preventative measure to keep the government from ignoring the costs associated with its regulatory burdens and acts as a governmental check to ensure that the government acts “only where a regulation’s benefits are greater than the costs it imposes.”¹⁸⁰

Traditionally, compensation stemming from the Takings Clause operates in one direction: it forces the government to internalize the costs of only its actions, but it does not force the government to internalize the costs of its failure to act.¹⁸¹ Professor Serkin argues that this traditional Takings Clause compensation scheme discourages efficient decision making because, in cases where governmental inaction is the most costly choice for society,¹⁸² the government’s obligation to pay only when it acts will decrease the likelihood of the government taking any form of action out of fear of traditional Takings Clause liability.¹⁸³ In short, allowing the government to escape liability for inaction will only serve to systemically favor governmental inaction rather than action.¹⁸⁴ Professor Serkin argues that if maximum efficiency is the end goal of regulatory regimes, “the government should have to pay the costs of both its actions and *forgone* actions.”¹⁸⁵ He furthers his point by stating, “[o]nly then would the government internalize the full impact of its decisions, including its decisions *not* to regulate.”¹⁸⁶

Professor Serkin’s Passive Takings Clause provides a new lens through which to view the traditional Takings Clause. That new lens, however, is not unique to just Professor Serkin and his followers; instead, the Maryland Court of Appeals has suggested same view.¹⁸⁷ In *Litz v. Maryland Department of the Environment*, the Maryland Court of Appeals held that a property owner has a claim under the Takings Clause when (1) a governmental entity has failed to act in the face of an affirmative duty and (2) the inaction causes the

178. *Id.* at 360.

179. *Id.* at 361; see also William A. Fischel & Perry Shapiro, *Takings, Insurance, and Michelman: Comments on Economic Interpretations of “Just Compensation” Law*, 17 J. LEGAL STUD. 269, 269–70 (1988).

180. Serkin, *supra* note 10, at 361.

181. *Id.*

182. Such is the case with sea level rise caused by climate change.

183. Serkin, *supra* note 10, at 361.

184. *Id.* at 362.

185. *Id.*

186. *Id.*

187. See *Litz v. Md. Dep’t of the Env’t*, 446 Md. 254, 267, 131 A.3d 923, 931 (Ct. Spec. App. 2016).

owner to lose all effective value of his or her property.¹⁸⁸ The significance of this case lies within its embrace of the Passive Takings Clause theory that governmental inaction, as opposed to affirmative governmental action, can be a basis for a claim under the Takings Clause.¹⁸⁹

In *Litz*, the property owner (*Litz*) was the proprietor of a recreational camp located near a lake in which typical recreational activities occurred.¹⁹⁰ The lake was within the town limits of the Town of Goldsboro, Maryland, and private septic systems served the surrounding areas of the lake and contained town drainage systems flowing into the lake.¹⁹¹ Due to the failure of several septic systems, of which the local town and Maryland Department of the Environment had knowledge, the lake became contaminated over a number of years.¹⁹² Despite having knowledge of the lake contamination, neither the Town of Goldsboro nor the Maryland Department of the Environment took any action.¹⁹³ As a result of this inaction, the lake became so contaminated that *Litz*'s entire business was destroyed and the property became substantially devalued, resulting in its forcible sale at a mortgage foreclosure.¹⁹⁴ *Litz* brought a Takings Clause lawsuit against the Town of Goldsboro and the Maryland Department of the Environment under the theory that those entities had essentially "taken" her property through their failure to address the sewage problem, causing the closure of her business and the loss of the value of her property.¹⁹⁵ The Maryland Court of Appeals held that "as a matter of Maryland law," a Takings claim¹⁹⁶ exists, "where a plaintiff alleges a taking caused by a governmental entity's . . . failure to act, in the face of an affirmative duty to act."¹⁹⁷ That said, in *Litz*, the court did not answer the question of whether the government had a duty to act.¹⁹⁸ So when is a governmental entity under an affirmative duty to act?

188. *Id.*; see also William D. Shaughnessy, Jr., "Inaction" by Government May Constitute a "Taking" of Property, GORDON FEINBLATT (Mar. 14, 2016), <https://www.gfirlaw.com/what-we-do/insights/inaction-government-may-constitute-taking-property> [https://perma.cc/D4VX-V5HC].

189. Shaughnessy, Jr., *supra* note 188.

190. *Id.* (noting that the recreational activities included fishing, swimming, and boating).

191. *Id.*

192. *Id.*

193. *Id.*

194. *Id.*

195. *Id.*

196. The Maryland Court of Appeals referred to it as an "inverse condemnation claim," but for our purposes, the verbiage of the Court does not invalidate the soundness of the argument or its application to the claim this article makes. *Id.*

197. *Litz v. Md. Dep't of the Env't*, 446 Md. 254, 267, 131 A.3d 923, 931 (Ct. Spec. App. 2016); see also Shaughnessy, Jr., *supra* note 188.

198. See *Litz*, 446 Md. at 280, 131 A.3d at 939; see also Shaughnessy, Jr., *supra* note 188.

V. WHERE THE RUBBER MEETS THE ROAD—HOW LEGISLATION CAN CREATE AFFIRMATIVE GOVERNMENTAL DUTIES AND HOW THOSE DUTIES CAN INVOKE THE PASSIVE TAKINGS CLAUSE

Professor Serkin's Passive Takings theory and court opinions like the one in *Litz* are theoretically compelling but practically unhelpful in the absence of an affirmative governmental duty to act.¹⁹⁹ Similarly, most citizens could not use Professor Serkin's Passive Takings theory to bring lawsuits based on the failure to combat climate change because most states do not have an affirmative duty to protect the environment.²⁰⁰ Conversely, as noted, New York, Montana, and Pennsylvania have created an affirmative duty to protect the environment and the environmental rights of their respective citizens.²⁰¹ The Supreme Court of Pennsylvania made this conclusion clear in *Robinson Township v. Commonwealth*:

As trustee, the Commonwealth is a fiduciary obligated to comply with the terms of the trust and with standards governing a fiduciary's conduct. The explicit terms of the trust require the government to "conserve and maintain" the corpus of the trust. The plain meaning of the terms conserve and maintain implicates a duty to prevent and remedy the degradation, diminution, or depletion of our public natural resources. As a fiduciary, the Commonwealth has a duty to act toward the corpus of the trust—the public natural resources—with prudence, loyalty, and impartiality.²⁰²

This holding provides the connective tissue for a citizen to make a Passive Takings Clause claim in any state that has passed a version of an environmental rights amendment and creates an affirmative duty to act by the government to protect the environment.²⁰³ Therefore, by combining Professor Serkin's Passive Takings theory, the Maryland court's legal Takings Clause theory the Maryland Court of Appeals set forth, and the fiduciary duty to protect the environment the Supreme Court of Pennsylvania recognized, citizens in a state with an environmental rights amendment could bring suit against their state government in the event that their property values were destroyed as a result of (1) adverse environmental impacts and (2) the failure

199. See *Hawkins v. City of Greenville*, 358 S.C. 280, 291, 594 S.E.2d 557, 563 (Ct. App. 2004) (finding no duty to act and rejecting a Takings/inverse condemnation claim).

200. Press Release, David Carlucci, *supra* note 126.

201. Rosa-Aquino, *supra* note 6; Karlin, *supra* note 125; see Press Release, David Carlucci, *supra* note 126.

202. 623 Pa. 564, 656, 83 A.3d 901, 958 (2013).

203. See *id.*

of their state government to affirmatively act to prevent such an occurrence.²⁰⁴ A myriad of factors would determine whether said citizen would prevail.²⁰⁵ That said, such a citizen would have standing to bring a suit against their respective state because (1) the law created an affirmative duty for the state to act to combat the effects of climate change, and (2) under the Passive Takings Clause theory, loss of one's property due to governmental inaction in the face of an affirmative duty to act constitutes a taking that requires just compensation.²⁰⁶

In applying these concepts to South Carolina, there are two requisite elements to combat the effects of climate change and provide financial relief to those South Carolinians suffering from those effects: (1) a law—either a constitutional amendment or a general law—providing certain environmental rights and protections to all South Carolinians and (2) the South Carolina judicial branch recognizing the Passive Takings Clause.

While environmental rights legislation may be enough to coax the government into combatting the effects of climate change, the coupling of legislation with a judicial commitment to the Passive Takings Clause theory would serve to ensure that South Carolinians would be able to live without fear of losing their property, livelihood, or way of life due to the effects of climate change. Conversely, if the South Carolina judiciary were to adopt the Passive Takings Clause theory in the absence of environmental rights legislation, bringing suit successfully under the Passive Takings Clause theory would be more difficult because of the inability to establish a strong affirmative duty on the part of the government.²⁰⁷ Put simply, in order to best protect South Carolinians from the effects of climate change, both the legislature and the judiciary must work together to create an affirmative governmental duty to combat climate change as well as provide for a legal remedy for citizens to rely upon when that duty is not adequately met. This task may seem far-fetched and unachievable, but anything short of the coupling of codified environmental rights legislation with the judicial adoption of the Passive Takings Clause will simply not be enough. Climate change is a colossal problem facing humankind that is unlike anything our species has dealt with before. Combatting such a formidable foe will require outside-the-box thinking and unorthodox methods.

204. *See id.*; *see also* Serkin, *supra* note 10, at 346; *Litz v. Md. Dep't of the Env't*, 446 Md. 254, 267, 131 A.3d 923, 931 (Ct. Spec. App. 2016).

205. *See Litz*, 446 Md. at 269, 131 A.3d at 932.

206. Serkin, *supra* note 10, at 346; *Litz*, 446 Md. at 267, 131 A.3d at 931.

207. *Hawkins v. City of Greenville*, 358 S.C. 280, 291, 594 S.E.2d 557, 563 (Ct. App. 2004).

VI. CONCLUSION

Climate change is a serious issue facing South Carolinians from the Lowcountry to the Upstate.²⁰⁸ It is a problem that affects the Palmetto State physically, economically, and culturally, and threatens some of the most vulnerable South Carolinians.²⁰⁹ While the effects of climate change seem unavoidable, there are ways to combat its growing threat in South Carolina. In order to combat the effects of climate change in South Carolina, the state needs to enact legislation guaranteeing environmental rights to all South Carolinians, and the judicial branch must commit to the Passive Takings Clause theory to recompense displaced and economically damaged sandlappers. The road to recovery from the effects of climate change is a long one, but as a South Carolinian, I have hope for a brighter tomorrow. *Dum spiro spero*—while I breathe, I hope. As the official motto of the State of South Carolina,²¹⁰ it is not only a way of life in South Carolina but also a testament to the resiliency of the Palmetto State and her citizens.

208. U.S. ENVTL. PROT. AGENCY, *supra* note 1.

209. *Id.*; Milman, *supra* note 18; Moore, *supra* note 2; Yee, *supra* note 1.

210. *Seals, Flags, House & Senate Emblems*, S.C. STUDENT CONNECTION, <https://www.scstatehouse.gov/studentpage/coolstuff/seal.shtml> [https://perma.cc/6PWX-KPKG].

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