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The *Lucas* Dissenters Saw Katrina Coming: Why Environmental Regulation of Coastal Development Should Not Be Categorized as a “Taking”

Regina McMahan*

I. Introduction

With its eroded coastlines, shrinking wetlands, and shaky levee system, New Orleans was considered a “disaster waiting to happen”¹ in the event of a hurricane or major storm. Hurricane Katrina was the catalyst of that disaster. When the storm made landfall in eastern Louisiana on August 29, 2005 as a Category 3 hurricane,² it blasted into an exposed and under prepared Gulf Coast and sent thousands of evacuees fleeing for higher ground.³ The extent of human suffering wreaked by Hurricane Katrina is astounding. Katrina ranks as the third deadliest hurricane in the U.S. since 1900,⁴ resulting in a total 1336 deaths.⁵ Thousands of people remain homeless, living in shelters or hotels awaiting federal relief, many of whom have no homes to which to

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1. Telephone Interview with Alfredo Quarto, Executive Director, Mangrove Action Project (organization dedicated to preserving mangrove-forest ecosystems), in Port Angeles, WA (Nov. 10, 2005).

2. RICHARD D. KNABB, ET AL., NAT’L HURRICANE CTR., TROPICAL CYCLONE REPORT: HURRICANE KATRINA 1, 1 (Dec. 20 2005), available at http://www.nhc.noaa.gov/pdf/TCR-AL122005_Katrina.pdf.

3. Joseph B. Treaster, et al., *Hurricane Katrina: The Overview; Hurricane Slams into Gulf Coast; Dozens are Dead*, N.Y. TIMES, Aug. 30, 2005, at A01.

4. KNABB, *supra* note 2, at 11.

5. *Id.* at 10. In Louisiana and Mississippi, the number of fatalities are uncertain and may never be accurately known. The majority of deaths in Louisiana were directly caused by floods that were induced by storm surges and the aftermath of such floods, particularly in New Orleans.

return.⁶ The current population of New Orleans is estimated at only 230,000, or half what it was before the storm.⁷

In retrospect, the warning signs of this disaster were hard to miss. Disaster officials had long known that New Orleans was especially vulnerable to large-scale hurricane damage.⁸ There is evidence that officials from the Federal Emergency Management Agency (FEMA) had known of the potential for disaster in New Orleans for nearly 20 years.⁹ After the 2004 tsunami disaster in South East Asia,¹⁰ FEMA officials even pinpointed New Orleans in January 2005 as the U.S. city most susceptible to a natural disaster.¹¹ Despite all of these warnings, Hurricane Katrina overwhelmed government agencies,¹² the manmade levees, and what little remained of the natural coast, and the hurricane is recorded as one of the most devastating natural disasters in United States history.¹³

Emergency response agencies were not alone in predicting a disaster like Hurricane Katrina, as the legal community has struggled before with issues of takings and the increased susceptibility of coastlines to natural disasters. The Fifth Amendment of the United States Constitution provides, “nor shall private property be taken for public use, without just compensation.”¹⁴ In 1992, the United States Supreme Court decided in *Lucas v. South Carolina Coastal Council*¹⁵ that when a regulation deprives a property owner of “all economically viable use” of his land, the government is obligated to compensate the owner for his land.¹⁶ However, both Justices Blackmun and Stevens dissented in *Lucas*, arguing that regulations promulgated to protect the

6. *Id.* at 13.

7. Roger Cohen, *Katrina's Scars Still Etch the Face of New Orleans*, N.Y. TIMES, April 6, 2007, at A01.

8. Scott Shane and Eric Lipton, *Storm and Crisis: Federal Response; Government Flood Risk but not Levee Failure*, N.Y. TIMES, Sept. 2, 2005, at A01.

9. *Id.* A July 2004 Hurricane Pam drill coordinated by federal, state and local officials PREDICTED 10-15 feet of water in the city and the evacuation of one million people.

10. *Huge Quake Spawns Tremors and Tsunamis in Southeast Asia*, N.Y. TIMES, Dec. 26, 2004, at A25. On December 26, 2004, a huge underwater earthquake of a 9.0 magnitude spurred tidal waves in the Indian Ocean. *Latest Earthquakes*, United States Geological Survey (USGS), Earthquake Hazards Program, <http://earthquake.usgs.gov/recenteqsww/Quakes/usslav.htm>). This tsunami caused 212,611 deaths and 166,320 of those killed were from Indonesia alone. CNN.com—Tsunami deaths soar past 212,000, <http://www.cnn.com/2005/WORLD/asiapcf/01/19/asia.tsunami/> (last updated Jan. 19, 2005).

11. Shane, *supra* note 8.

12. *Id.*

13. KNABB, *supra* note 2, at 1.

14. U.S. CONST. amend. V.

15. 505 U.S. 1003 (1992).

16. *Lucas*, 505 U.S. at 1025.

general public welfare do not require the government to compensate the property owner whose land is affected by the regulations.¹⁷

Fifteen years after *Lucas*, a brutal season of powerful hurricanes has shed light on the imminent need for environmental regulation restricting coastal development in order to preserve the natural coastlines, especially in the hurricane-prone areas of the Gulf and Florida Coasts. An average of three major hurricanes every five years make landfall somewhere along the U.S. Gulf or Atlantic Coasts and six large-scale hurricanes struck there in 2004 and 2005.¹⁸ Together these storms caused more than 1,400 deaths and more than \$100 billion in insured losses.¹⁹ Insured property losses resulting from Hurricane Katrina alone are estimated at between \$20 billion and \$60 billion.²⁰

Despite the threat of such destructive hurricanes, coastal development in the U.S. continues to accelerate as residents and businesses flock to sunny beaches.²¹ Additionally, the lure of oil and gas resources along the Gulf Coast have drawn industrial developers to the area and have contributed to the region's erosion.²² Not only does coastal development place residents in increased danger during hurricanes, but the waterfront development often destroys natural environmental protections, like barrier islands, wetlands, and dunes, which help to mitigate hurricane damage farther inland. By permitting and, in some cases, encouraging property owners to build on vulnerable coastlines, the government is effectively placing those individuals' safety squarely in the eye of the storm.

This comment will discuss how the recent havoc wreaked on the Gulf Coast by Hurricane Katrina has validated the *Lucas* dissenters' arguments: the government should have the authority to regulate coastal development for environmental protection without the characterization of such regulation as a Fifth Amendment "taking" of private property. In the wake of a tumultuous hurricane season, the worst in recorded

17. *Lucas*, 505 U.S. 1003 (1992) (Blackmun, J., dissenting and Stevens, J., dissenting).

18. Hurricanes Charley, Frances, Ivan and Jeanne hit the Gulf and Atlantic Coasts in 2004 and Hurricanes Katrina, Rita and Wilma struck there again in 2005.

19. Haya El Nasser, *Storms don't deter N.C. coastal residents*, USA TODAY, Oct. 21, 2005, at 4A [hereinafter El Nasser, *Storms*].

20. KNABB, *supra* note 2, at 12. The American Insurance Services Group (AISG) estimates \$38.1 billion insured losses resulting from Hurricane Katrina. A preliminary approximation of Katrina's total damage cost is roughly twice this AISG figure, or about \$75 billion. This total damage figure would easily rank Katrina as the costliest hurricane in U.S. history.

21. Haya El Nasser and Paul Overberg, *Despite storms, coasts fill up*, USA TODAY, Oct. 21, 2005, at 1A [hereinafter El Nasser, *Coasts fill up*].

22. Julie Cart and Kenneth R. Weiss, *Hurricane Destroys Last of Nature's Speed Bumps*, L.A. TIMES, Sept. 4, 2005, at A23.

history,²³ debates are raging over how to properly rebuild the Gulf Coast region. Proposed solutions range from high-tech superlevees to restoration of wetlands and dunes.²⁴ A simpler suggestion is best: enact legislation restricting rebuilding on the most damaged and vulnerable coastlines, especially those where wetlands and dunes continue to exist. After restoring damaged wetlands, barrier islands and dunes, protect those areas and allow nature take its course. Without the authorization to regulate coastal development and preserve these natural buffer zones, the government is powerless to combat the continued annihilation of America's coastlines. Regulation of coastal development that seeks to prevent further degradation of coastlines and consequently affects private property should not be coined a compensable taking because such regulation aims to enhance the overall protection of the public from ferocious natural disasters.

Part II of this comment will discuss the importance of the natural environment in mitigating hurricane damage and will highlight the stunning decline in the amount of barrier islands, wetlands, and dunes in existence along America's coastlines, due largely to commercial and residential development. Part III will introduce the regulatory takings doctrine and will summarize key pre-*Lucas* Supreme Court decisions involving regulatory takings. Part III will also outline the facts, procedural history and decision of the Supreme Court in *Lucas*. Part IV will analyze the arguments of the *Lucas* dissenters, Justices Blackmun and Stevens. Part V will discuss these arguments in the aftermath of Hurricane Katrina, noting how the storm's sabotage has effectively validated them. Part V will further analyze the economic impact of allowing coastal development to erase natural buffer zones, considering the enormous costs related to hurricane clean-up and will address the continued obliteration of environmental protections along the Atlantic and Gulf Coasts, caused by development in hurricane-prone regions. This comment will conclude by discussing the future of regulatory takings in the overall scope of environmental law, offering potential solutions to preventing further large-scale hurricane damage.

II. The Plague of Development

Coastal development greatly contributes to the collective damage a hurricane causes to a community. Section A will discuss coastal

23. Press Release, National Oceanic & Atmospheric Administration (NOAA), U.S. Department of Commerce, NOAA Reviews Record-Setting 2005 Atlantic Hurricane Season (Nov. 29, 2005), available at <http://www.publicaffairs.noaa.gov/releases2005/nov05/noaa05-141.html>.

24. William J. Broad, *High-Tech Flood Control, With Nature's Help*, N.Y. TIMES, Sept. 6, 2005, at F01.

development's obliteration of natural buffer zones made of barrier islands, wetlands and dunes, noting the essential roles these buffers play in mitigating hurricane damage and the increased damage caused when the buffer zones are replaced with residential and commercial buildings and attractions. Section B will note the inadequacy of the manmade replacements for these buffer zones, highlighting the many failures of levees and floodgates, failures made devastatingly apparent during Hurricane Katrina. Section C will analyze the overdevelopment of America's coasts and will discuss the heightened vulnerability of inland areas as development continues to erase natural buffer zones. Section C will also note the economic and social impact of hurricane damage, which may have been avoided absent such coastal development.

A. *The Degradation of Natural Buffer Zones*

Coastal development has led to the degradation of natural buffer zones that protect inland areas during natural disasters like hurricanes.²⁵ These buffer zones usually consist of barrier islands, wetlands and dunes which act as a "first line of defense" during coastal storms.²⁶

1. Barrier Islands

Barrier islands are long, narrow strips of sand²⁷ that exist on all coastlines, but which are found largely along the Gulf of Mexico and Atlantic Coasts.²⁸ These islands protect inland areas from the force of wind and waves produced during hurricanes.²⁹ Damage to barrier islands usually occurs from human interference.³⁰ The ability of natural coastlines to withstand hurricanes is far better than that of developed coastlines congested with physical structures.³¹

Along the Louisiana coast, barrier islands provide the region's initial protection against waves and storm surges during hurricanes.³²

25. Quarto, *supra* note 1.

26. Traci Watson and Tom Kenworth, *Development, nature eroded region's defenses*, USA TODAY, Aug. 30, 2005, at 3A.

27. *The Fragile Fringe: A Guide for Teaching About Coastal Wetlands—Barrier Islands as Part of and Protection for the Wetlands*, United States Geological Survey (USGS), National Wetlands Research Center, Biological Resources, available at <http://www.nwrc.usgs.gov/fringe/barriers.html> (last modified Oct. 20, 2003).

28. *Id.*

29. Watson, *supra* note 26.

30. Cornelia Dean, *From the Air, Scientists Comb a Ruined Coastline for Clues and Lessons*, N.Y. TIMES, Sept. 6, 2005, at F01 [hereinafter Dean, *From the Air*].

31. *Id.*

32. Cornelia Dean and Andrew C. Revkin, *After Centuries of 'Controlling' Land, Gulf Residents Learn Who's Really the Boss*, N.Y. TIMES, Aug. 30, 2005, at A14; Cart, *supra* note 22.

Before Hurricane Katrina struck, barrier islands along Louisiana's coast were disappearing at rates of up to 100 feet per year.³³ In Katrina's aftermath, coastal experts noted the important role Louisiana's barrier islands played in blocking huge ocean waves, thereby preventing even greater damage to the region.³⁴ The Louisiana barrier islands are eroding so rapidly that according to some estimates, they will vanish by the end of this century.³⁵

Development on barrier islands has led to their destruction. Absent such coastal development, barrier islands in their natural forms are regenerated during hurricanes, when sand washes toward the back of the islands, preventing both coastal and inland property damage.³⁶ These "natural shorelines" fare far better in hurricanes than developed shorelines, where the sand is pushed out from under homes, sliding foundations out from beachfront property.³⁷

2. Wetlands and Dunes

Wetlands and dunes are two types of environmental protections credited with shielding property and residents from the effects of high-intensity storms.

a. The Benefits of Wetlands

Wetlands are transitional areas located between particular bodies of water and dry land³⁸ where water covers the soil.³⁹ Wetlands function like natural sponges by storing water and slowly releasing it⁴⁰ and they act as a "speed bump" for storms.⁴¹ When bodies of water overflow,

33. *Louisiana's Barrier Islands: A Vanishing Resource*, USGS, Marine and Coastal Geology Program, USGS Fact Sheet, available at <http://marine.usgs.gov/marine/fact-sheets/Barrier/index.html> (last modified Nov. 3, 1995).

34. Cart, *supra* note 22.

35. *Louisiana Barrier Islands*, *supra* note 33.

36. Dean, *From the Air*, *supra* note 30.

37. *Id.*

38. See Richard C. Ausness, *Regulatory Takings and Wetland Protection in the Post-Lucas Era*, 30 LAND & WATER L. REV. 349, 352 (1995). See also Lee E. Caplin, *Is Congress Protecting Our Water? The Controversy over Section 404, Federal Water Pollution Control Act Amendments of 1972*, 31 U. MIAMI L. REV. 445, 455 (1977).

39. EPA > Wetlands > America's Wetlands: Our Vital Link, *What are Wetlands?*, available at <http://www.epa.gov/owow/wetlands/vital/what.html> (last modified Mar. 23, 2005).

40. Wetlands Fact Sheet, United States Environmental Protection Agency (EPA), Office of Wetlands, Oceans and Watersheds (Sept. 2001) [hereinafter 2001 Wetlands Fact Sheet].

41. Wetlands erosion raises hurricane risks—Science—MSNBC.com, <http://www.msnbc.msn.com/id/9118570/> (last modified Aug. 29, 2005).

wetlands help to slow the resulting flood waters.⁴² One acre of wetland can store up to 1.5 million gallons of floodwater.⁴³ For every 2.7 miles of wetlands, storm surges are reduced by about one foot.⁴⁴ In the deadliest recorded hurricanes in U.S. history, high death totals were primarily a result of hurricane storm surges of ten feet or greater.⁴⁵ In the United States, storm surge is blamed for ninety percent of hurricane-related deaths.⁴⁶ A majority of Hurricane Katrina deaths in Louisiana were directly caused by floods that were induced by storm surges.⁴⁷

The ability of wetlands to control flood waters also provides economic benefits through avoidance of costs related to flood cleanup.⁴⁸ In 2004 alone, Hurricanes Charley and Ivan caused nearly \$30 billion in damage along the Alabama and Florida coasts.⁴⁹ Hurricane Andrew, which slammed into the coasts of southeastern Florida and Louisiana in 1992, still ranks as the costliest hurricane ever to hit the U.S., causing more than \$43 billion in damage⁵⁰ even though the loss of life (twenty-six people were killed by the storm⁵¹) was far less than that caused by Hurricane Katrina. Total damage estimates from Hurricane Katrina may propel the storm past Hurricane Andrew as the costliest in American history, with approximations of \$75 billion in damage.⁵²

Wetlands alleviate property damage and reduce human casualties during floods by slowing flood waters and decreasing the height of storm surges.⁵³ For example, the preservation of wetlands along the Charles

42. Wetlands Fact Sheet, EPA Office of Wetlands, Oceans and Watershed, (Dec. 2004) [hereinafter 2004 Wetlands Fact Sheet].

43. 2001 Wetlands Fact Sheet, *supra* note 40.

44. Wetlands erosion, *supra* note 41.

45. Eric. S. Blake, Jerry D. Jarrell, Edward N. Rappaport, and Christopher W. Landsea, *The Deadliest, Costliest and Most Intense United States Hurricanes from 1851 to 2004 (and Other Frequently Requested Hurricane Facts)*, NOAA, Technical Memorandum NWS TPC 4 (August 2005), available at http://www.nhc.noaa.gov/Deadliest_Costliest.shtml.

46. Edward N. Rappaport and Jose Fernandez-Partagas, *The Deadliest Atlantic Tropical Cyclones, 1492-1996*, NOAA, Technical Memorandum NWS NHC 47 (May 28, 2005), available at <http://www.nhc.noaa.gov/pastdeadly.shtml> (last visited Nov. 2, 2005).

47. KNABB, *supra* note 2, at 11 (noting that Katrina provides “a grim reminder that storm surge poses the greatest potential cause for large loss of life in a single hurricane in this country”). The remainder of deaths directly resulting from Katrina in Louisiana may also be attributed to the miserable after effects of these storm surge-induced floods in New Orleans and the surrounding area.

48. 2001 Wetlands Fact Sheet, *supra* note 40.

49. Blake, *supra* note 45.

50. *Id.*

51. Katrina Joins List of 10 Deadliest U.S. Disasters—Live Science, http://www.livescience.com/forcesofnature/ap_050914_worst_disasters.html (last updated Sept. 10, 2005).

52. See KNABB, *supra* note 21 (discussing projected total costs of Hurricane Katrina).

53. 2004 Wetlands Fact Sheet, *supra* note 42.

River in Boston, Massachusetts saved the state \$17 million in potential flood damage.⁵⁴ Therefore, the financial losses that would have been saved if additional wetlands were preserved along the Gulf Coast may similarly have reached into millions of dollars.

b. Where Have All the Wetlands Gone?

Scientists estimate that more than half of the wetlands in the original 48 states have been destroyed.⁵⁵ Wetlands remain under brutal attack. Nationwide, nearly 300,000 acres are disappearing each year, due largely to agricultural and urban development.⁵⁶ The United States loses approximately 60,000 acres of wetlands each year.⁵⁷ In the last 75 years, in the Louisiana coastal areas alone, a total of 1,900 square miles of marsh has been lost⁵⁸—enough wetlands to cover the state of Delaware.⁵⁹

c. Wetlands Loss Increases Hurricane Damage

Where natural wetlands are removed or destroyed by development, the coastal zones and their surrounding communities become exposed and extremely vulnerable.⁶⁰ The loss of wetlands aggravates flood damage by increasing the amount and velocity of downstream flow.⁶¹ In Katrina's wake, scientists noted that had coastal Louisiana consisted of fully preserved barrier islands and wetlands, the storm's momentum would have been slowed.⁶² When Katrina hit the coast, it carried storm surges of 20 to 25 feet⁶³ which presumably would have been slowed by

54. 2001 Wetlands Fact Sheet, *supra* note 40 (study by U.S. Army Corps of Engineers).

55. Wetlands Fact Sheet 11, EPA Office of Wetlands, Oceans and Watershed (1995).

56. ROBERT V. PERCIVAL, ET AL., ENVIRONMENTAL REGULATION: LAW, SCIENCE AND POLICY 674 (4th ed. 2003).

57. 2004 Wetlands Fact Sheet, *supra* note 42.

58. Cornelia Dean, *Hard Choices Seen in Efforts to Help Louisiana Wetlands*, N.Y. TIMES, Nov. 10, 2005, at A21 (study by U.S. Geological Survey). Louisiana's wetland loss was estimated at 40 square miles a year; the state currently loses between 12 and 20 square miles annually. *Id.* The Geological Survey estimates that if this course of wetlands destruction continues, an additional 700 square miles will disappear by 2050. Cornelia Dean, *Louisiana's Marshes Fight for Their Lives*, N.Y. TIMES, Nov. 15, 2005, at F01 [hereinafter Dean, *Louisiana's Marshes*].

59. Watson, *supra* note 26.

60. Wetlands erosion, *supra* note 41.

61. See Wetlands of the United States: Current Status and Recent Trends 21, United States Fish and Wildlife Service, (1984). See also S. Wesley Woolf & James E. Kundell, *Georgia's Wetlands: Values, Trends, and Legal Status*, 41 MERCER L. REV. 791, 796 (1990).

62. Cart, *supra* note 22.

63. *Id.*

pre-development era Louisiana wetlands.⁶⁴

The lack of adequate protection from natural buffer zones contributed to Hurricane Katrina's destruction. In the western end of Dauphin Island, a fifteen-mile barrier island at the mouth of Mobile Bay in Alabama, property damage caused by the hurricane was significantly worse than in the eastern side of the island, as no protective dunes existed on the western end to shield homes from storm waters.⁶⁵ Similarly, without 20,000 acres of wetlands preserved in a wildlife refuge on the eastern side of New Orleans, hurricane damage to that side of the city may have been far more severe.⁶⁶ Some of the remaining wetlands along the Gulf Coast also sustained damage during the 2005 hurricane season⁶⁷—Hurricanes Katrina and Rita are credited with transforming 100 square miles of marsh into open water in southeastern Louisiana.⁶⁸

d. Dunes Offer Additional Protection

The loss of valuable dunes along the Gulf Coast could have shielded many of Hurricane Katrina's victims. Dunes are low hills of drifted sand found in coastal areas.⁶⁹ The elimination of many dunes along high-risk Mississippi coastal areas is credited to a surge of recreational development of casinos and other buildings overpopulating the coast.⁷⁰ These dunes may have protected inland residents from the wrath of Katrina by slowing the storm's flood waters.⁷¹

B. *Natural Buffer Zones are Inadequately Replaced by Levees and Floodgates*

Levees, man's replacement for natural buffer zones, not only fail to protect residents during hurricanes but also contribute to the loss of wetlands.

64. *See id.*

65. Dean, *From the Air*, *supra* note 30.

66. Craig E. Colten, Editorial, *How to Rebuild New Orleans; Restore the Marsh*, N.Y. TIMES, Sept. 10, 2005, A17.

67. Press Release, United States Geological Survey, USGS Reports Preliminary Wetland Loss Estimates for Southeastern Louisiana from Hurricanes Katrina and Rita, Nov. 1, 2005, available at http://www.usgs.gov/newsroom/article_pf.asp?ID=1409 (preliminary reports from September and October 2005 satellite images of Southeastern Louisiana).

68. *Id.*

69. *Fragile Fringe*, *supra* note 27.

70. Watson, *supra* note 26.

71. *Id.*

1. Levees Don't Get the Job Done

Attempts to protect the Gulf Coast from hurricanes by replacing natural protections with man-made technology has not proven successful in a region which for years has been marked as a prime target for hurricanes.⁷² When barrier islands, wetlands, or dunes are eliminated or severely degraded by coastal development, they are often replaced with man-made flood control systems, like levees and floodgates.⁷³

Levees are natural or artificial embankments,⁷⁴ which attempt to offer flood protection during seasonal storms and hurricanes.⁷⁵ However, despite even superior engineering and maintenance, a system of levees, floodgates, and seawalls, like most man-made protections, is destined for sporadic failures.⁷⁶ The breach of levees along New Orleans' canals days after the brunt of Hurricane Katrina caused much of the flooding, sending surging seawaters "[shooting] like a bullet"⁷⁷ down the Gulf Intercoastal Waterway, emptying into the city and filling it like a bowl.⁷⁸ The government acknowledged that it never anticipated a breach of the levees in New Orleans.⁷⁹ This \$458 million flood-protection system,⁸⁰ installed to protect New Orleans in the event of such a natural disaster, was constructed to withstand a Category 3 hurricane,⁸¹ yet when Hurricane Katrina made landfall as a Category 3 storm⁸² it overwhelmed the levees, flooding the city.⁸³ In fact, it is estimated that levees along two New Orleans canals breached even before the eye of Hurricane Katrina hit land,⁸⁴ a testament to the unreliability of levees in high-intensity storms. Simply stated, levees do not possess the wave-reducing

72. See Quarto, *supra* note 1; Broad, *supra* note 24.

73. Broad, *supra* note 24.

74. Levee—Wikipedia, the free encyclopedia, <http://en.wikipedia.org/wiki/Levee> (last modified Jan. 20, 2006).

75. Levees—U.S. Army Corps of Engineers, <http://www.mvm.usace.army.mil/floodcontrol/Levees/levees.htm> (last modified July 12, 2005).

76. Broad, *supra* note 24.

77. Michael Oneal, *Still in harm's way*, CHI. TRIB., Dec. 15, 2005, at C01.

78. Michael Grunwald and Susan B. Glasser, *Experts Say Faulty Levees Caused Much of Flooding*, WASH. POST, Sept. 21, 2005, at A01.

79. Shane, *supra* note 8.

80. John Schwartz, *Malfesance Might Have Hurt Levees, Engineers Say*, N.Y. Times, Nov. 3, 2005, at A22.

81. Michael Powell and Michael Grunwald, *The Lure of Coastal Life Outweighs the Risks*, WASH. POST, Sept. 7, 2005, at A01.

82. KNABB, *supra* note 2.

83. Oneal, *supra* note 77.

84. KNABB, *supra* note 2, at 9. Breaches along both the 17th Street Canal northwest of downtown New Orleans and the Industrial Canal east of downtown appeared to have occurred in the early morning of August 29, 2005. *Id.* The eye of Hurricane Katrina reportedly made landfall near the Louisiana/Mississippi border at 12:45 p.m. that same day. *Id.* at 18.

capacity of wetlands.⁸⁵

2. Levees Actually Contribute to Wetland Loss

Ironically, a large portion of lost wetlands in Louisiana can be attributed to the New Orleans levee system.⁸⁶ The very technology that the city hoped would protect it from hurricane flooding in fact worked against it and contributed to the decay of nearby wetlands.⁸⁷ Because levees prevent occasional flooding, they also prevent the addition of sediment to the marshes.⁸⁸ Without regular flooding, wetlands have no fresh nutrients or new water and they die.⁸⁹ Consequently, the levees are a key factor in the disappearance of Louisiana's wetlands.⁹⁰

In addition, the channelization of the Mississippi River into the Gulf of Mexico has only contributed to Louisiana's vulnerability to hurricane damage.⁹¹ The Mississippi River used to deposit large amounts of sediment that built up the Delta as the water reached the ocean.⁹² However, the re-channeling of the Mississippi River caused the silt to be carried out to the Gulf of Mexico.⁹³ As a result of this channelization and removal of silt from the Delta, Louisiana is currently losing 25 square miles of its coastline each year.⁹⁴ The channelization of the Mississippi River also harmed wetlands. When the river flowed naturally, regular floods carried silt into the marshes, maintaining their elevation.⁹⁵

C. Coastal Development Not Slowing

America's coasts are dangerously overpopulated. Coastal counties along the Atlantic and Pacific Oceans and the Gulf of Mexico account for only 11% of the total number of counties in the United States,⁹⁶ yet, according to the United States Census Bureau, 87 million people, nearly

85. Quarto, *supra* note 1.

86. Wetlands erosion, *supra* note 41.

87. *Id.*

88. Robert S. Young and David M. Bush, *Forced Marsh*, N.Y. TIMES, Sept. 27, 2005, at A25.

89. Wetlands erosion, *supra* note 41.

90. Young, *supra* note 88.

91. Juliet Eilperin, *Shrinking La. Coastline Contributes To Flooding*, WASH. POST, Aug. 30, 2005, at A07.

92. *Id.*

93. *Id.*

94. *Id.*

95. Dean, *Louisiana's Marshes*, *supra* note 58.

96. Bryan J. Boruff, Christopher Emrich and Susan L. Cutter, *Erosion Hazard Vulnerability of U.S. Coastal Counties*, J. COAST. RESEARCH, Vol. 21, Issue 5, 932-42 (Sept. 2005).

one-third of the nation's population, live on or near the Atlantic or Gulf Coasts.⁹⁷ Since 2000, the number of residents in the 169 counties along the Atlantic and Gulf Coasts has increased by more than two million.⁹⁸ In Florida, more than 13 million people live in coastal counties, as compared to only 200,000 people a century ago.⁹⁹ About 3,600 Americans move to the coast each day.¹⁰⁰ A 2000 Federal Emergency Management Agency report to Congress found that nearly a quarter of the houses built within 500 feet of U.S. coasts may be washed out by coastal erosion by the year 2060.¹⁰¹

Scientists and environmentalists alike have long cautioned that the nation's coastline is perilously overbuilt.¹⁰² Remarkably, after devastating hurricanes, the clearing of debris often prompts large-scale urban-renewal projects in which flattened houses are replaced by bigger ones.¹⁰³ These new homes lack the protection of dunes that eroded during the hurricane.¹⁰⁴ Even advocates of coastal development are suggesting a retreat from the coast for lack of protection available to residents during storms.¹⁰⁵ The economic effect of coastal development and hurricanes is disturbing. From 1990 to 2000, 18% of the nation's economic losses from natural disasters (over \$14 billion) took place in the country's coastal counties.¹⁰⁶

III. Background

Efforts to preserve natural coastlines have repeatedly incurred resistance from private property owners seeking to maintain their personal uses of their beachfront land. Section A will discuss the Takings Clause of the Fifth Amendment and will map the Supreme Court's progression of its takings jurisprudence, summarizing key regulatory takings cases decided prior to *Lucas*. Section B will introduce the *Lucas* decision, providing the factual background, procedural history and the Supreme Court's decision of the case.

97. Cornelia Dean, *Some Experts Say It's Time to Evacuate the Coast (for Good)*, N.Y. TIMES, Oct. 4, 2005, at F04 [hereinafter Dean, *Evacuate the Coast*].

98. El Nasser, *Coasts fill up*, *supra* note 21. The current number of residents in those coastal counties is 44.3 million.

99. Powell *supra* note 81.

100. Dean, *Evacuate the Coast*, *supra* note 97.

101. See Dean, *Evacuate the Coast*, *supra* note 97; El Nasser, *Storms*, *supra* note 19; Blake, *supra* note 45.

102. Powell, *supra* note 81.

103. Young, *supra* note 88.

104. *Id.*

105. Cornelia Dean, *The Nation: The Coast; Imagine 20 Years of This*, N.Y. TIMES, Sept. 25, 2005, at F04.

106. Boruff, *supra* note 96.

A. *The Takings Clause and Pre-Lucas Decisions*

1. The Takings Clause

The Fifth Amendment to the United States Constitution (through the “Takings Clause”) requires that the government compensate any property owners when their land is taken for public use.¹⁰⁷ Traditionally, physical invasions of private land by the government are obvious takings. Despite the apparent clarity of the Takings Clause, the application of this language has not proven an easy task for the Supreme Court.¹⁰⁸

2. *Pre-Lucas* Regulatory Takings Cases

Government regulation, too, can constitute a taking when it restricts a property owner’s ability to use his land in a manner he desires. The Supreme Court handed down its first decision on the regulatory takings doctrine in *Mugler v. Kansas*, where it held that a state is not required to compensate a landowner for restrictions on property when the government is exercising its police power to prohibit “noxious uses,” uses of property that are analogous to public nuisances.¹⁰⁹

The Supreme Court broke ground in *Pennsylvania Coal v. Mahon*,¹¹⁰ the first case in which the Court held that the government must compensate property owners when regulations unreasonably restrict the use of their property.¹¹¹ The Court held that Pennsylvania was required to compensate a coal company when a state statute prohibited the mining of anthracite coal in residential areas in order to protect

107. U.S. CONST. amend. V. (“nor shall private property be taken for public use, without just compensation.”).

108. See Hope M. Babcock, Article: *Has the U.S. Supreme Court Finally Drained the Swamp of Takings Jurisprudence? The Impact of Lucas v. South Carolina Coastal Council on Wetlands and Coastal Barrier Beaches*, 19 HARV. ENVTL. L. REV. 1, 1 (1995). For additional remarks of the Court’s struggle in *Lucas*, see Hope M. Babcock, *Should Lucas v. South Carolina Coastal Council Protect Where the Wild Things Are?*, 85 IOWA L. REV. 849 (2000) (arguing that the *Lucas* Court failed in aiming to simplify “the judicial task of resolving . . . land use disputes”); Brian D. Lee, *Fifth Amendment—Regulatory Takings Depriving All Economically Viable Use of a Property Owner’s Land Require Just Compensation Unless the Government Can Identify Common Law Nuisance or Property Principles Furthered by the Regulation—Lucas v. South Carolina Coastal Council*, 112 S.Ct. 2886 (1992), 23 SETON HALL L. REV. 1840 (1993) (arguing that the Court’s analysis of the Fifth Amendment has created one of the most disordered areas of the Supreme Court’s jurisprudence).

109. 123 U.S. 623, 672-75 (1887).

110. 260 U.S. 393 (1922).

111. *Id.* at 422; see Patrick Kennedy, Comment: *The United States Claims Court: A Safe “Harbor” from Government Regulation of Privately Owned Wetlands*, 9 PACE ENVTL. L. REV. 723, 726 (1992).

overlying structures.¹¹² The Court in *Mahon* also held that while the government may regulate private property to a certain extent, it would be required to compensate property owners when regulations went “too far.”¹¹³ This approach came to be known as the diminution-in-value test.¹¹⁴

Next, in *Euclid v. Ambler Realty Co.*,¹¹⁵ the Court addressed a landowner’s claim that his property had been taken through a municipal zoning ordinance that imposed building restrictions on his land. The Court held that this ordinance was a valid exercise of the municipality’s authority and no compensation was due to the landowner.¹¹⁶

The Supreme Court employed a new approach to takings law in *Penn Central Transportation Co. v. New York City*,¹¹⁷ identifying three factors to be considered in analyzing a takings claim: 1) the character of the governmental action, 2) the regulation’s interference with reasonable investment-backed expectations, and 3) the regulation’s economic impact on the property owner.¹¹⁸ This method balances the public’s interest, found in the rationale of the regulation restricting the property owner’s rights, against the private property owner’s interests.¹¹⁹ After balancing these factors in light of the regulation in dispute (a law preserving Grand Central Station as a city landmark)¹²⁰, the *Penn Central* Court held that the City had not taken the plaintiffs’ property and no compensation was due.¹²¹

Two years after *Penn Central*, the Supreme Court created yet

112. *Mahon*, 260 U.S. at 408, 421.

113. *Mahon*, 260 U.S. at 415. “While property may be regulated to a certain extent, if the regulation goes too far it will be recognized as a taking.”

114. See Ausness, *supra* note 38, at 370. The concept of when a regulation goes “too far” prompted considerable confusion among courts confronted with disputes involving regulatory takings. See Hope M. Babcock, Article: *Has the U.S. Supreme Court Finally Drained the Swamp of Takings Jurisprudence? The Impact of Lucas v. South Carolina Coastal Council on Wetlands and Coastal Barrier Beaches*, 19 HARV. ENVTL. L. REV. 1, 10 (1995) (naming *Mahon* the most controversial of the three keystone cases of the modern takings doctrine). Even Justice Scalia, writing for the majority in *Lucas*, acknowledged that the *Mahon* decision “offered little insight under what circumstances . . . a regulation would be seen as going ‘too far’ for purposes of the Fifth Amendment.” *Lucas*, 505 U.S. at 1015. Justice Scalia further noted that the Court had essentially avoided providing a clear test in approximately 70 years of regulatory takings cases. See *id.*

115. 272 U.S. 365 (1926).

116. *Euclid*, 272 U.S. at 397.

117. 438 U.S. 104 (1978).

118. *Penn Central*, 438 U.S. at 124.

119. See Kerry T. Scarlott, Note: *Federal Regulation of Wetlands and the Public Nuisance Exception to the Takings Clause: The Case for Insulating Wetlands Against Regulatory Takings Challenges*, 54 U. PITT. L. REV. 917, 919 (1993).

120. *Penn Central*, 438 U.S. at 108-09.

121. *Id.* at 138.

another method for evaluating takings claims in *Agins v. City of Tiburon*,¹²² moving away from a balancing approach.¹²³ Under the *Agins* formula, a taking exists if a court finds that the regulation: (1) does not substantially advance a legitimate state interest, or (2) deprives the landowner of all economically viable use of his or her property.¹²⁴ The Court in *Agins* concluded that a local ordinance limiting the number of residential dwellings that could be constructed on plaintiffs' five-acre tract of land satisfied the first prong of the formula, as it substantially advanced the legitimate governmental goal of protecting the public against overpopulation from urbanization.¹²⁵

B. *The Lucas Decision*

After a line of muddled case law, the regulatory takings doctrine appeared to be headed for clarity in 1992 when the Supreme Court agreed to hear *Lucas v. South Carolina Coastal Council*.¹²⁶ However, the decision handed down by the majority was not the type hoped for by environmentalists. Subsection 1 will discuss the Beachfront Management Act, the regulation at issue in *Lucas*. Subsections 2 and 3 will outline the procedural history of the case, and Subsection 4 will analyze the majority's holding.

1. The Beachfront Management Act

Congress enacted the Coastal Zone Management Act of 1972 (CZMA)¹²⁷ in an effort to encourage states to adopt plans to preserve steadily eroding coastal areas.¹²⁸ South Carolina enacted its own version of the CZMA in 1977.¹²⁹ The South Carolina CZMA required property owners of coastal land qualifying as a "critical area"¹³⁰ to obtain permits from the South Carolina Coastal Council before making any changes to the physical landscape of the property.¹³¹

In 1986, developer David Lucas purchased two beachfront lots on

122. 447 U.S. 255 (1980).

123. See Ausness, *supra* note 38. See also Ann T. Kadlec, Note, *The Effects of Lucas v. South Carolina Coastal Council on the Law of Regulatory Takings*, 68 WASH. L. REV. 415, 419-20 (1993).

124. *Id.* at 260.

125. *Id.* at 261.

126. 505 U.S. 1003 (1992).

127. 28 U.S.C. § 1451 (1972).

128. PERCIVAL, *supra* note 49?

129. South Carolina Coastal Zone Management Act of 1977, S.C. CODE ANN. §§ 48-39-10 – 48-39-36 (Supp. 1991).

130. S.C. CODE ANN. § 48-39-10(J) (Supp. 1991). The South Carolina CZMA defined "critical area" to include beaches and immediately adjacent sand dunes.

131. S.C. CODE ANN. § 48-39-130(A).

the northern end of the Isle of Palms, a barrier island to the east of Charleston, South Carolina, at the price of \$975,000.¹³² When Lucas acquired this land, no building restrictions were placed upon it and the land was zoned for single family residential construction.¹³³ Lucas planned to build houses on the property but, in 1988, the South Carolina legislature halted his plans.¹³⁴ That year, the state legislature enacted the Beachfront Management Act (BMA),¹³⁵ which expanded upon the South Carolina CZMA and strengthened protections for the coast.¹³⁶ The BMA authorized the Coastal Council to establish a baseline that connected the points of erosion most landward in the Isle of the Palms.¹³⁷ After this baseline was drawn, all of Lucas' property was included in the enlarged critical area¹³⁸ and Lucas was barred from constructing any permanent structures on his lots.¹³⁹

2. Lucas Takes the Coastal Council to Court

Lucas took the issue to a state trial court and filed suit against the Coastal Council. He argued that the restrictions BMA imposed on his available property uses constituted a taking without just compensation in violation of the Fifth Amendment.¹⁴⁰ The trial court agreed and ruled in favor of Lucas,¹⁴¹ finding that the BMA's ban on development rendered Lucas' land "valueless" and constituted a Fifth Amendment taking.¹⁴²

3. South Carolina Supreme Court Reverses

The Coastal Council appealed and the South Carolina Supreme Court reversed.¹⁴³ The state supreme court applied the rationale used in a string of cases decided under the 1887 U.S. Supreme Court decision in *Mugler v. Kansas*: where a regulation is intended to prevent "harmful or noxious uses" of property that are comparable to public nuisances, no compensation is required under the Takings Clause.¹⁴⁴ The state Supreme Court stated that the *Mugler* standard disregards the effect of

132. *Lucas*, 505 U.S. at 1006.

133. *Id.* at 1006-08.

134. *Id.* at 1008.

135. S.C. CODE ANN. §§ 48-39-10 – 48-39-36 (Supp. 1991).

136. *Id.*

137. S.C. CODE ANN. § 48-39-280(A)(2) (Supp. 1991).

138. *Lucas*, 505 U.S. at 1008.

139. *Id.* at 1008 n.2.

140. *Lucas v. South Carolina Coastal Council*, 404 S.E.2d 895, 896 (S.C. 1991).

141. *Lucas*, 404 S.E. 2d at 896.

142. *Lucas*, 505 U.S. at 1009.

143. *Lucas*, 404 S.E.2d at 896.

144. *Id.* (citing *Mugler v. Kansas*, 123 U.S. 623 (1887)).

such regulation on the value of the property at issue.¹⁴⁵ The state supreme court noted that the BMA was “properly and validly designed to preserve” the coast of South Carolina.¹⁴⁶ The court concluded that because the BMA intended to prevent serious public harm, South Carolina had not committed a taking and Lucas was not owed any compensation under the Fifth Amendment.¹⁴⁷

4. U.S. Supreme Court Decision

In a decision written by Justice Scalia, a majority of the United States Supreme Court reversed the decision of the South Carolina Supreme Court.¹⁴⁸ The Court held that a property owner must be compensated when a regulation deprives that owner of “economically viable uses of his land” because such regulation constitutes a taking under the Fifth Amendment.¹⁴⁹ A regulation which denies the landowner such use requires that the government compensate the landowner unless the government is acting to enforce land use restrictions already in place by the state’s property law or to abate a common law nuisance.¹⁵⁰ The Supreme Court remanded the case to the state court to determine whether South Carolina’s BMA had effected a taking by prohibiting any permanent habitable structures in front of the setback line that completely encompassed Lucas’ property (and therefore entitling Lucas to compensation).¹⁵¹

IV. The *Lucas* Dissents

The dissents of the case offer insight into an avenue of relief particularly relevant in the post-Katrina world where the plight of Gulf Coast residents has awakened Americans to the necessities of hurricane protection. Both Justices Blackmun and Stevens support the proposition that regulation that seeks to protect the general public from significant harm should not be a compensable taking under the Fifth Amendment. Therefore, the arguments of the *Lucas* dissenters support a proposition that the government ought to be able to use environmental regulation to insulate the public from hurricane-related harm without such regulation constituting a compensable taking under the Fifth Amendment.

145. *Lucas*, 404 S.E.2d at 896.

146. *Id.*

147. *Id.*

148. *Lucas v. South Carolina Coastal Council*, 404 S.E. 2d 895 (S.C. 1991), *rev'd*, 505 U.S. 1003 (1992).

149. *Lucas*, 505 U.S. at 1029.

150. *Id.*

151. *Lucas*, 505 U.S. at 1031-32.

A. *The Dissent of Justice Blackmun*

In determining whether the government has committed a compensable taking, Justice Blackmun employed a test that asks whether the legislature has forwarded a harm-preventing justification for its regulation.¹⁵² Additionally, he noted the Court's consistent precedent of upholding regulations enacted to prevent a "significant threat to the common welfare," regardless of the economic effect of such regulations on the property owner.¹⁵³

In support of granting authority to the South Carolina legislature to regulate coastal development, Justice Blackmun emphasized the state's assertion that the prohibitions the BMA imposed on building in front of the setback line were necessary to protect residents and property from storms and erosion.¹⁵⁴ The Justice noted the importance of awarding a certain degree of deference to the legislature's determination that regulations affecting private property rights are intended for the protection of the public.¹⁵⁵ Because the BMA sought to prevent the harm to life and property that would be caused if no restrictions were placed on the coast, Justice Blackmun supported the decision of the South Carolina Supreme Court in finding no compensable taking of David Lucas' property.¹⁵⁶

B. *The Dissent of Justice Stevens*

In determining whether a regulation constitutes a compensable taking, Justice Stevens focused his dissenting argument on the generality of the regulation in question that restricts an individual's use of his private property.¹⁵⁷ The Justice states that the BMA is general because it "regulates the use of the coastline of the entire State" and therefore is not subject to the Takings Clause, which targets state actions directed at individuals.¹⁵⁸ Justice Stevens also predicted that the Court's ruling would hamper the efforts of state legislature's to protect coastal residents

152. *Lucas*, 505 U.S. at 1039, 1040-41, 1047-51 (Blackmun, J., dissenting).

153. *Id.* at 1040 (Blackmun, J., dissenting) (citing the line of cases running from *Mugler v. Kansas*, 123 U.S. 623 (1887) to *Euclid v. Ambler Realty Co.*, 272 U.S. 365 (1926) to *Goldblatt v. Hempstead*, 369 U.S. 590 (1962). "This Court repeatedly has recognized the ability of government, in certain circumstances, to regulate property without compensation no matter how adverse the financial effect on the owner may be." *Id.* (Blackmun, J., dissenting).

154. *Id.* (Blackmun, J., dissenting).

155. *Id.* at 1040-41 (Blackmun, J., dissenting).

156. *Id.* (Blackmun, J., dissenting).

157. *Id.* at 1072 (Stevens, J., dissenting).

158. *Id.* at 1074 (Stevens, J., dissenting).

by giving developers the go-ahead to ignore environmental regulation.¹⁵⁹

V. Analysis

Hurricane Katrina has validated the arguments of the *Lucas* dissenters. Unless the government is permitted to regulate coastal development for reasons other than abating a nuisance, hurricanes will continue to destroy lives and property.

A. *The Reality of Lucas in a Post-Katrina America*

Although at first glance the ramifications of the *Lucas* holding do not appear devastating for environmental regulation,¹⁶⁰ a consideration of Hurricane Katrina's aftermath alters this view. The hurricane flooded 80% of New Orleans, and left over 1300 people dead throughout the Gulf Coast region.¹⁶¹

Justice Blackmun rightly places the welfare and safety of the public ahead of the economic and property interests of the property owner. Due credit must be given to Justice Blackmun's faith in the determinations of an elected democratic government to enact legislation seeking to protect its constituents. This view of deference toward legislative findings as supporting rationale for regulations effecting private property rights has garnered criticism from both the *Lucas* majority and commentators.¹⁶² The majority in *Lucas* stated that a compensation requirement for coastal regulation of private property often possesses a risk that fear of serious harm to the public will eventually convert private property into a form of

159. *Id.* at 1075 n.5 (Stevens, J., dissenting) (citing Daniel A. Farber, *Economic Analysis and Just Compensation*, 12 INTL. REV. L. & ECON. 125 (1992). "The Court today effectively establishes a form of insurance against certain changes in land-use regulations. . . . In the face of uncertainty about changes in the law, developers will overinvest, safe in the knowledge that if the law changes adversely, they will be entitled to compensation."

160. See Babcock, *supra* note 108 (observing that the exceptions to the *Lucas* categorical regulatory takings rule far outweigh its prohibitions); Glenn P. Sugameli, *Takings Law Symposium: Lucas v. South Carolina Coastal Council: The Categorical and Other "Exceptions" to Liability for Fifth Amendment Takings of Private Property Far Outweigh the "Rule"*, 29 ENVTL. L. 939, 946 (1999) (arguing that few land use regulations, if any, actually deprive property owners of all economically viable uses of land; the regulations can be limited in scope to restrict only certain uses) [hereinafter Sugameli, *Takings*]; see also Jill Dickey Protos, Comment: *Lucas v. South Carolina Coastal Council: A Tremor on the Regulatory Takings Richter Scale*, 43 CASE W. RES. 651 (1993); Glenn P. Sugameli, *Takings Issues in Light of Lucas v. South Carolina Coastal Council: A Decision Full of Sound and Fury Signifying Nothing*, 12 VA. ENVTL. L.J. 439 (1993).

161. KNABB, *supra* note 2, at 10-11.

162. Richard A. Epstein, *The Seven Deadly Sins of Takings Law: The Dissents in Lucas v. South Carolina Coastal Council*, 26 LOY. L.A. L. REV. 955 (1993).

public service.¹⁶³ Here, the Court places its unfounded fear of the extinction of private property rights ahead of the lives of the American public, aiming to keep check on the legislature through a compensation requirement.

What the Court may not realize, though, is that such a compensation requirement may operate to hinder the government's responsibilities to its public. Few Americans can disregard the government's appallingly slow emergency relief and rescue efforts in the days immediately following Hurricane Katrina.¹⁶⁴ However, if the government were permitted to regulate coastal development in anticipation of natural disasters, such extensive relief efforts would not be necessary because the restored natural coasts would impede flooding. Additionally, as argued by Justice Blackmun, the judiciary may serve to police the legislation restricting coastal development to ensure the preservation of both private property rights and human lives.¹⁶⁵

B. The Economic Benefits of Regulating Coastal Development

Hurricane Katrina may likely be the costliest hurricane to ever strike the U.S.¹⁶⁶ Environmental regulation of coastal development presents a recurring problem: state and local governments value the revenue from the property taxes on hotels, casinos and lavish beachfront homes and this expected financial gain wins out over environmental protections. Clearly, the environmental degradation permitted through such development in exchange for economic gains has not resulted in a beneficial bargain for residents, for even high property taxes may never balance the extraordinary cleanup costs of hurricanes (which stretch into the billions). Unless coastal development is at least halted, if not reversed entirely, then hurricanes will continue to destroy property and claim thousands of lives. If the government is permitted to regulate coastal development to ensure that environmental protections along the Gulf and Atlantic Coasts remain and flourish, much of the hurricane damage could be avoided.

C. The Future of Takings and Environmental Regulation

The current composition of the Supreme Court may provide favorable outcomes to disputes over environmental regulations in the

163. *Lucas*, 505 U.S. at 1018.

164. *Officials' Memos After Storm Vividly Spell Out Their Fears*, N.Y. TIMES, Dec. 7, 2005, at A29 (noting that FEMA officials knew the agency's horribly inadequate hurricane response system had failed in the critical days following Hurricane Katrina).

165. *See Lucas*, 505 U.S. at 1047 (Blackmun, J., dissenting).

166. KNABB, *supra* note 2, at 1.

takings arena. The Court's most recent (and most controversial)¹⁶⁷ takings decision of *Kelo v. City of New London* expanded the Fifth Amendment's application to permit non-compensable takings of private property for the economic benefit of the public.¹⁶⁸ In the decision written by Justice Stevens (a *Lucas* dissenter),¹⁶⁹ the Court in *Kelo* held against seven homeowners in ruling that the city of New London, Connecticut could seize the homeowners' property to develop a hotel, convention center, office space and condominiums next to the new research headquarters of pharmaceutical giant Pfizer, Inc.¹⁷⁰ The court was persuaded by the city's argument that tax revenues and new jobs from the development would benefit the public.¹⁷¹

Because the Court agrees that the potential for increased economic productivity is sufficient to take private property, then the potential for saving human lives by preventing development in certain coastal areas should surely follow. In *Kelo*, the court broadened the phrase "public use" into "public benefit."¹⁷² Justice Kennedy sided with the majority in *Kelo* and also concurred in *Lucas*.¹⁷³ The *Lucas* concurrence of Justice Kennedy provides hope for environmentalists tackling takings issues.¹⁷⁴ Justice Kennedy stated:

The State should not be prevented from enacting new regulatory initiatives in response to changing conditions. . . . The Takings Clause does not require a static body of state property law. . . . Coastal property may present such unique concerns for a fragile land system that the State can go further in regulating its development and use than the common law of nuisance might permit.¹⁷⁵

This language is particularly relevant to regulation directed at the preservation of natural coasts in the wake of Hurricane Katrina. The Takings Clause should permit an evolution of the concept to empower governments to protect residents from such future damage.

D. *The Devastation Ahead*

The trend of ruthless hurricane seasons is predicted to continue in

167. Richard A. Epstein, *Supreme Folly*, WALL ST. J., June 27, 2005, at A14.

168. 125 S. Ct. 2655 (2005).

169. *Lucas*, 505 U.S. at 1047 (Stevens, J., dissenting).

170. *Id.* at 1048.

171. *Kelo*, 125 S. Ct. at 2677.

172. Epstein, *supra* note 167.

173. *Lucas*, 505 U.S. at 1032 (Kennedy, J., concurring in the judgment).

174. Sugameli, *Takings*, *supra* note 161, at 943 (suggesting Justice Kennedy's critical role in the Supreme Court's takings jurisprudence may lead to a narrow reading of the *Lucas* holding).

175. *Lucas*, 505 U.S. at 1035 (Kennedy, J., concurring in the judgment).

the years ahead¹⁷⁶ and requires swift governmental action to prevent any future destruction. Even three months after Hurricane Katrina, state, local, and federal agencies had yet to develop any sort of plan to shield New Orleans from a comparable storm.¹⁷⁷ The few plans the federal government has proposed focus not on preserving the natural coastline, but on reinforcing the failed manmade flood controls. The U.S. Army Corps of Engineers proposed a \$2 billion short-term solution to protect New Orleans by repairing the levees and installing floodwater pumps to lessen the strain on drainage canals.¹⁷⁸ However, scientists note that even the most dependable levee system will undoubtedly fail unless equivalent attention is given to reconstruction of Louisiana's eroded coastal wetlands and barrier islands.¹⁷⁹

The Bush Administration has done little to support the effort to replenish the natural coast, as the President has assured New Orleans' residents only that "we'll build higher and better."¹⁸⁰ A proposal which seeks to build "better" may suffice, but only in those areas not especially vulnerable to severe hurricane damage. In the very least, local building codes in the least vulnerable areas must be strengthened to provide for stronger structures that can sustain the most intense hurricanes imaginable. Building higher will do nothing but leave helpless residents stranded above flood waters awaiting impending death when the foundation of a poorly constructed high rise structure falters.

In the aftermath of an American disaster, those rebuilding the Gulf Coast may choose to recognize the value of environmental protections or they may continue to ignore the need for natural buffer zones. The potential success of such legislation is staggering and could avoid tremendous loss of life and property damage caused by hurricanes. The government should be permitted to enact preventive legislation that would prohibit building on certain beachfront property particularly susceptible to hurricanes. Such legislation may displease property owners and those in the real estate market, but it would have the long-term effect of protecting both coastal and inland residents and property from suffering such devastation comparable to that caused by Hurricane Katrina.

VII. Conclusion

Heedless coastal development along the Gulf Coast exacerbated

176. National Oceanic & Atmospheric Association, *supra* note 34.

177. Oneal, *supra* note 77.

178. *Id.* (noting the goals and estimated cost of the short-term plan by Dan Hitchings, director of Katrina Relief for the U.S. Army Corps of Engineers).

179. *Id.*

180. *Id.*

Hurricane Katrina's toll on property, the economy and most importantly, human life. Now, more than two years after the brutal storm hit the area, most of the Gulf coast has seen little rehabilitation and redevelopment. Prompt action, through legislation restricting coastal development along the Gulf Coast, is necessary to save thousands of lives from another Hurricane Katrina. The Supreme Court must allow state legislatures to put the physical safety of their constituents ahead of the economic well being the communities. The government should strike immediately and prevent any rebuilding along the coast where homes have already been destroyed. Such action would not require demolition of safe and habitable homes along the water, it would simply prevent the reconstruction of those badly damaged.

In consideration of the future of takings law and in light of the current Supreme Court, it is hoped that the tragedy evidenced by Katrina will prompt the Court to adopt the arguments of the *Lucas* dissenters and uphold environmentally-sound regulation of coastal development valuing the preservation of human life.

