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## AGAINST THE WIND: COASTAL ZONE MANAGEMENT IN SOUTH CAROLINA, 1972-1993

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A Thesis Presented to the Graduate School of Clemson University

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In Partial Fulfillment of the Requirements for the Degree Master of Arts History

> by Misty Belle Soles May 2008

Accepted by: Joanna Grisinger, Committee Chair Jacob Hamblin H. Roger Grant

#### **Abstract**

Coastal zone regulation and policy in South Carolina had three distinct phases between 1972 and 1993. Each was a result of choices based on state conditions and did not indicate an inherent route, as revealed through a comparison to North Carolina. The strongest period of regulation was a response to worsening erosion and to changes in scientific knowledge. While likely the best course of action for the coast when considered over time, this regulation was defeated by competing concerns, particularly private property rights, that emerged after Hurricane Hugo and litigation related to the regulation. South Carolina's foray into coastal zone management illustrates the difficulty of formulating and implementing effective environmental regulation and shows the complexity of factors that affect the success of a regulatory program. The state's coastal zone regulation program, which declined based on the disapproving response of many citizens and subsequently legislators, can be deemed unsuccessful. While the legislature tried to protect the state's economy by protecting the beaches, it did not take into account the economic consequences to individuals. The malfunction of the regulatory process in this setting indicates that people support regulation, or are at least ambivalent about it, until they are directly affected by it in a way that they perceive as negative. Regulation for private citizens, as opposed to corporations, must take into account that individuals have not been exposed to the regulatory process and are not accustomed to regulation generally. As a result, they may rebel against the regulation via their voting power.

## Acknowledgements

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#### Introduction

"The edge of the sea is a strange and beautiful place. All through the long history of Earth it has been an area of unrest where waves have broken heavily against the land, where the tides have pressed forward over the continents, receded, and then returned. For no two successive days is the shore line precisely the same." --Rachel Carson *The Edge of the Sea* 

Land located near the ocean is some of the most valuable property within the United States. However, development within these areas can be harmful in numerous ways and for several reasons. First, the coast is subject to unique and dynamic natural processes that can endanger both development and human life. Unwise siting and development decisions can exacerbate these processes. Imprudent and ill-advised development and positioning of homes and businesses may also impede or otherwise harm less aggressive natural processes (such as tides) that can damage ecosystems and valuable natural resources. The coastal zone is highly sought after for its scenic value and recreational values, yet it is small in area compared to the number of people who seek to make use of it. It can be made even smaller by private property owners who seek exclusivity of its use. In South Carolina, coastal real estate is expensive and highly desired. It provides a large portion of South Carolina's economy and is home to a considerable amount of its population. The regulation of land near the ocean in South Carolina is highly contentious and has gone through several periods of change beginning in the 1970s.

The South Carolina Coast Before 1970

Historically, development along the South Carolina coast was governed by the risk associated with construction. Only people who could afford to shoulder the risk themselves built along the coast. Most of the structures built in the coastal zone, particularly on the barrier islands of the Atlantic Ocean, were owned by the rich. By the end of the eighteenth century, South Carolina planters were erecting summer beach cottages, and Pawley's Island (located just off the coast between Murrell's Inlet and Mt. Pleasant) was particularly popular. Wealthy planters sought relief from the hot and humid summer climate at these new retreats. Near Charleston, well-to-do residents began to build cottages on Sullivan's Island in the early 1800s. By 1824, the island had a summer population of approximately one thousand.

Until the mid-twentieth century, coastal building was almost exclusively an activity of the wealthy because of the risks associated with it. Prior to the passage of the National Flood Insurance Program of 1968, few insurance companies would insure oceanfront buildings, and few banks would grant mortgages for oceanfront buildings, at least without other collateral. As a result, most construction in the coastal zone was done by the well-to-do, reflecting an awareness of the risks and costs of building there. When federal insurance became available for these structures, they began multiplying, as individuals were no longer required to incur all the risks of shoreline ownership

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<sup>&</sup>lt;sup>1</sup> James B. London and others, *A Study of Shore Erosion Management Issues and Options in South Carolina* (Charleston: South Carolina Sea Grant Consortium, 1981), 39.

themselves.<sup>2</sup> This legislation encouraged those who may not have been wealthy enough to self-insure to build homes near the ocean.

During the 1960s and 1970s, coastal development increased tremendously in South Carolina, particularly in Horry County. Horry County is the northern-most coastal county in South Carolina and is also the largest county in the state. Myrtle Beach, a sizeable tourist area, is located in Horry County. There were no restrictions or regulations in place during this period of large-scale growth on where one could develop, including the beaches or dunes. South Carolina did not regulate oceanfront building before 1977, and since natural erosion at that point only averaged about one foot per year, there appeared to be few erosion-related problems associated with development, even fairly close to the shore.<sup>3</sup>

Over time, population growth and its accompanying development increased and put immense pressure on the resources and ecosystems of the coast.<sup>4</sup> Coastal development harmed the habitats of fish and coastal wildlife. Construction in the coastal zone also altered natural processes and their resulting impacts.<sup>5</sup> Housing developments and other building required new and larger infrastructures (such as roads, utilities and

<sup>&</sup>lt;sup>2</sup> G.S. Kleppel and others, "Trends in Land Use Policy and Development in the Coastal Southeast," in *Changing Land Use Patterns in the Coastal Zone: Managing Environmental Quality in Rapidly Developing Regions*, ed. G.S. Kleppel, M. Richard DeVoe and Mac V. Dawson (New York: Springer, 2006), 28. The National Flood Insurance Act is codified at 42 U.S.C. 4001 et seq.

<sup>&</sup>lt;sup>3</sup> Timothy W. Kana, *Beach Erosion in South Carolina* (Charleston: South Carolina Sea Grant Consortium, 1988), 28.

<sup>&</sup>lt;sup>4</sup> "The most important factor in the decline of environmental conditions within the coastal zone has been the unprecedented increase in human population growth, particularly in the southeastern United States." Geoffrey I. Scott, A. Frederick Holland, and Paul A. Sandifer, "Afterword: Managing Coastal Urbanization and Development in the Twenty-First Century: The Need for a New Paradigm," *Changing Land Use Patterns in the Coastal Zone: Managing Environmental Quality in Rapidly Developing Regions*, ed. G.S. Kleppel, M. Richard DeVoe and Mac V. Dawson (New York: Springer, 2006), 285-299, 285.

<sup>&</sup>lt;sup>5</sup> Orrin H. Pilkey and others, *The North Carolina Shore and Its Barrier Islands: Restless Ribbons of Sand* (Durham: Duke University Press, 1998), 37.

schools), the construction or improvement of which further harmed the sensitive ecosystems and processes. For these reasons, population growth near the coast has become a concern.

The numbers associated with this growth are informative. The total population of the coastal counties of the southeastern region of the United States rose by sixty-four percent between 1970 and 1990. During the latter decade, the greatest population increases on the east coast took place in Virginia, North Carolina, South Carolina, Georgia and Florida.<sup>7</sup> The Census Bureau has predicted that approximately eleven million people will move to the North Carolina, South Carolina and Georgia between 1995 and 2025, and between fifty and seventy-five percent of them will reside on the coastal plains of this three state region.<sup>8</sup> Between 1990 and 2000, the population of South Carolina's coastal counties increased from 833,519 to 981,338, a 17.73 percent increase. There has been change over time in terms of the population of the coastal zone that increased dramatically in the mid-twentieth century. Before the twentieth century, development near the coast was not seen as a problem, both because it was scarce and because there was little in terms of scientific knowledge to indicate that it might become a problem. This twentieth-century development exacerbated natural conditions and resulted in problems such as erosion.

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<sup>&</sup>lt;sup>6</sup> M. Richard DeVoe and G.S. Kleppel, "Introduction—The Effects of Changing Land Use Patterns on Marine Resources: Setting a Research Agenda to Facilitate Management," *Changing Land Use Patterns in the Coastal Zone: Managing Environmental Quality in Rapidly Developing Regions*, ed. G.S. Kleppel, M. Richard DeVoe and Mac V. Dawson (New York: Springer, 2006), 1-19, 3.

<sup>&</sup>lt;sup>7</sup> F. John Vernberg and Winona Vernberg, *The Coastal Zone: Past, Present, and Future* (Columbia: University of South Carolina Press, 2001), 62.

<sup>&</sup>lt;sup>8</sup> Kleppel and others, "Trends in Land Use Policy,"23-45, 26.

<sup>&</sup>lt;sup>9</sup>Timothy Beatley, David J. Brower and Anna K. Schwab, *An Introduction to Coastal Zone Management*, 2nd ed. (Washington, D.C.: Island Press, 2002), 56.

In addition to the dramatic increase in population, day and overnight visitors to the coastal zone increased in the mid to late twentieth century, particularly in South Carolina. The total of the permanent population and the visitor population is referred to as the "peak population." In the coming years, the peak population of east coast coastal zone areas is expected to increase even more. During this period of growth, visitors to the coastal zone, particularly in the greater Myrtle Beach area, often sought accommodations and attractions on or near the shoreline, one of the most ecologically sensitive and easily damaged areas of the coastal zone. As a result, hotel construction near the beach grew dramatically.

South Carolina's coastal zone is significant. It measures approximately 8,116 square miles, including about 500,000 acres of coastal marshes (335,000 of which are classified as salt marsh), 35,000 acres of brackish water, 65,000 acres of freshwater marsh, 40 barrier islands and 3 million acres of forested lands. The coastal zone comprises about 23% of state's land area. In the 1970s, it contained 21% of state's population, 18% of the state's labor force and 16% of the state's unemployment. The most important economic sectors as of 1970 in South Carolina's coastal zone were agriculture, forestry, fisheries, recreation and tourism, government and limited industry.<sup>11</sup>

The South Carolina coastal zone consists of eight counties and includes both their lands and waters: Beaufort, Berkeley, Charleston, Colleton, Dorchester, Georgetown, Horry and Jasper. Additionally, the South Carolina Coastal Management Act specified

<sup>&</sup>lt;sup>10</sup> Vernberg and Vernberg, *The Coastal Zone*, 65.

<sup>&</sup>lt;sup>11</sup> Office of Coastal Zone Management, National Ocean and Atmospheric Administration and South Carolina Coastal Council, *Final Environmental Impact Statement of the Proposed Coastal Management Program for the State of South Carolina* (Washington: US Dept. of Commerce, 1979), pt. 3, 1-4.

that the coastal zone was to include the coastal waters and submerged lands seaward to the State's jurisdictional limits. 12 South Carolina's coastline is complex and irregular, broken up by numerous tidal inlets, with beaches facing more than one direction. (This is in contrast to the relatively straight Atlantic shorelines of North Carolina and Florida.)<sup>13</sup>

Figure One<sup>14</sup> The South Carolina Coastal Zone

The lighter shading indicates the coastal zone. The darker shading indicates the areas of the coastal zone that have been designated critical areas under the Beachfront Management Act, an amended form of the South Carolina Coastal Management Act.

Generally, South Carolina beaches are wider than the beaches of the other Atlantic coast states. 15 Another general trend in South Carolina is sand movement. Most

<sup>12</sup> South Carolina Coastal Council, Legal Analysis and Goals and Objectives of the South Carolina Coastal Management Program, Draft Report no. 2 (South Carolina Coastal Council: February, 1978), 13.

<sup>&</sup>lt;sup>13</sup> Kana, Beach Erosion in South Carolina, 13. The opposite of erosion is accretion. This is the process of increasing the surface area of a beach through the natural transfer of sand from another area. Interestingly, the South Carolina Coastal Zone Management Act, originally and as amended, provides that accreted land automatically becomes the property of the State: "...no person or governmental agency may develop ocean front property accreted by natural forces or as the result of permitted or non-permitted structures beyond the mean high water mark as it existed at the time the ocean front property was initially developed or subdivided, and such property shall remain the property of the State held in trust for the people of the State."<sup>13</sup> From a practical standpoint, this would obviously be a difficult provision to enforce, at least until the accretion became substantial.

<sup>&</sup>lt;sup>14</sup> Figure One is taken from the website for the Department of Health and Environmental Control, http://www.scdhec.net/environment/ocrm/ (accessed on August 9, 2007).

of South Carolina's inlets seem to depend on a persistent source of sand from beaches to the north to feed the inlet system, indicating a trend that sand shifts southward because of wind and waves. The shape of South Carolina's barrier islands offers evidence of this trend: the northern ends of the islands are commonly wider than the southern ends. This means that some beaches are more secure or "healthy" than others because of where they are positioned in relation to their supply of incoming sand. On the other side of the coin, however, are the beaches from which the sand is moving. These beaches are experiencing erosion at a higher rate.<sup>17</sup> Of the thirty states in the United States with a coastline, all experience localized erosion. <sup>18</sup> Some figures put the total of open shoreline that is retreating in a landward direction in the continental United States at between eighty and ninety percent. 19 In sum, South Carolina's coast is a multifaceted, convoluted group of parts, each experiencing its own responses to natural and human-made stimuli. Some parts appear to be healthy as to the problems associated with erosion, while others seem to be melting away more quickly. The factor that can make all the degrees of erosion appear relevant is coastal development.

Coastal regions are affected by, and in point of fact are constantly being altered by, both natural and human impacts. Changes in the shoreline are natural and would occur if humans were not present. The coast is transient, and its ordinary conduct and natural cycles include both erosion and accretion. Without human activity and

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<sup>&</sup>lt;sup>15</sup> London and others, A Study of Shore Erosion, 19.

<sup>&</sup>lt;sup>16</sup> Kana, Beach Erosion in South Carolina, 19-21.

<sup>&</sup>lt;sup>17</sup> Kana, Beach Erosion in South Carolina, 22.

<sup>&</sup>lt;sup>18</sup> Beatley, Brower and Schwab, An Introduction to Coastal Zone Management, 43.

<sup>&</sup>lt;sup>19</sup> Pilkey and others, *The North Carolina Shore*, 87.

development in the coastal zone, these activities would occur without concern.<sup>20</sup> Human activities in the coastal zone have had, and continue to have, dramatic effects on the coastal zone, particularly on the rate of shoreline erosion. Despite some of the recent efforts of society, these activities have been primarily negative and have almost always increased the rate of shoreline erosion. Table One lists many of both the natural and artificial forces that perpetuate erosion in the coastal zone.

Table One<sup>21</sup>
Factors Affecting Shoreline Erosion

Natural Factors	Man-Made Factors
Breaking Waves	Dams on Rivers
Winds	Shorefront Development
Currents	Seawalls
Rain	Groins and breakwaters
Sediment supply	Harbor jetties
Tidal cycle	Offshore dredging
Storm frequency	Beach sand mining
Sea-level rise	Boat wakes
Near shore bathymetry	Farm practices
Regional geology	Surface water runoff
Biogenic process (reef building, burrowing	
by organisms, etc.)	

While most of these factors are in play in nearly all coastal communities, some are more influential than others in South Carolina. Of the natural processes, breaking waves and storm frequency are prevalent in the Palmetto State. Of the human-caused factors, shorefront development, particularly in Horry County and on the barrier islands,

<sup>&</sup>lt;sup>20</sup> Peter W. French, *Coastal Defences: Process, Problems and Solutions* (London: Routledge, 2001), 19-20. <sup>21</sup> Kana, *Beach Erosion in South Carolina*, 10. When considered in the whole of geologic time, South Carolina's coast has been building, not eroding, through the sediment buildup resulting from the erosion of the Appalachian Mountains. As a result, much of the state's coast is quite young from the standpoint of geologic time. The barrier islands, for example, are only about four thousand years old.

and erosion-control devices, particularly seawalls and groins, have been the cause of a large extent of the erosion along the South Carolina coast.

Erosion can be classified depending on how immediate the danger is to the coastline and to the accompanying structures. (Erosion is the landward dislocation of the shoreline. When beach erodes, sand located there is moved into the ocean and away from the shoreline.)<sup>22</sup> An area likely to suffer from imminent erosion is subject to an erosion hazard within ten years. What this means is that within a decade the beach in front of the area could be gone due to erosion. In terms of buildings, land underneath the structure could be damaged by erosion within ten years or even that the water could touch the structure within ten years. The worst case scenario in this category is that the beach and the land under the structure's foundation could completely erode within a decade, leaving the structure to fall into the water. The next most dangerous category is intermediate. An area subject to an intermediate hazard may be subject to erosion hazards within thirty years. Finally, an area subject to long-term erosion hazards will likely be safe from erosion for sixty years or more.<sup>23</sup> The least wise decision would be to improve land within an imminent erosion hazard zone. Development within the intermediate hazard zone is likely acceptable, though smaller, moveable structures would be preferable. Development within the long-term erosion hazard zone would be preferable, both for the health of the shoreline and coastal zone as well as for the monetary stake of the landowner or developer. Most people do not consider erosion a serious natural hazard, as

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<sup>&</sup>lt;sup>22</sup> Beatley, Brower and Schwab, *An Introduction to Coastal Zone Management*, 43. Erosion is much more common than accretion, which is the increase of coastal land based on the deposit of sand or other sediment

<sup>&</sup>lt;sup>23</sup> National Research Council, *Managing Coastal Erosion* (Washington, D.C.: National Academy Press, 1990), 7.

it poses no direct threat to human life and is only noticeable over time.<sup>24</sup> Nevertheless, it can be responsible for partial or complete loss in terms of property value and is therefore a contentious legal issue that emerges repeatedly in coastal zone management.

There are three basic responses to erosion along the coast when development is already present: do nothing, renourish the beaches (by moving sand from another location to the beach to build it up) or "armor" the beaches via erosion-control devices. While beach renourishment is preferable to erosion-control devices, it is not a perfect solution. Renourishment is preferable in that it allows maintenance of natural coastal processes while still providing increased levels of coastal protection. For this reason, it is sometimes called "an imitation of nature." 25 It can also be discontinued if determined to be ineffective, without the problems of deteriorating structures or structure removal that would be associated with hard defenses.<sup>26</sup> However, renourishment must be repeated, sometimes indefinitely, to be effective, since the beach is not being allowed to function naturally. This can be extremely costly. In addition to the expense of repeating the process indefinitely, there is a need for a source site for the harvest of renourishment materials. The borrow site must have sand that is similar to the renourishment location for the process to be most effective. Borrow sites can become environmentally unstable themselves if over-harvested for renourishment materials.<sup>27</sup> Nevertheless, because of the

<sup>&</sup>lt;sup>24</sup> Owen J. Furuseth and Sallie M. Ives, "Individual Attitudes Toward Coastal Erosion Policies: Carolina Beach, North Carolina," in *Cities on the Beach: Management Issues of Developed Coastal Barriers*, ed. Rutherford H. Platt, Sheila G. Pelczarski and Barbara K.R. Burbank (Chicago: The University of Chicago Department of Geography, 1987), 185-196, 185.

<sup>&</sup>lt;sup>25</sup> London and others, A Study of Shore Erosion, 27.

<sup>&</sup>lt;sup>26</sup> London and others, A Study of Shore Erosion, 29.

<sup>&</sup>lt;sup>27</sup> London and others, A Study of Shore Erosion, 28.

value of property in many coastal areas, some renourishment is often viewed as absolutely necessary.<sup>28</sup>

In addition to renourishment, other options exist for defense. Coastal defense mechanisms are generally classified as either soft (such as beach renourishment) or hard (erosion control devices or structures). Hard defenses include any structure that provides a solid barrier between the land and the ocean so as to resist the energy of the waves. This classification of defense would include seawalls, bulkheads, revetments, groins and jetties. Seawalls are large structures designed to provide a permanent separation between land and water; seawalls are used to protect against direct wave action. Bulkheads are used primarily to protect fill located landward of their location and to provide protection from small waves. Revetments are lighter structures used to armor the dune slope; they are often made of a more flexible material such as rubble. Groins are long narrow structures that run perpendicular to the shoreline and into the water and are designed to trap moving sand. Jetties extend into the water as groins do, but they are used to control inlet areas, as opposed to beach areas.<sup>29</sup> The selection of an erosion-control device is dependent upon the dynamics of the area. These devices may also be used in combination with one another or in combination with beach renourishment.<sup>30</sup> These structures prevent natural coastal processes from operating and result in a series of impacts on the natural environment.<sup>31</sup> Erosion-control devices have been a controversial issue because of their effects. While some types protect the subject structures that have

<sup>&</sup>lt;sup>28</sup> French, Coastal Defences, 213-14.

<sup>&</sup>lt;sup>29</sup> London and others, A Study of Shore Erosion, 29-34.

<sup>&</sup>lt;sup>30</sup> London and others, A Study of Shore Erosion, 35-6.

<sup>&</sup>lt;sup>31</sup> French, *Coastal Defences*, 47.

been created to shield, they may also result in continued shoreline retreat and beach loss.<sup>32</sup>

Erosion-control devices have been employed both by private landowners and by state governments in attempts to stop landward movement of the shoreline. In South Carolina, most of these structures were put into place by private property owners or groups of private property owners (such as homeowners associations). Many were erected in the 1970s or before. Coastal geologist Peter French has noted that hard defense historically remained a response to erosion control in many situations for several reasons. First, hard defenses were traditional in many areas. People often felt more secure behind a seawall than behind a built up beach, even if the degree of protection offered was similar. The value of the land in question was often high, leading people to prefer a proactive method of defense.<sup>33</sup> It is important to note, however, that erosion control devices were and are designed to protect property and not beaches. Beaches, even if moving landward, would always be present if left alone. These devices are not beach-saving techniques, but rather beach-diminishing devices. Their sole goal is to preserve private property that lies landward of the beach.<sup>34</sup>

Another circumstance which contributes to coastal defense is the existence and condition of sand dunes. Dunes can be thought of as natural sea walls, serving as a barrier between ocean and land. South Carolina's shoreline is fairly well-armed with dunes,

<sup>&</sup>lt;sup>32</sup> As coastal zone management specialist Timothy Beatley has indicated, there was a growing recognition in the early 1990s that attempts to fortify the coastline are largely futile, as well as being damaging to the environment. Timothy Beatley, "Hurricane Hugo and Shoreline Retreat: Evaluating the Effectiveness of the South Carolina Beachfront Management Act" (working paper, University of Virginia, September 1992), 1.

<sup>33</sup> Ibid.,

<sup>&</sup>lt;sup>34</sup> Cornelia Dean, *Against the Tide: The Battle for America's Beaches* (New York: Columbia University Press, 1999), 16.

which average roughly four feet in height in developed areas and are usually covered, at least partially, with sea oats or other vegetation. While highly fragile, dunes play a significant role in the stability of both the beaches that front them and the land behind them. Like the shoreline, dunes are dynamic landforms. They are able to supply sand to the beach when it is needed and store it when it is not needed.<sup>35</sup> Dunes are essential to both the natural processes at work in the shoreline area, as well as serving as a line of defense for any structures that may lie landward of the dune. When dunes and dune vegetation are altered by human activities, their protective value can be lessened or lost. A dune can be harmed if a structure is placed directly upon it, but it can also be damaged if a structure is built nearby, as beachfront development generally leads to the destruction of dune vegetation and the slow movement of dune sand via human activities near or one the dunes. Dunes are easily destabilized. There are several means of dune stabilization, including employing sand fences, planting vegetation (such as sea oats), and posting signs requesting that visitors stay off of dunes and/or that visitors do not remove or damage vegetation.<sup>36</sup> Unlike erosion-control devices, however, dunes harm neither their adjacent beaches nor beaches downdrift.

In the 1970s, coastal zone management became more fully developed as a science, and more research was done on the effects of hard defenses. By the early 1980s, most experts agreed that the move away from erosion-control devices was the well-informed and correct decision. The general reasoning for this decision was that while they can protect structures near the shoreline from waves if they are properly designed

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<sup>&</sup>lt;sup>35</sup> French, *Coastal Defences*, 218-19.

<sup>&</sup>lt;sup>36</sup> Vernberg and Vernberg, *The Coastal Zone*, 116-118.

and constructed, seawalls almost always result in the eventual loss of the recreational beach. Seawalls can degrade beaches in three ways: passive loss (waves crash against the wall and the offshore slope is steepened), placement loss (the seawall is built seaward of the high tide line, removing all or part of the beach when the wall is constructed) and active loss (the rate of beach loss is enhanced through the interaction of the wall and storms).<sup>37</sup> Most of the time, the problems caused by these structures are reflected in the downdrift beaches, which experience more severe erosion than they would have otherwise. These adjacent beaches often bear the brunt of the reduction of the natural processes.<sup>38</sup>

The specific regulatory provisions considered for the coastal zone depended upon the unique attributes that the subject section possesses. Each Atlantic coast state has a distinctive coastal zone that requires understanding for a proper recommendation and enactment of coastal zone management policy. The marine environment generally is composed of three zones: coastal zone, continental shelf and open ocean. South Carolina's shoreline and coastal zone are markedly different from those of its northern coastal neighbor, North Carolina, and its southern coastal neighbor, Georgia. The state of South Carolina has 198 miles of ocean coastline. This stretch is frequently divided into three zones: 1) Grand Strand—from Little River Inlet to Winyah Bay, 2) Santee Delta and 3) approximately 100 miles of barrier and sea islands.

<sup>&</sup>lt;sup>37</sup> Pilkey and others, *The North Carolina Shore*, 91.

<sup>&</sup>lt;sup>38</sup> National Research Council, *Managing Coastal Erosion*, 35.

<sup>&</sup>lt;sup>39</sup> Scott, Holland and Sandifer, "Managing Coastal Urbanization and Development," 285.

<sup>&</sup>lt;sup>40</sup> Rutherford H. Platt and others, *Coastal Erosion: Has Retreat Sounded?* Program on Environment and Behavior, Monograph No. 53 (Boulder: Institute of Behavioral Science, University of Colorado: 1992).

Particular risk is affixed to development along the shoreline. Structures developed close to the beach are in the path of storm-driven waves and are at the mercy of erosion. Development on the coast is risky and tricky, yet it is thriving more than ever. In the mid-twentieth century, coastal landowners and developers began swiftly developing the coastal zone, and the pace has not slowed since. Unquestionably, these human activities changed the natural processes at work in the coastal zone.

Development in the coastal zone, as anywhere else, is governed by policies that manage and organize development. As Dennis Ducsik of the Massachusetts Office of Coastal Zone Management has revealed, the federal and state governments have taken a direct role in protecting the intangible assets and qualities of the coastal zone since the 1970s, as these types of values are not protected by market forces. As a result, the amount of development in each state impacted how regulation in that state looked and how successful it was. If there was little development, there was less protest. If there was more development, as was the case in South Carolina, there was more protest.

As Timothy Kana, a coastal scientist and engineer, has observed, little attention is paid to the natural ebb and flow of beach shifts in undeveloped areas. (About forty percent, or over seventy miles, of South Carolina's coastline is primitive and protected from future development due to its legal status as a park, wildlife refuge or other protected status. These areas are undeveloped.) In areas where structures exist, however, even the smallest changes are observed and fretted over. Coastal real estate is a

<sup>&</sup>lt;sup>41</sup> Dennis W. Ducsik, Shoreline for the Public: A Handbook of Social, Economic, and Legal Considerations Regarding Public Recreational Use of the Nation's Coastal Shoreline (Cambridge: MIT Press, 1974), 209.

<sup>42</sup> Kana, Beach Erosion in South Carolina, 27.

<sup>&</sup>lt;sup>43</sup> Kana, Beach Erosion in South Carolina, 32.

big, expensive business. In many areas, coastal property doubles in value every five to ten years, so "losing" a piece of it to the ocean, even if it is small, is a major concern to land owners. Even so, property owners can also "lose" land, or certain uses of it, through regulation. This is what occurred in South Carolina through the regulation of the coast. Though the coastal property owners did not want their shoreline property to fall into the ocean, they also wanted to be free to build large houses there.

The Coastal Zone Management Act and the Regulation of the South Carolina Coast

Coastal zone management is the attempt to control and manage human activities so as to protect the natural resources of the coastal zone from humans and to likewise protect humans from the hazards presented by the coastal zone. It is a relatively new concept in terms of United States legal history that began with the federal Coastal Zone Management Act enacted in 1972. This legislation was part of the flurry of federal environmental legislation enacted in the early 1970s during the Richard Nixon administration. The Coastal Zone Management Act encouraged states to develop individualized coastal management programs and offered federal financial support if a handful of requirements were met. Most Atlantic coast states responded to this offer of federal support and quickly developed their own legislation and the structures necessary to implement a coastal management program. Table Two indicates that federal monies spent on state CZMA programs between 1972 and 2001. It indicates that CZMA

<sup>&</sup>lt;sup>44</sup> Beatley, Brower and Schwab, An Introduction to Coastal Zone Management, 13-14.

expenditures were significant during this period, when many states were in organization and start-up phases of the CZMA program.

Table Two<sup>45</sup>
Selected Coastal Program Expenditures (by the federal government),
Fiscal Years 1972-2001

CZMA Section	Expenditures (in millions of dollars)
305—Program Development	72.1
306—Program Administration	844.1
308—Coastal Zone Management Fund	10.9
309—Coastal Zone Enhancement	79.1
310—Research and Technical Assistance	4.9

South Carolina's policy and legislation related to the coastal zone underwent several key changes. The first, as aforementioned, was the passage of the state's initial coastal zone management legislation. This legislation came in direct response to passage of the federal Coastal Zone Management Act, which was considered a necessary response to coastal degradation. Before its initial legislation, South Carolina did not regulate oceanfront construction, yet there was little opposition to this law. This statute was not protested by the public for three reasons. First, the general climate of opinion during this era was favorable toward environmental statutes, so protection of the coast seemed like a good idea. Second, this law did not really impact anyone except that some people were slightly inconvenienced by the permit process. Otherwise, the property owners who already had houses or other structures in place were not affected, and development continued to increase. Finally, it brought money into the state from the federal government.

<sup>&</sup>lt;sup>45</sup> Table One is adapted from Beatley, Brower and Schwab, *An Introduction to Coastal Zone Management*, 103.

The federal legislation was a reaction to the changing nature of society's views as to hazards posed to the natural environment and calls for federal intervention to preserve and conserve the natural environment. The public became increasingly aware of pollution and other dangers as a result of informative books, the development of ecology as a field, high-profile environmental disasters, and activities of environmental organizations that culminated in Earth Day in 1970. The second major change to South Carolina's coastal zone management policy occurred in response to a regarded failure of the initial legislation regarding erosion and to the subsequent report of the Blue Ribbon Committee. After the state's preliminary policy and legislation had been in place for a few years, it was evident that it had failed. Erosion, particularly, was still a big problem. As a result, the Coastal Council (the state agency responsible for administering the state's coastal zone management policy and legislation) appointed a special committee to determine what was wrong with the policy and legislation and how best to respond. This committee released its report in 1987, citing the Coastal Council's inadequate authority as one of the biggest issues that needed to be corrected. The state's legislation was then amended in 1988. These amendments, known as the Beachfront Management Act (BMA), gave the Coastal Council new powers and strengthened the state's law for protecting the coastal zone. The BMA affected only a few property owners (those who had undeveloped lots) since most of the coast was already developed. As a result, there was relatively little protest against the much stronger regulation.

Problems began to surface, however, in 1989, when the Coastal Council began to enforce regulations regarding oceanfront development, particularly those that involved

setbacks and reconstruction near the shoreline. These problems were exacerbated by natural forces, especially hurricanes, and by resistance to Coastal Council decisions by property owners. Property owners spoke up, loudly and often, and they complained to their state legislators. As a result, the legislators felt pressured to change the law to pacify their constituents. The next major changes to South Carolina coastal zone management policy were directly precipitated by Hurricane Hugo in 1989 and by a battle in the courts, *Lucas v. South Carolina Coastal Council*. Numerous houses were destroyed or severely damaged in Hugo, which brought the otherwise unconsidered setback provisions into play for several property owners. These changes contrasted with passage of the initial legislation and to the changes made in response to the Blue Ribbon Committee's Report in that they weakened the powers of the Coastal Council and backtracked in terms of conservation of the coastal zone.

#### Literature Review

The CZMA sought to provide the coastal states a basis for regulating the activities of human beings within the coastal zone. The study of a subject of this type brings into play a number of disciplines. The study of regulation generally encompasses history, political science and law. (Business historian Thomas McCraw has correctly noted that in the case of economic regulation of business, a fourth discipline, economics, must be included as well.)<sup>46</sup> The study of a federal regulation with environmental implications, such as the CZMA, may also encompass environmental science and/or ecology.

<sup>&</sup>lt;sup>46</sup> Thomas K. McCraw, "Regulation in America: A Review Article," *Business History Review* 49, no. 2 (Summer, 1975): 159-183, 159.

Consideration of coastal zone management legislation and its effectiveness requires the analysis of history and law, as well as the considerations of political science and ecology.

Several historians and other academics have considered why the study and consideration of regulation may be relevant to legislators and others who influence policy. Understanding how and why coastal zone management legislation and policy changed in South Carolina, particularly what factors influenced the changes and the difficulty of pacifying adverse groups within society, may have applicability to other contexts involving environmental regulation. A study of these policy and legislative changes suggests that citizens can have an overpowering influence on how regulation is written and that their concerns regarding other rights can overcome scientific advice and recommendations.

Environmental regulation may be placed into a larger context of regulation generally termed social regulation. (Social regulation usually concerns non-market products of economic activity and is generally designed "to remedy the failure of the private market to price adequately the negative externalities of many productive practices...[which impose] economically unjustifiable costs on certain groups in the population."")<sup>47</sup> Regulations covering workplace safety or consumer safety are usually identified as social regulation. <sup>48</sup> Social regulation and reform have received considerable academic attention, much of it pre-dating the social reform explosion of the 1960s and 1970s. As early as 1911, Frank Goodnow, a prominent early twentieth century political

<sup>&</sup>lt;sup>47</sup> Chester L. Mirsky and David Porter, "Ambushing the Public: The Sociopolitical and Legal Consequences of SEQRA Decision-Making," Albany Law Environmental Outlook Journal 6, no. 1 (2002): 3-54, 9. <sup>48</sup> Ibid.

scientist, argued that the attitudes and opinions of the U.S. Supreme Court are the only Constitutional obstacles to social reform and that the Constitution itself offers few impediments to a substantial increase in government functions, both state and federal. This proved to be one of the obstacles to progressive coastal zone management reform in South Carolina when *Lucas v. South Carolina Coastal Council* was decided.

Other scholars have studied and emphasized the early roots of social regulation in the United States. Eugene Bardach and Robert Kagan, for example, illustrate that protective social regulation dates back to colonial times, when many colonies, including New York and Massachusetts, employed inspectors to protect the public from diseased or fraudulent provisions or other goods. Similarly, political scientist David Vogel notes that environmentally protective legislation was in place early in the twentieth century, citing a 1906 statute banning the import of sponges from the Gulf of Mexico that were harvested through methods that harmed these beds. Coastal zone management legislation was a later arrival, first appearing as a part of federal law in the early 1970s.

Historians frequently divide the study of regulations into periods. Public policy professor Marc Allen Eisner suggests that many varieties of regulation within a period are linked by larger policy objectives. He believes that regulation generally has undergone several significant shifts, which he refers to as "regulatory regimes," including a dramatic increase in social regulation in the 1960s and 1970s, a period which he refers to as the "societal" regime. Eisner has argued that the study of regulation is valuable

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<sup>&</sup>lt;sup>49</sup> Frank J. Goodnow, *Social Reform and the Constitution* (New York: Burt Franklin, 1911): 31, 231.

<sup>&</sup>lt;sup>50</sup> Eugene Bardach and Robert A. Kagan, *Going By the Book: The Problem of Regulatory Unreasonableness* (Philadelphia: Temple University Press, 1982), 8.

<sup>&</sup>lt;sup>51</sup> David Vogel, *Trading Up: Consumer and Environmental Regulation in a Global Economy* (Cambridge: Harvard University Press, 1995), 8.

because it is helpful in recognizing the sources of contemporary policy debates.<sup>52</sup> David Vogel contended that the United States has gone through three periods of change as to business-government relations in the twentieth century: Progressive Era, New Deal and the 1960s-1970s era.<sup>53</sup> The Progressive/New Deal/1960s-1970s breakdown is the one most often used by historians of regulation. Vogel notes that the most recent era is difficult to define as far as the boundary years, but he estimates that this era began about 1964 and ended in approximately 1977. Though he suggests that this era is more difficult to set chronological boundaries upon, he concludes that it is the most distinctive era of the three because it included greater political conflict over social regulation and because of the increase in federal social control in both number of regulations/agencies and degree of control.<sup>54</sup> Political conflict was a condition suffered by coastal zone management policymakers in South Carolina, but it did not end in 1977. It actually intensified as changes were made to the law.

Public policy professor Cary Coglianese has asserted that laws and the reform of laws have a certain role in social movement as instruments to bring about social change. Law reform, therefore, is generally viewed a means of realizing the goal of social change. Specifically, he argues that the environmental movement began to transform law and society in the early 1970s. Coglianese refers to "dramatic changes" to American

 $<sup>^{52}</sup>$  Marc Allen Eisner,  $Regulatory\ Politics\ in\ Transition$  (Baltimore: The Johns Hopkins University Press, 2000).

<sup>&</sup>lt;sup>53</sup> David Vogel, "The 'New' Social Regulation in Historical and Comparative Perspective," in *Regulation in Perspective: Historical Essays*, ed. Thomas K. McCraw (Cambridge: Harvard University Press, 1981), 155-185, 155-158.

<sup>&</sup>lt;sup>54</sup> Ibid.

<sup>&</sup>lt;sup>55</sup> Cary Coglianese, "Social Movements, Law, and Society: The Institutionalization of the Environmental Movement," *University of Pennsylvania Law Review* 150, no. 1 (November 2001): 85-118, 85.

law that he dates to the signing of the National Environmental Policy Act on January 1, 1970. The Coastal Zone Management Act, enacted two years later, was part of this series of changes. It motivated otherwise conservative and regulation-averse states, including South Carolina, to police the use of their coastal zones. Before the enactment of their coastal zone legislation in the late 1970s, there was no regulation of coastal zone use or near-ocean construction in South Carolina. The only means of governance was common sense.

Geologists Roger Charlier and Christian DeMeyer have argued that environmental management programs are usually introduced by a government agency reacting to resource degradation, exposure to major hazards, utilization conflict or the need for social-economic development. This supposition fits well with the concept of coastal zone management legislation, which is a response to two of these factors: resource degradation and utilization conflict. As these authors note, the CZMA itself reflected a national concern "to harmonize the demands of urbanization, recreation, industry and energy development in the littoral fringe, and recognizes the incompatibility of these uses." In terms of the regulation of natural resources, Arthur McEvoy has argued that it is the domain of public agencies to determine permissible levels of use or harvest so as to regulate effective and efficient use while conserving the resource for future use. The source of the second of the second of the second of the resource of the resource of the second of t

<sup>&</sup>lt;sup>56</sup> Roger H. Charlier and Christian P. DeMeyer, *Coastal Erosion: Response and Management* (Berlin: Springer-Verlag, 1998), 12.

<sup>&</sup>lt;sup>37</sup> Ibid., 13.

<sup>&</sup>lt;sup>58</sup> Arthur F. McEvoy, "Law, Public Policy, and Industrialization in the California Fisheries, 1900-1925," *The Business History Review* 57, no. 4 (Winter, 1983): 494-521, 496.

David Vogel has suggested that environmental regulation can be used to generalize about the politics and administration of regulation generally, though he acknowledges that environmental regulation in the United States is a politicized issue.<sup>59</sup> When South Carolina's coastal zone management legislation was amended following Hurricane Hugo, it was a politicized issue based upon how the legislation would affect the property rights of coastal landowners. Many of the legislators pushing for a weaker version of the law represented residents of the coastal counties.

Another possibility is the use of environmental history as a form of advocacy. Environmental historian Richard Andrews argues that historical context actively affects environmental issues today. He specifically offers the example of wetlands protection in the framework of years of federal policies and constitutional doctrines established over time, both of which have proven difficult to overcome. Andrews contends that understanding the history of American environmental policy is necessary to correct what he views as existing problems. He suggests that persistent public support is necessary to initiate and maintain government action and that both require knowledge of what has been successful and what has not.<sup>60</sup> This was the key weakness of the South Carolina's coastal zone management program. When initially introduced, it had public support. At that juncture, the weak regulations introduced replaced nothing and, in response, the state received federal money. The amendments to the program seemed good in theory, based upon the idea that they would help decrease erosion. This change represented the policy

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<sup>&</sup>lt;sup>59</sup> David Vogel, *National Styles of Regulation: Environmental Policy in Great Britain and the United States* (Ithaca: Cornell University Press, 1986), 24, 261.

<sup>&</sup>lt;sup>60</sup> Richard N.L. Andrews, *Managing the Environment, Managing Ourselves: A History of American Environmental Policy* (New Haven: Yale University Press, 1999).

at its strongest point, both from a regulatory and a scientific standpoint. The full regulatory implications of the amendments were not understood until after Hurricane Hugo and the *Lucas* challenge. At that point, the regulations lost public support because they adversely affected another group of rights—property rights. This group of rights was viewed by many of the citizens as more important than the environmental protection offered by the coastal zone management laws.

Historians and political scientists have analyzed specific regulations and why they were deemed successes or failures. Samuel P. Hays, a historian who has written extensively on environmental issues, maintains that analysis of this type can only be deemed successful if it includes the circumstances surrounding the regulation, the groups influenced by it and the ends which will be served through it. Similarly, Thomas McCraw argues that successful and effective regulation of business must take the economics of the situation into account. While McCraw applied this principle to the regulation of businesses, it applies to the regulation of individuals as well. The laws passed by the states under the CZMA, unlike other environmental statutes like the Clean Air and Clean Water Acts, applied directly to individuals. In the case of South Carolina, the legislature considered the economic objectives of the state as a whole when it devised the subject regulation, but it did not consider the economic consequences to affected individuals or the reactions that those people might have. While corporations have had exposure to governmental regulation, individuals generally have not. This inexperience

<sup>&</sup>lt;sup>61</sup> Samuel P. Hays, *American Political History as Social Analysis* (Knoxville: The University of Tennessee Press, 1980), 59.

<sup>&</sup>lt;sup>62</sup> Thomas K. McCraw, *Prophets of Regulation* (Cambridge: Harvard University Press, 1984).

explains the failure of these property owners to educate themselves and give input in regard to the applicable regulation until Hurricane Hugo made it more conspicuous.

Other scholars look for the roots or reasoning behind regulation. A common line of reasoning contends that social regulation is required due to past actions or inaction. Environmental historian Richard Andrews believes that U.S. environmental policy is a "heterogeneous patchwork" that has been developed piecemeal through time, and that most of the environmental crises that exist are due to a failure to regulate and, less directly, to economic progress and the means by which it was effected. Policy, according to Andrews, includes not only regulation as found in written form but also the obstacles of lack of regulation, as during the colonial period, and deregulation, as in the Ronald Reagan era. As this study will explore, the primary obstacle to the enforcement of effective and progressive coastal zone management legislation in South Carolina was the concern of affected citizens.

In his examination of modern environmental politics, Hays has suggested that historical examination in this context is valuable because it can influence the usefulness of modern discussion and that historians, as observers rather than participants, may offer different and original observations. According to Hays, to properly analyze environmental regulation, one must look at the circumstances surrounding it, the groups influenced by it and the ends that will be served through it. This type of analysis is useful in the subject study; in South Carolina, strong opposition existed to an effective,

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<sup>&</sup>lt;sup>63</sup> Samuel P. Hays, *Beauty, Health, and Permanence: Environmental Politics in the United States, 1955-1985* (New York; Cambridge University Press, 1987).

<sup>&</sup>lt;sup>64</sup> Samuel P. Hays, *A History of Environmental Politics Since 1945* (Pittsburgh: University of Pittsburgh Press, 2000), 199.

scientifically sound coastal zone management policy if property rights were thereby affected. This opposition was so strong that it influenced changes made to the legislation.

The coastal zone is a battleground of interests, between public and private, citizen and government, economic and environmental, state and federal. It encompasses concerns that affect everyone who come into contact with this region where land and sea meet and has even come to affect others who will never go there through its role in defining the relationship between citizens and government. In this case, the voices of citizens were louder than those of scientists. Despite the apparent need for tough regulation, protest from society that related to the diminution of property rights won the day in South Carolina. Representatives responded to the concerns of their constituents and weakened the law, despite indications that stronger regulation was needed for the protection of coastal resources.

Coastal zone regulation is a form of environmental regulation, statutes that are difficult to write and harder to implement. Several factors make the composition and implementation of environmental regulation tricky. First, environmental regulation is frequently based upon science, and changes in scientific knowledge or theory are frequent. In the case of coastal zone management, scientific understanding of erosion and erosion-control devices evolved since the early 1970s and resulted in policy and legislative changes. Second, environmental regulation can be costly. For coastal zone management, sizeable expenses include renourishment of beaches and, potentially, acquisition of expensive oceanfront property. In this case, legislators failed to take into account the economic consequences to individuals that were affected by the regulation, as

they looked only at the "big picture" of the state's economy and its reliance on tourism. Another problem frequently associated with environmental regulation that is illustrated by coastal regulation is the reaction of groups within the subject society. In South Carolina, there were citizens who supported strong coastal regulation and others who blasted such regulation. Both used legal action to express their views. These groups put more value on private property rights than on environmental protection. The subject regulation was also made more difficult due to the fact that it applied to individuals who were inexperienced with regulation rather than to businesses. Finally, nature can influence the form of environmental regulation. Coastal zone management regulation in South Carolina was impacted by Hurricane Hugo.

This study will look at the stages of South Carolina's coastal zone management policy and regulation and will attempt to determine why these changes were made, considering especially the legal challenges made to the regulation in its strongest form and from where these challenges arose. These changes, and the factors that led to them, are helpful in identifying the difficulties faced by legislators who seek to devise environmental regulation in all forms, and an evaluation of the legislation and policy is a vehicle for determining if this regulatory scheme was successful.

#### **Chapter One**

- "Administration is the most obvious part of government...It is government in action..."
- --Woodrow Wilson
- "The Study of Administration"

American concern for the environment, at least as a major societal and political issue, can be traced to the 1960s and 1970s. 65 Most of the modern environmental legislation at both the federal and state levels has its roots in this time period. After hundreds of years of development and industrialization which largely ignored environmental consequences, a large segment of the American population began to see the effects of their neglect in the 1960s and 1970s. High profile events, like the burning of the Cuyahoga River in Cleveland, Ohio in 1969, and intriguing environmental literature, including Rachel Carson's Silent Spring in 1962 and the material of modern muckraker Ralph Nader, caught the interest and attention of a generation of social activists that had marched for civil rights and against Vietnam. 66 Silent Spring alerted Americans to the dangers of pesticides and documented how environment factors are interconnected. The public became increasingly aware of pollution through the development and advancement of ecology and through the goings-on of larger and more vocal activist groups. Preservation of the environment and conservation became issues of general concern among the American public, amidst the many social changes that had occurred and were occurring in the United States since World War II.

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<sup>&</sup>lt;sup>65</sup> Vernberg and Vernberg, *The Coastal Zone*, xiii.

<sup>&</sup>lt;sup>66</sup> Several books published before *Silent Spring* were influential in introducing American society to the condition of the environment, including the 1948 *Our Plundered Planet*, by Fairfield Osborn, and *A Sand County Almanac*, by Aldo Leopold.

Additionally, the prosperous post-war economy allowed many families to concentrate more on leisure than they had been able to before, consequently leading to a concern for the environmental quality of personal activities. Though environmental protection had been a public issue in the regulation-rich Progressive and New Deal eras, the level of public consciousness of environmental hazards and awareness of other environmental concerns in the 1960s and 1970s was greater than in any earlier period. The environmental movement of this period is distinguishable from previous conservation movements, which sought to "conserve" nature through wise use for the future use of the human race.

A turning point from the perspective of public involvement in environmental concerns was Earth Day. On April 22, 1970, the first Earth Day was held. The brainchild of Senator Gaylord Nelson, Democrat of Wisconsin, Earth Day was originally planned as a one day teach-in on college campuses about "The Crisis of the Environment." A full-page advertisement for Earth Day ran in the Sunday *New York Times* on January 18, 1970:

A disease has infected our country. It has brought smog to Yosemite, dumped garbage in the Hudson, sprayed DDT in our food, and left our cities in decay. Its carrier is man.

Earth Day is a commitment to make life better, not just bigger and faster; to provide real rather than rhetorical solutions. It is a day to re-examine the ethic of individual progress at mankind's expense. It is a day to challenge the corporate and governmental leaders who promise change, but who shortchange the necessary programs. It is a day for looking beyond tomorrow. April 22 seeks a future worth living. April 22 seeks a future.

<sup>&</sup>lt;sup>67</sup> Hays, History of Environmental Politics.

<sup>&</sup>lt;sup>68</sup> David Vogel, "The 'New' Social Regulation", 160.

<sup>&</sup>lt;sup>69</sup> Bill Christofferson, *The Man from Clear Lake*, *Earth Day Founder Senator Gaylord Nelson* (Madison: The University of Wisconsin Press, 2004).

<sup>&</sup>lt;sup>70</sup> Ibid., 306-7.

The advertisement asked for responses and contributions, and both were received in great numbers. Earth Day became a nationwide celebration. The ad and its response also reflected how the environmental movement of this period differed from the conservation movement, which worked more with corporations than against them. The day's activities were loosely organized and varied widely depending on location. Common events were picking up trash and planting trees, but residents of some locales showed greater creativity. In San Francisco, a group poured oil into the reflecting pool in front of the office of Standard Oil of California in protest, and on Fifth Avenue in New York City demonstrators held up dead fish to passersby and shouted, "You're next, people!" Approximately 20 million Americans participated in the first Earth Day celebration. To many, Earth Day represents the launch of a full-scale environmental movement in the United States, a theory given credence both by the number of people who participated in the event and by what followed it.

There was a major increase in both activist groups themselves and in memberships in activist groups during this period, including an increase of about four hundred thousand members in the five largest environmental organizations in 1970 and 1971. As a result of their size and visibility, these groups gained tremendous power. This growth is one of the factors frequently cited by historians when considering why environmentally protective regulations began to multiply in number and complexity in the early 1970s. Regulation in general had expanded during the New Deal-era and had

<sup>&</sup>lt;sup>71</sup> Philip Shabecoff, *A Fierce Green Fire: The American Environmental Movement*, rev. ed. (Washington, D.C.: Island Press, 2003).

<sup>&</sup>lt;sup>72</sup> Ibid., 103

<sup>&</sup>lt;sup>73</sup> Vogel, "The 'New' Social Regulation," 170.

proved to be effective in many situations. This may be one reason the these groups, which had more members, money and power in the 1960s and 1970s, chose to go about environmental improvement through regulation as opposed to through direct action.

One of the key reactions to Earth Day and the feelings and ideas represented therein came from the federal government. This response involved legislation that included the National Environmental Policy Act and formation of the Environmental Protection Agency, Clean Water Act, Ocean Dumping Act, Endangered Species Act, Resource Conservation and Recovery Act (RCRA) and Toxic Substances Control Act. In fact, environmentally protective legislation was debated on and acted upon by every session of Congress from the beginning of the 1960s to the end of the 1970s. These lengthy statutes were vastly different from the environmental regulation that had preceded them, offering detailed instructions, procedures and criteria for the agencies that were produced. Environmental historian Samuel P. Hays has noted that the size and scale of public institutions, including federal administrative bodies, grew at a pace similar to the growth of environmental values themselves in the period after World War II. What this means is that as people became more concerned about the environment, more agencies were created to oversee the environment.

In 1972, the Coastal Zone Management Act (CZMA) became law. The CZMA states that "There is a national interest in the effective management, beneficial use, protection, and development of the coastal zone." This measure was, as a general

<sup>&</sup>lt;sup>74</sup> Vogel, "The 'New' Social Regulation," 161.

<sup>75</sup> Hays, "The Structure of Environmental Politics," 724.

<sup>&</sup>lt;sup>76</sup> Coastal Zone Management Act of 1972, 16 U.S. Code Annotated §1451 et seq., 16 U.S.C.A. § 1451(a).

matter, part of the expansion of national environmental consciousness that was occurring in the United States. In earlier years there had been no environmental concern regarding use of the coastal zone; coastal resources were viewed as unlimited in South Carolina and in the other coastal states.<sup>77</sup> In addition to the problems that this attitude created, the coastal area was important and reflected a need for protection. The coastal zone was vital to the nation and the individual states from economic and ecological standpoints, home to rich natural resources, numerous wildlife habitats, scenic beauty and recreational areas.<sup>78</sup>

Specifically, the CZMA was a response to the recommendations of the Stratton Commission of the Commission of Marine Science, Engineering and Resources as set forth in a report, "Our Nation and the Sea," issued in January 1969. The Commission consisted of scientists, politicians and industry leaders and included representation from the Ford Foundation, the Department of the Interior and Standard Oil.<sup>79</sup> This document made specific recommendations for coastal problems that were identified by the Commission. The report recognized the unique nature of the area and the complexity of the problems that existed there and wanted a federal agency to oversee the care of the zone. The Commission determined that the most effective administration would be by

<sup>&</sup>lt;sup>77</sup> Vernberg and Vernberg, *The Coastal Zone*, 7.

<sup>&</sup>lt;sup>78</sup> DeVoe and Kleppel, "Introduction", 1-2.

<sup>&</sup>lt;sup>79</sup> The Commission had fifteen members: Julius Stratton of the Ford Foundation, Richard Geyer of the Department of Oceanography at Texas A&M, David Adams of the North Carolina Department of Conservation and Development Fisheries Division, Carl Auerbach of the University of Minnesota School of Law, Charles F. Baird of the Office of the Undersecretary of the Navy, Jacob Blaustein of Standard Oil, Frank DiLuzio of the Department of the Interior, Leon Jaworski of the law firm Fulbright, Crooker, Freeman, Bates and Jaworski, John Knauss of the University of Rhode Island Department of Oceanography, John Perry of Perry Publications, Taylor Pryor of the Oceanic Foundation, George Reedy of the Struthers Research and Development Corporation, Robert White of the Department of Commerce, and George Sullivan of General Electric. The Commission also had four Congressional advisors: Senator Norris Cotton, Senator Warren Magnuson, Representative Alton Lennon and Representative Charles Mosher. Stratton Commission, "Our Nation and the Sea: A Plan for National Action," National Oceanic and Atmospheric Administration, http://www.lib.noaa.gov/noaainfo/heritage/stratton/title.html.

the individual states but determined that the states currently lacked the machinery to properly manage the zone. Because the coastal zone was unique to each state, and because the states used the area in a variety of ways, they would be more competent at managing their own coasts. As a result, the Commission recommended that the federal government assist the states financially in establishing coastal zone authorities to plan, regulate, acquire lands and develop public facilities. Other factors played into the push for a federal program, including lobbying by environmental groups and requests by state governments.

Like any major federal legislation, consideration of what would become the CZMA involved plenty of political disagreement from the start: President Richard Nixon wanted a national land-use law; most of Congress wanted a separate coastal statute; the oil industry was concerned about allowable ocean drilling; and many local governments worried about their roles being diluted if federal legislation, and subsequently control, was implemented. President Nixon, who apparently responded to the wishes of the oil industry in this controversy, supported the Department of the Interior because it promoted offshore drilling and development of deepwater ports to serve supertankers. A national land-use law would have allowed Interior to follow through with these projects. Though

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<sup>&</sup>lt;sup>80</sup> Senate Committee on Commerce, *Legislative History of the Coastal Zone Management Act of 1972*, 94<sup>th</sup> Cong., 2d sess., 1976, S. Res. 222, 2.

<sup>&</sup>lt;sup>81</sup> Robert W. Knecht, "Tracing the Evolution of Coastal Zone Management," in *Achievements of the '70s and Prospects for the '80s: Proceedings of the Seventh Annual Conference of the Coastal Society* (Bethesda, MD: The Coastal Society, 1981), 1-8, 2. Other historians also comment on the importance of the Stratton Commission Report in focusing the attention of politicians on the importance of the coastal zone and the lack of effective management at that time. See Beatley, Brower and Schwab, *An Introduction to Coastal Zone Management*, 102.

<sup>&</sup>lt;sup>82</sup> Charles M. Lamb, *Land Use Politics and Law in the 1970's* (Washington, D.C.: Program of Policy Studies in Science and Technology of the George Washington University, 1975), 32.

<sup>83 &</sup>quot;Senate Is Backed on Coast-Zone Bill," New York Times, October 3, 1972.

the national land-use law failed, the separate coastal management statute succeeded. The states were unwilling to accept the kind of control that the national land-use law implied. Perhaps most importantly from the point of view of the Senate, the coastal management statute sent money back to the states, whereas the national land-use law would not have. Senator Ernest F. Hollings, Democrat of South Carolina, implied that this was one of the reasons for the Senate support: "This law [the Coastal Zone Management Act] would help hard-pressed coastal and Great Lakes states plan and manage development on lands and waters in their coastal zones." Hays reasons that environmentalists tolerated the failure of the proposed national land-use law because they believed that large-scale industry favored such legislation. As a result, the environmentalists sided with Congress and supported the idea of a separate coastal management statute.

After a separate coastal statute was agreed upon, the next big question was who would administer the program. President Nixon backed the Department of the Interior, while congressional leaders favored the establishment of a new agency for the duties. 60 Congress finally prevailed, in large part under the leadership of Senator Hollings, Chair of the National Ocean Policy Study. 71 As for a majority of the provisions of the CZMA, Congress was relying upon the recommendations of the Stratton Commission that had specifically recommended a new, consolidated agency for this role. The Commission suggested combining the Environmental Science Services Administration, the U.S. Coast

<sup>&</sup>lt;sup>84</sup> Ernest F. Hollings, letter to the editor, *Washington Post*, July 5, 1973.

<sup>85</sup> Hays, "The Structure of Environmental Politics," 730.

<sup>&</sup>lt;sup>86</sup> President Nixon, in his statement on signing the CZMA, stated that he had hoped to have the Department of the Interior as the lead agency for the CZMA because he wanted to consolidate all land use policy in one agency. Senate Committee on Commerce, *Legislative History of the Coastal Zone Management Act*, 459.

<sup>87</sup> Lamb, *Land Use Politics*, 33.

Guard and the Bureau of Commercial Fisheries to form "the base for a major, viable Government agency...bringing to bear the scientific disciplines and other specialized knowledge required to initiate a diverse, broad-gauged effort." The Commission thought that this joint organization might be called the National Ocean and Atmospheric Administration or NOAA. It was stated in the CZMA's legislative history that the NOAA could offer "a broader and more balanced perspective." Additionally, Senator Hollings told the Senate that "after careful review the committee believes that NOAA is the best qualified agency to undertake this complex task because of its capabilities for dealing with the interaction of land and water problems." The input of the South Carolina senator provided an influential voice for his home state in the preparation of the CZMA.

National policy as declared by Congress in the CZMA included the preservation, protection and development of the resources of the national coastal zone. As to the states, Congress declared that national policy was "to encourage and assist the states to exercise effectively their responsibilities in the coastal zone through the development and implementation of management programs to achieve wise use of the land and water resources of the coastal zone, giving full consideration to ecological, cultural, historic and esthetic values as well as the needs for compatible economic development." This

<sup>&</sup>lt;sup>88</sup> Stratton Commission, "Our Nation and the Sea," 234.

<sup>&</sup>lt;sup>89</sup>Ibid 4

<sup>&</sup>lt;sup>90</sup> Senate Committee on Commerce, Legislative History of the Coastal Zone Management Act, 2

<sup>&</sup>lt;sup>91</sup> Senate Committee on Commerce, *Legislative History of the Coastal Zone Management Act*, 202. The legislative history of the CZMA also states that, while several agencies with responsibilities involving coastal waters were considered for the oversight role, none of them has "so broad and extensive an involvement as does NOAA." Ibid., 319.

<sup>92</sup> Coastal Zone Management Act, 16 U.S.C.A. § 1452.

statement of policy indicated that economic considerations were not the only factors that should be considered for the maintenance of the zone. It also demonstrated that it would be the states, not the federal government, that would make the actual rules. The CZMA authorized federal grants-in-aid (money given by a governmental agency to an institution for a specific purpose), administered through the Secretary of Commerce. To qualify for the federal money, a state needed to complete a specified planning process then submit its plan to the federal Office of Coastal Zone Management for approval. To be considered for approval, a plan had to show how the state's coastal zone would be defined, how permissible uses of land and water within the zone would be determined, a designation of areas of particular concern and an explanation of the legal infrastructure (laws and agencies) of the state's program. Once approved, the state was eligible for funding to implement and administer its coastal program. The amount available was up to fifty percent of the total cost to the state for development of its program, with no set dollar limit. 93 This approval process was cursory and most programs were accepted with no difficulty.

Each state's agency was given general authority to administer land and water use regulations. Each state was also granted the specific power to acquire land through condemnation or other means when it was deemed necessary to achieve compliance with

<sup>&</sup>lt;sup>93</sup> Coastal Zone Management Act, 16 U.S.C.A. § 1454-5. The states were able to specifically define or designate their own coastal zones under the CZMA, and the definitions vary. The CZMA was amended in 1976 to include more specific language in regard to shoreline erosion. Section 305(b)(a) states that "The management program for each coastal state shall include a planning process for (A) assessing the effects of shoreline erosion (however caused), and (B) studying and evaluating ways to control, or lessen the impact of, such erosion, and to restore areas adversely affected by such erosion."

its management plan. 94 As a whole, the CZMA gave the individual states great freedom in designing and managing their distinct coastal zone management programs. It was different from the majority of the federal administrative legislation enacted in the period preceding it in that it offered "carrots" (financial assistance) as opposed to "sticks" (threats to cut off federal funding). The only standard for approval was that the Secretary of Commerce had to determine if the program met the basic requirements listed in the statute. These requirements were: 1) that the state developed a program consistent with federal goals as stated in the CZMA; 2) that the program included coastal zone boundaries, permissible uses within the zone, designation of areas within the zone, identification of means of control, priorities of use, organizational structure of the program, definition of "beach," planning process for energy facilities, process for the assessment and evaluation of erosion; 3) evidence of coordination with local plans and establishment of a mechanism for continuing consultation with local and state agencies; 4) evidence of public hearings; 5) review by the governor; 6) designation of an agency to administer and implement the plan; 7) organization to implement the plan; 8) consideration of the national interest; 9) procedures for conserving areas with recreational, ecological, historical or aesthetic value; 10) designation of authority to administer land and water use control and to acquire fee simple interests in land necessary to achieve conformance with the program; 11) establishment of administrative review procedure; 12) method of assuring that unreasonable restrictions on land or water

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<sup>&</sup>lt;sup>94</sup> Coastal Zone Management Act, 16 U.S.C.A. § 1455(d)(10). The 1976 amendments to the CZMA added three planning requirements for state programs; states were now specifically required to consider shoreline access, shoreline erosion and energy facility siting in their programs. In 1990, the a section requiring the consideration of coastal non-point-source pollution was added.

use do not exist; 13) designation of areas of national significance; 14) public participation in permitting; and 15) mechanism for adherence by other state agencies.<sup>95</sup>

The CZMA encouraged cooperation between the federal and state levels of government, especially since the state agencies had to meet certain federal guidelines (such as the consideration of the national interest when planning for energy facilities), recognize other federal legislation that affected the coastal zone, and cooperate with federal agencies that were already in place. 96 For example, the Clean Air Act had implications for wetlands permitting, was involved in coastal pollution control, and established effluent standards for water pollutants. If a state's agency wanted to impose regulation that affected any of these variables, it needed to cooperate with the agency responsible for the administration of the Clean Water Act, the Environmental Protection Agency. The most important thing about the CZMA was that nothing was mandatory; states were free to act or not. If they chose to act, the requirements to get federal funding, as discussed above, were modest. As a result, South Carolina and the other coastal states had the freedom to design almost any kind of coastal program that they wanted and were able to take into consideration economic, geographic and political factors. Most Atlantic coast states immediately responded to the offer of federal money and devised plans. The only exception was Georgia; Georgia was willing to forego the free funds to maintain full and complete control of their coast. Full autonomy was more important to Georgia than

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<sup>95</sup> Coastal Zone Management Act, 16 U.S.C.A. § 1454.

<sup>&</sup>lt;sup>96</sup> Numerous agencies and pieces of legislation affect the coastal zone; a list that includes legislation, agencies and activities implicating the coastal zone is given in Appendix One.

the cash offered by Congress. South Carolina, on the other hand, found the offer of funding easier to accept.

South Carolina was hardly in the vanguard of environmental legislation and regulation in the period that came to be known as the "Green Decade," and many southern states could be considered this way. (Samuel P. Hays has noted that most of the interest in coastal environmental protection came from California and the northern Atlantic states.)<sup>97</sup> While most other Atlantic coast states had enacted legislation to help protect at least their wetlands in the late 1960s and early 1970s, South Carolina legislators had failed to do even that at the time the CZMA was enacted. Judging by the timeframe of the adoption of the CZMA and the South Carolina statute, the CZMA was the proximate cause of South Carolina's General Assembly enactment of coastal legislation. South Carolina legislators considered many variables when writing the first coastal legislation.

First, the legislators considered the characteristics of the South Carolina coastal zone and how it was affected by nature. The human desire for stable land-use patterns are in conflict with the dynamic nature of the coastal system. Erosion is a distinctive concern that both landowners and public users of the coastal zone must contend with and attempt to manage. For this reason, people seek to control both their own behavior and as well as the behavior of nature so that coastal resources can be managed as effectively as possible, both from development and conservation standpoints. Laws are one means of controlling and organizing the behaviors of human beings.

<sup>&</sup>lt;sup>97</sup> Hays, Health, Beauty, and Permanence, 167-8.

<sup>&</sup>lt;sup>98</sup> London and others, A Study of Shore Erosion, 1.

Because of the complexity of the coastal zone, numerous values come into play when considering how to regulate activities. Social ecologist Stephen Kellert has argued that different segments of the population place different values on the coastal zone. These include aesthetic values (the coast as a source of beauty and other physical attributes), scientific values (the coast as a source of opportunities for scientific research and understanding), humanistic values (the coast as a vehicle for bonds with nature), naturalistic values (the coast as an area for exploration of and contact with nature) and utilitarian values (the coast as a source of material and commodity benefits). <sup>99</sup> As a result, writing laws to govern the coastal area is a challenging process. Coastal zone legislation is frequently contentious and, as was the case for South Carolina, may take several years to formulate in its final composition.

Soon after the passage of the CZMA, South Carolina started toward coastal zone legislation. In August 1973, Governor John West, through executive order, created the South Carolina Coastal Zone Planning and Management Council. The body was made up of eleven members, taken from the heads of state agencies and elected representatives, and was charged with drafting and developing a management program for the coastal zone in accordance with the provisions of the CZMA. Several attempts at legislation by this group were unsuccessful because the General Assembly could not decide how powerful the regulation should be, and the challenges came from every level of the

<sup>&</sup>lt;sup>99</sup> Stephen R. Kellert, "Coastal Values and a Sense of Place," in *America's Changing Coasts: Private Rights and Public Trust*, ed. Diana M. Whitelaw and Gerald R. Visgilio (Cheltenham, UK: Edward Elgar Publishing, 2005), 12-25, 15.

process. Some bills were defeated in the House, some in the Senate and some were vetoed by the Governor.

In 1977, the Senate Fish, Game and Forestry Committee sponsored a compromise bill (S280) which passed the Senate and the House in May with only slight amendment. Governor Edwards signed the bill into law on May 24, 1977. Act 123 of 1977, the South Carolina Coastal Management Act, established the South Carolina Coastal Council, which, on July 1, 1997, became an official agency. It also provided for the development and administration of a coastal zone management program by the Council, including the authority to issue and deny permits in critical areas as of September 28, 1977, as well as authorizing legal proceedings to settle claims of private individuals to tidelands below the mean high water mark. <sup>100</sup>

The Coastal Council, the new agency created to administer the act, was an 18-member commission, with eight members to be chosen by the governing bodies of the coastal counties, six to be chosen from the coastal Congressional districts by the Senators and Representatives of those districts and four members taken directly from the state's Senate and House. All members were to serve four-year terms, except for the four legislative members, who were to continue as long as they remained members of the General Assembly. The legislative members were motivated to perform as their constituents wished, or they could suffer the consequences of voter displeasure in the next election. The other members did not share this motivation, as they were not elected officials.

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<sup>&</sup>lt;sup>100</sup> South Carolina Coastal Council, *Legal Analysis and Goals*, sec. 1, part 2, 5-8.

<sup>&</sup>lt;sup>101</sup> South Carolina Coastal Council, *Legal Analysis and Goals*, sec. 1, part 2, 10-11.

The policies and directives of the Council were to be formulated under the umbrella policy of the Act: "' to protect the quality of the coastal environment and to promote the economic and social improvement of the coastal zone and all the people of the State.' "102 The chief purpose of the Act was stated as "the proper management of the natural, recreational, commercial and industrial resources of the State's coastal zone resources of present and potential value to all citizens of the State." Because of the earlier failed attempts, this type of broad language was probably necessary for the legislation to carry favor with both houses and the governor. There was little opposition from coastal property owners and commercial developers to this original legislation, which imposed few actual limits on construction, especially since the shoreline was highly developed already. (There were no setback provisions that required a certain distance be kept from the beach in the original legislation.) The permitting process did not affect people who already had a house, and people who owned undeveloped property could still seek a permit for construction, which they had no reason to believe would not be approved given the advanced condition of development at that time.

William Eichbaum has noted that there is no single, unified public or uniform set of values regarding the coastal zone. Groups tend to find management and policies constructive when the use they make of the coastal zone is protected. Developers and commercial property owners (those using the property for commercial purposes such as hotels) are generally hostile to laws that limit where or how they can build on their

<sup>&</sup>lt;sup>102</sup> Ibid., 9.

<sup>&</sup>lt;sup>103</sup> Ibid., 19.

<sup>&</sup>lt;sup>104</sup> William Eichbaum, "Coastal Management and Policy," in *Environmental Science in the Coastal Zone: Issues for Further Research*, ed. National Research Council (Washington, D.C.: National Academy Press, 1994), 152.

property. This has been true for coastal property in South Carolina, but it was not exhibited until after the original legislation was amended.

The state granted the Council two general types of management authority. As to the critical areas, defined as coastal waters, tidelands, beaches and primary sand dunes, the Council received direct control through the permitting program. The Council was given the exclusive authority to issue or deny applications for alterations of any critical areas. What this means is that a property owner who wanted to build a house, walkway or other structure on a critical area (such as a dune) would have to apply to the Council for permission. The Council was free to either approve or deny the permit after considering certain factors required by the Act, including effects on the production of fish and other natural resources, effects on endangered species and their habitats, effects on public access to recreational areas and the impact on historical and archaeological sites. 105 A permit appeals process was provided for, with direct appeals to the Council itself. If the property owner was denied a permit, he or she would have to ask the Council to reconsider their decision before he or she could take any other action. An aggrieved party could also appeal to the circuit court of the county where the project was to be located, namely a "last resort."

The second type of authority granted to the Council was "indirect." In all the counties that were included in the coastal zone by definition, the Council was granted "indirect control." This "indirect" authority was to be implemented through Council certification of permits of other agencies and through memoranda of agreement between

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<sup>&</sup>lt;sup>105</sup> South Carolina Coastal Council, *Legal Analysis and Goals*, sec. 1, part 2, 16-17.

<sup>&</sup>lt;sup>106</sup> South Carolina Coastal Council, *Legal Analysis and Goals*, sec. 1, part 2, 12-13.

the Council and other agencies, including the Environmental Protection Agency and the National Park Service, both of which had power to make certain determinations within the coastal zone. 107 More specifically, the Council was directed to manage certain areas and activities, including pipeline corridors and estuarine and marine sanctuaries. 108 Overall, power outside the limited areas defined as "critical" was modest. What this means in terms of development is that a property owner did not have to ask the Council for permission to build outside the critical areas. The Council was also designated to develop and implement a beach erosion control program. The body was granted permit jurisdiction over erosion control structures not otherwise covered by law, meaning that a permit was required before a new erosion control device could be constructed, unless it fell in an area that was covered by another agency (such as the National Park Service).

This first statute, while stronger than no regulation, was weak and allowed the Council little control over construction or erosion-control devices, the two primary human-made sources of erosion in South Carolina. Essentially, a permit was only denied if "the project would permanently disrupt a priority use" of a Geographic Area of Particular Concern (critical area). These uses varied by area but in general were characterized by economic, environmental or recreational value. For example, a permit that requested to build a structure that would block public access to a highly-used recreational beach could and should be denied under the provisions of the original

<sup>&</sup>lt;sup>107</sup> Ibid., 22.

<sup>&</sup>lt;sup>108</sup> Ibid., 14-15.

<sup>&</sup>lt;sup>109</sup> Office of Coastal Zone Management, National Ocean and Atmospheric Administration and South Carolina Coastal Council, *Final Environmental Impact Statement*, 13.

legislation. In reality, few permits were denied; this is likely because the regulations were unspecific and vague and because of public pressure to continue development.

As a result, these types of structures, in the form of private houses and commercial businesses, continued to proliferate along the coast. Development continued, largely unhindered by the regulation, as did the erection of erosion-control devices like seawalls by private property owners. As the prices for coastal real estate rose, so too did the number of hard defenses and, subsequently, the severity of erosion. As a result of this initial legislation, the condition of the coastal zone did not improve.

The CZMA was part of a larger movement toward environmental consciousness that occurred in the 1960s and 1970s. It was a response to a perceived need for regulation of this finite resource, based upon degradation and conflicts in use, as well as to a general societal movement. In that it motivated most coastal states to initiate their own coastal planning policies and processes, it was certainly a positive step. However, its very flexibility, which allowed each state to customize its program to best fit its unique coastal qualities, was also one of its weaknesses. In striving for elasticity, the CZMA had so few requirements and obligations that states had too much freedom. In short, some states enacted an ineffective program or made changes to existing programs that rendered them ineffective. What each state chose to do with the resources offered by the CZMA was their decision, and they were given little guidance under the CZMA.

South Carolina's first attempt at coastal zone management legislation involved a contentious process of give and take in the General Assembly. Because of the many

conflicting users of the area and due to the competing values related to the zone, the legislation that evolved was necessarily broad. Yet this statute was a good starting point for the state, seeking as it did to properly manage and protect the coastal zone. The General Assembly recognized the importance of the coastal zone, but it was also motivated by the financial assistance offered by the CZMA.

This initial legislation established the South Carolina Coastal Council to oversee the implementation of the new policies. The Council was given authority, via a permitting process, over the area deemed "critical," but this area was small. In short, the Council had modest authority (it could deny permits in theory but rarely did) over a limited amount of land (when compared to the state's full coastal zone). The Council's authority to control development on primary sand dunes, while a great improvement from the previous situation (i.e.—no regulation), was also modest. As a result, development near the shoreline continued to accumulate at a rapid pace. South Carolina's primary concern was in limiting construction and development in certain areas, particularly those in close proximity to the beach and its associated erosion zones, but because the permitting process was so relaxed, not much got done. Natural processes remained, and the anxiety associated with erosion still plagued "front-row" property owners (those who owned lots directly adjacent to the beach and/or primary oceanfront dunes). Their response, in many cases, was to erect a seawall that exacerbated erosion farther down the beach. Within ten years, the situation deteriorated to a "state of crisis."

## **Chapter Two**

- "In Florida and Louisiana, and the Carolinas in 1989, people found out, yes, it can be that bad..."
- --Cathy Henry, North Carolina Division of Emergency Preparedness 110
- "...everyone who hears these words of mine and puts them into practice is like a wise man who built his house on the rock. The rain came down...the winds blew and beat against that house; yet it did not fall, because it had its foundation on the rock. But everyone who...does not...is like a foolish man who built his house on sand. The rain came down...and the winds blew and beat against that house, and it fell with a great crash."

--Matthew 7:24-27

The Coastal Council recognized that the protection of the coastal zone was not progressing as well as had been hoped when South Carolina's first coastal zone management legislation was enacted. After the initial statute had been in place for almost ten years, the condition of the beaches had not improved. In October 1986, the Council appointed the Blue Ribbon Committee on Beachfront Management to investigate beach and dune erosion in South Carolina and to make recommendations to improve the situation. The Committee was made up of developers, environmentalists, and state and local representatives.<sup>111</sup> The following March, the Committee issued its report, finding

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<sup>&</sup>lt;sup>110</sup> Peter Applebome, "Outlook: Risky; Storm Cycles and Coastal Growth Could Make Disaster a Way of Life," *The New York Times*, August 30, 1992.

May 8, 1988. The members were Erick Ficken of Myrtle Beach, Alan Altman of Pawleys Island, Richard Beck of Folly Beach, Frank Brumley of Charleston, Johnny Byrd of Atlantic Beach, Frances Close-Hart of Columbia, Richard D'Amato of North Myrtle Beach, Richard Davis of Columbia, John Dean of Columbia, Palmer Freeman of Columbia, Virginia Guerard of Edisto Beach, Betty Haskins of Georgetown, Randall Lee of Columbia, Laura MacIntosh of Bluffton, William Marscher of Hilton Head, Robert Marvin of Walterboro, John McMillan of Columbia, Earle Morris of Columbia, Page Morris of Columbia, Wim Pastoor of Myrtle Beach, Jim Self of Greenwood, Charles Sweatt of Sullivan's Island, Charles Say of Charleston, Neil Wright of Surfside Beach and Huber Yarborough of Greenville.

that "the South Carolina beach/dune system is now in a state of crisis." The Committee's report stated that over 57 miles of the state's beaches were critically eroding, which it attributed to three principal factors: rising sea levels, poorly planned development that was infringing upon the beach/dune system and an overall lack of comprehensive beach management planning. (The sea level rose over one foot in the 20<sup>th</sup> century, thereby consuming approximately 1,000 feet of beach. Though some changes in sea level are normal, this dramatic rise is usually attributed to global warming.) 114

The Committee's report noted that the "shoreline is a resource which is vitally important to the citizens of this state and to the state's economy as it annually attracts millions of visitors and generates approximately two-thirds of the state's annual \$3.75 billion dollar tourist industry." The Committee sought to protect the coast as a resource for the state and its economy, but the economic situation of individual coastal property owners was not considered in the committee's findings nor was it considered in the recommendations made to the General Assembly.

The Committee further concluded that the South Carolina Coastal Zone

Management Act had been ineffective in controlling development because "too little

authority over the beach/dune system was given to the Coastal Council which is

<sup>&</sup>lt;sup>112</sup> South Carolina Blue Ribbon Committee on Beachfront Management (An independent committee appointed by the South Carolina Coastal Council), *Report of the South Carolina Blue Ribbon Committee on Beachfront Management* (Myrtle Beach: South Carolina Blue Ribbon Committee on Beachfront Management, 1987), i.

<sup>&</sup>lt;sup>113</sup> Blue Ribbon Committee, *Report*, i.

Angela L. Beckner, "Coastal Zone Management on the Atlantic Seaboard: Two Different Approaches Taken by the Carolinas," *Baltimore Journal of Environmental Law* 3 (1993): 62-88, 62.

<sup>&</sup>lt;sup>115</sup> Blue Ribbon Committee, *Report*, i.

responsible for administering the Act." <sup>116</sup> In turn, the Committee determined that the Council was unable to prevent unwise placement of structures (both homes and businesses) near the eroding areas. The Council did not have enough power to make and enforce the kinds of decisions that needed to be made in terms of structural siting. There were no defined rules about when a permit had to be denied. Additionally, the Committee noted that many owners of oceanfront property sought and received permits from the Council to erect erosion-control devices such as seawalls and bulkheads, most of which actually resulted in increased erosion and other negative effects. 117 The Committee's report seemed to suggest that the Coastal Council must be given hard, definite rules under which permit requests would be denied. Otherwise, it seemed as though the Council granted most applications for permits. The Commission proposed a way to give the Council legislative power to deny permits for lots that had not been developed or in case a structure was destroyed. The proposed rules would require a denial in set, defined situations, decreasing discretionary decisions.

The Committee set forth recommendations for future coastal zone management, featuring "The Thirty-Year Retreat Policy." This policy included the determination of a "Setback Line," which the Committee defined as "the location of the Base Line [the location of the crest of a typical primary ocean front dune] based on a 30-year landward projection as determined by historical erosion rate and not influenced by erosion control structures or nourishment." The Setback Line was significant because the Committee

<sup>116</sup> Ibid.

<sup>117</sup> Blue Ribbon Committee, *Report*, ii. 118 Blue Ribbon Committee, *Report*, 6-7.

recommended that, following the effective date of the legislation, no new structures could be constructed seaward of the Setback Line unless the owner met certain stated conditions (such as having the lot platted prior to the effective date of the legislation, providing a plan for removal of the structure if that were to become necessary and obvious conditions such as meeting local building and zoning codes) AND received a permit for such construction from the Council. In practice, this meant that unless a property owner's construction planning had progressed significantly and was relatively small (since it would have to be moveable), the party would not be able to build in this zone. Also, it meant that if a house or other structure was destroyed, it could not be rebuilt if the lot was located within the zone.

Setbacks are extremely useful in coastal zone management. The purpose of designating setbacks or a setback line is to exclude certain uses, most often the construction of structures, from the areas close to the shoreline. The Council could use a setback for multiple purposes, including the avoidance of damage from flooding and erosion to structures, protection of ecological functions or ecologically critical or sensitive areas, and the protection of public access to the shoreline (i.e.—to keep property owners from building in such a way that public visitors are discouraged from going to the shoreline.) Shoreline setbacks differ from program to program; they can be designed as a uniform distance (such as 100 feet) or may be dictated by a natural feature. <sup>120</sup>

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<sup>&</sup>lt;sup>119</sup> Blue Ribbon Committee, *Report*, 9.

John R. Clark, *Coastal Zone Management Handbook* (Boca Raton: CRC Press/Lewis Publishers, 1996), 44.

In 1988, the General Assembly, specifically citing the report of the Blue Ribbon Committee on Beachfront Management that had been appointed by the Council, determined that the legislation in place to protect the coastal zone was inadequate, finding that it "did not provide adequate jurisdiction to the South Carolina Coastal Council to enable it to effectively protect the integrity of the beach/dune system." As a result, the General Assembly found, development had proceeded in close proximity to the beach/dune system, resulting in accelerated erosion and other problematic consequences. 122

To combat these issues, the General Assembly, in July 1988, adopted substantial amendments to the South Carolina Coastal Zone Management Act, commonly referred to as the Beachfront Management Act (BMA). The most vigorous provision in these amendments was the retreat policy: the BMA established a forty-year retreat from the shoreline policy that called for a gradual retreat from the beachfront over the prescribed period. 123 What this means is that they planned for future development to move away from the beach until it reached a point that erosion would no longer affect it. Additionally, this would make the structures less vulnerable to hurricanes. Houses that are located farther from the beach are less vulnerable to storm surge. Using historical data (including aerial photographs) on the location of shoreline, the Council drew the

South Carolina Code 48-39-250(4).
 South Carolina Code 48-39-250(4).

<sup>123</sup> South Carolina Code 48-39-280.

baseline at the innermost (i.e.--most landward) point at which the shoreline had been located within the last forty years. Beyond that point, the BMA banned development.<sup>124</sup>

As previously discussed, these types of regulations are frequently referred to as "setbacks" or "setback regulations." Setbacks can be thought of as a type of zoning, in that they allow only certain structures to be built in certain areas, while disallowing other types of development or specific structures in various places. Setbacks are extremely important in coastal communities because they force developers or landowners to build far enough back from the shoreline so that structures will not be in an overly dangerous position when exposed to coastal storms. Additionally, they allow dunes and shorelines to be conserved. This was a crucial development in support of South Carolina's overall policy, which was to control where and how development occurred. This was controversial because development was not allowed over an invisible line. Theoretically, this could mean that entire lots could not be used from a development perspective. In other words, a property owner could be faced with an expensive oceanfront lot that he or she could not build a house on after the passage of the BMA. Even more likely was the possibility that a property owner could only use part of a lot or lots. It was not highly controversial when it was passed because most of the oceanfront lots in South Carolina were already developed. It would become much more contentious when scores of homes were destroyed or severely damaged by Hurricane Hugo, since these property owners

<sup>&</sup>lt;sup>124</sup> South Carolina Code 48-39-280. The line was determined using digitized aerial photos taken since the 1940s, showing how beaches had eroded in and accreted in cycles. If a piece of land had been covered by water during that period, it could not be built on. Dean, *Against the Tide*, 200.

then had to apply for permits for construction if their lot or a portion of it extended over the line.

Almost immediately, the setback provision was questioned by property owners, but it was not an issue for the majority of property owners (since most already had houses, hotels or whatever they wanted to build). By July 20, days after the passage of the BMA, the Council indicated to Isle of Palms property owner Robert Willms Jr. that he would have either have to move his new oceanfront home, which was under construction at the time, or tear it down, as it fell seaward of the baseline by about eighty feet. Surprisingly, Willms was not upset that he had to move the construction; he was only displeased because he wanted a clear and definitive answer from the Council about where the house could be placed. "All I want is a decision. I'm upset because I can't get an answer from them. I've got a contract to build a house and they have not allowed work to continue." Willms added that he would comply with the decision of the Council if it were to move the construction by ten feet but added that "I'm not moving back 80 feet without contesting."125 This conflict was illustrative of several that occurred between property owners and the Council in the early days of the BMA. Property owners were generally unsure how the BMA affected them, and the Council was unable to give to-the-point answers as they were still gathering data and had not yet made a final decision on the setback line in some areas. Most of the property owners affected by the law were individuals who had little or no experience with governmental regulation. They

<sup>&</sup>lt;sup>125</sup> Sun News, "Homeowner Wants Decision on Beach Building," July 20, 1988.

did not know what kinds of questions to ask, and few had participated in the formative stages of the law.

"Critical area" was amended in the BMA to include the "beach/dune system which is the area from the mean high-water mark to the setback line as determined in Section 48-39-280," as well as the previously included coastal waters, tidelands and beaches. This was one of the most important sections of the amendments passed, as it significantly increased the areas over which the Council had direct authority to control future development. What these amendments meant to property owners was that the Council could deny the request of a property owner to build on land that was not actually part of the present day beach or dunes because it might be in the future. On February 11, 1991, the South Carolina Supreme Court held, in *Lucas v. South Carolina Coastal Council*, that the BMA was constitutional. (The *Lucas* case and its subsequent judicial history will be discussed in depth in Chapter Five.)

In May 1991, the Council published its updated *Regulations*, including those pertaining to permitting in critical areas of the coastal zone. Members noted therein, as had the Blue Ribbon Committee and the General Assembly earlier, that their previous authority had been inadequate, writing that the 1977 legislation "proved ineffective for managing the beach/dune system because regulatory authority over these areas given to the Coastal Council was not sufficient. From the State's beaches, the Council could previously regulate landward *only to the primary oceanfront sand dune* or to the highest

<sup>&</sup>lt;sup>126</sup> South Carolina Code 48-39-10(J).

<sup>&</sup>lt;sup>127</sup> Lucas v. South Carolina Coastal Council, 404 S.E.2d 895 (1991).

uprush of waves where no such dune existed." (emphasis added)<sup>128</sup> As a result, many landowners had continued to build as close to the water as possible and then sought permits from the Council to build erosion control devices to protect their unwisely sited and now erosion-endangered structures. With their new authority, the Council could regulate all new oceanfront development.

The purpose of the new Regulations was to "aid developers and others in taking advantage of the state-of-the-art techniques in developing projects compatible with the natural environment; [to] insure consistent permit evaluation by Council and staff; and [to] serve as a stimulus for implementation of better and more consistent management efforts for the coastal zone." The major changes from previous Council policies were due to the body's increased level of power via the 1988 Beachfront Management Act, including the rejection of erosion control devices and the adoption of the policies of renourishment and retreat. (Beach renourishment involves the excavation of sand from one site and placement of this sand on an existing but retreating beach to slow the landward retreat of the beach.) Through 1996, South Carolina spent over \$50 million on approximately twenty-eight distinct renourishment projects.

The renourishment issue was significant because that is primary solution that was advocated by some groups who opposed adoption of the BMA and the setback provision, particularly developers and commercial property owners. South Carolina's forty-nine

<sup>&</sup>lt;sup>128</sup> South Carolina Coastal Council, *Regulations for Permitting in Critical Areas of the State's Coastal Zone* (Charleston: South Carolina Coastal Council, 1991), 2.

<sup>&</sup>lt;sup>129</sup> Ibid., 1. <sup>130</sup> Ibid., 3.

<sup>131</sup> National Research Council, *Managing Coastal Erosion*, 56.

<sup>&</sup>lt;sup>132</sup> Beatley, Brower and Schwab, An Introduction to Coastal Zone Management, 119.

savings and loan institutions became vocal opponents of the BMA. They argued that a setback provision would devalue coastal property and that renourishment was the best way to ensure a healthy beach. 133

In addition to the problems they can cause, these types of structures do not provide definite protection—nearly every seawall within the reach of Hurricane Hugo was overtopped by waves and storm surge. Like South Carolina, North Carolina and Maine have also banned the construction of permanent shore-hardening structures. Like the setback provision, the feature that denied property owners the ability to construct erosion control devices was quickly protested. Days after the passage of the BMA, the Council heard an appeal from Robert and Alice Beard. The Beards had been denied permission to build a seawall (a popular type of erosion-control device) across a lot on Cherry Grove (an area located just north of North Myrtle Beach) and to move three existing seawalls on contiguous lots seaward. The request was denied by Council staff and upheld by the full Council. 136

Any regulation or other legislation that affects the ability of private property owners to develop or modify their land will usually be subject to protest. As a result, it was apparent that the BMA would meet with challenges. It was unexpected, however, that the first and most significant challenge to the BMA would result from the activities of nature itself, in the form of a massive hurricane and its effects on the South Carolina coastal zone and the structures located there.

<sup>&</sup>lt;sup>133</sup> Charles Pope, "49 Lending Institutions to Fight Beachfront Laws, Group Wants Provision for Setback to be Deleted," *The State*, January 7, 1988.

<sup>&</sup>lt;sup>134</sup> Pilkey and others, *The North Carolina Shore*, 89.

Beatley, Brower and Schwab, An Introduction to Coastal Zone Management, 140.

<sup>&</sup>lt;sup>136</sup> Sun News, "Council Denies Seawall Appeal in Public Beach Access Issue," July 16, 1988.

While most relevant factors (see Table Three) affect the coastline subtly and over time, the most dramatic instances of change and erosion are caused by coastal storms, especially hurricanes. Hurricanes are responsible for the majority of the storm-related damage to coastal property in the United States. 137 These monster storms affect coastal structures in several ways. First, hurricanes cause an abnormal rise in sea level known as "storm surge." Storm surge causes flooding and can be particularly harmful if the hurricane makes landfall at high tide. Hurricane waves are also dangerous for coastal structures, particularly those that are "oceanfront." In addition to throwing water strongly against the shore, waves can also move floating objects, like boats, piers, and dislodged structures, against the shore and against structures located there. Higher than normal waves can also move sand away from the beach, potentially causing collapse and erosion of nearby land and, subsequently, structures. 138

Hurricanes and other storms affect different parts of the coastal zone in various manners. The most unstable areas of the United States coastline are the Atlantic barrier islands. They are extremely vulnerable to storms, and debris taken from them by storms can damage inland property. (Barrier islands, formed of loosely consolidated materials, are extremely vulnerable to wind and waves, both of which are increased dramatically by hurricanes. Consequently, the size, shape and location of barrier islands are always changing.)<sup>139</sup> South Carolina's barrier islands include the Isle of Palms and Sullivan's

<sup>&</sup>lt;sup>137</sup> Pilkey and others, *The North Carolina Shore*, 20. Many states on the East Coast of the United States also suffer from winter storm, known as northeasters. South Carolina, unlike North Carolina, has been spared major damage from northeasters in modern times. <sup>138</sup> Pilkey and others, *The North Carolina Shore*, 218-19.

<sup>&</sup>lt;sup>139</sup> Beatley, Brower and Schwab, An Introduction to Coastal Zone Management, 19.

Island, both located near Charleston. These islands are fully developed, and property there is especially costly. <sup>140</sup>

A coastal storm is classified by the maximum sustained winds that it contains. A storm is referred to as a "tropical storm" when its maximum sustained winds reach thirty-eight miles per hour. Once the maximum sustained winds reach seventy-four miles per hour, it is then classified as a hurricane and given a "human" name. Hurricanes are evaluated via the Saffir-Simpson Scale, which uses a rating system that ranks hurricanes in a category between 1 and 5.

Table Three<sup>141</sup>
Hurricane Ratings

Hullicane Katings					
Saffir-	Maximum	Storm	General Level of	South	
Simpson	sustained wind	Surge	Damage	Carolina	
Category	speed (in miles	(in feet)		Example (with	
	per hour)			number dead	
	_			in South	
				Carolina)	
1	74-96	3-5	Minimal: Most damage	Charley (1986)	
			is to plant life, with little	(No known	
			damage to structures.	deaths)	
2	97-111	6-8	Moderate: Major damage	Storm of	
			to mobile homes and	August 27,	
			some damage to roofing	1911	
			materials of other	(17 dead)	
			structures. Evacuation of		
			shoreline and low-lying		
			areas may be necessary.		
3	112-131	9-12	Extensive: Large trees	Hurricane	
			may be blown down.	Hazel(1954)	
			Mobile homes destroyed.	(1 dead)	
			Serious flooding at the		

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<sup>&</sup>lt;sup>140</sup> Property values for single family homes on the Isle of Palms range from \$579,998 to \$7,380,000. Property values on Sullivan's Island range for single family homes range from \$889,000 to \$5,499,000, based on information provided by www.realtor.com on March 17, 2008.

Table Three is adapted from Beatley, *An Introduction to Coastal Zone Management*, 38-9 and Tom Rubillo, *Hurricane Destruction in South Carolina: Hell and High Water* (Charleston: History Press, 2006).

	1	•	1	
			shoreline, and many	
			small structures near the	
			shoreline will be	
			destroyed. Evacuation	
			may be necessary for	
			several blocks within	
			several blocks of	
			shoreline.	
4	132-155	13-18	Extreme: Extensive	Hurricane Hugo
			damage to roofing,	(1989)
			windows and doors, with	(29 dead)
			many complete roof	,
			failures. Flat terrain 10	
			feet or less above sea	
			level flooded inland as	
			far as 6 miles.	
			Evacuation of all	
			residences within 500	
			yards of shore or within	
			two miles if only one	
			story possibly needed.	
5	156+	19+	Catastrophic: Severe	None known in
			damage to roofing,	North or South
			windows and doors, with	Carolina. An
			many complete roof	example of a
			failures. Many complete	Category 5 is
			building failures. Major	Hurricane
			damage to lower floors	Camille, which
			of structures less than 15	was blamed for
			feet above sea level	over 250 deaths
			within 500 yards of	in the Gulf
			shoreline. Evacuation of	Coast Region in
			residential areas within	1969.
			10 miles of shore	
			possibly needed.	

The problems of coastal construction led to a series of efforts by the federal government to enact helpful regulations, the first being the creation of a federal flood insurance program in 1968. It was launched primarily as an alternative to federal disaster relief. As part of the program, communities were required to establish land-use controls

or other means of limiting the impact of potential floods. Though these responses were beneficial, they were not as effective as had been hoped, and hurricane-related floods continued to wreak havoc on the coastal zone of the United States. 142

South Carolina's hurricane history, while not as severe as that of North Carolina, Florida or the Gulf Coast, does contain several storms of consequence that resulted in a great deal of costly damage:

Table Four<sup>143</sup>
Hurricanes Affecting South Carolina by Decade, 1800-2000

Decade	Number of Hurricanes	Category Three or Higher	
	Affecting South Carolina		
1800	4	Yes	
1810	4	Yes	
1820	3	Yes	
1830	4	No	
1840	1	No	
1850	2	No	
1860	1	No	
1870	2	No	
1880	4	Yes	
1890	7	Yes	
1900	3	No	
1910	2	No	
1920	1	No	
1930	1	No	
1940	2	No	
1950	6	Yes	
1960	1	No	
1970	2	No	
1980	3	Yes	
1990	3	No	

<sup>&</sup>lt;sup>142</sup> Tim Searchinger, "Lucas v. South Carolina Coastal Council: An Enigmatic Approach to the Environmental Regulation of Land," in *Let the People Judge: Wise Use and the Private Property Rights Movement*, ed. John D. Echeverria and Raymond Booth Eby (Washington, DC: Island Press, 1995), 169-181

<sup>&</sup>lt;sup>143</sup> Table Four is adapted from Rubillo, *Hurricane Destruction in South Carolina*.

As demonstrated by Table Four, South Carolina, between the 1960s and 1989, experienced a lull in major hurricanes. As a result, many residents of the coastal zone had not experienced a major hurricane when Hugo struck in 1989, either because they were too young to remember the last major storm or because they moved to the coastal zone from a non-coastal region during a less active period. This is likely a major factor that led to increased development in the highly hazardous areas of the coastal zone. 144 The low level of major hurricanes between 1966 and 1997, during which time only five major hurricanes struck the East Coast, corresponded with enormous growth along the entire eastern seaboard. Younger and newer residents were simply unaware of the tremendous destruction that hurricanes, particularly major ones, can cause. 145 Table Four also reveals that the likelihood of a major hurricane in any ten or even twenty year period is low. These odds may have given coastal landowners a false sense of security regarding the level of danger to which their property is exposed. Storms do not occur in a regular pattern or spacing; just because there was a forty-five year gap between Hurricanes Hazel and Hugo does not mean that another major hurricane will not strike South Carolina until 2034. Hurricanes are unpredictable, except in how they affect coastal structures.

In 1954, Hurricane Hazel skirted the South Carolina coast after killing almost 1,000 people in Haiti. Hazel's storm surge, at 14.5 feet, grinded and crushed the beaches of the Grand Strand, from Pawleys Island to Little River. Windy Hill, today part of North Myrtle Beach, was completely destroyed. Eighty percent of the oceanfront and adjacent structures were destroyed in Myrtle Beach. Amazingly, Hazel had not directly

<sup>&</sup>lt;sup>144</sup> Pilkey and others, *The North Carolina Shore*, 20.

<sup>&</sup>lt;sup>145</sup> Vernberg and Vernberg, *The Coastal Zone*, 127.

hit to the South Carolina coast. This storm did not make landfall until reaching the of North Carolina coast. 146 Nevertheless, the effects wrought by the incredible storm surge and high winds were devastating. Long-time South Carolina residents recall Hazel as the only memorable storm to affect South Carolina before Hurricane Hugo. The next significant hurricane to affect the South Carolina coast was Hurricane Gracie, which made landfall in Beaufort County in October 1959. Gracie contained sustained winds of 120 miles per hour and gusts up to 138 miles per hour. Gracie was blamed for four deaths and damage to 2,394 homes. 147

In respect to hurricanes, the period between 1961 and 1980 became the most lackluster in recorded history on the east coast and corresponds to the increase of coastal development. Though these years neither slowed development nor increased the caution of developers. This phenomenon has been referred to as "a lack of appreciation for dynamic processes." This period saw a surge in building in the coastal zone, both in terms of housing and resort development, and there was little coastal storm activity to deter or slow the rush. Other factors, including the growth in personal income and an increased standard of living, improved accessibility via the private automobile and interstate highway system and learned patterns of beach users, helped stimulate rapid development of the coastal zone of the southeastern United States. However, the lack of major hurricanes in this period is a frequently cited factor when considering the rapid increase in development. In 1979, for example, Hurricane David hit the South Carolina

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<sup>&</sup>lt;sup>146</sup> Rubillo, *Hurricane Destruction in South Carolina*, 112-13.

<sup>&</sup>lt;sup>147</sup> Rubillo, *Hurricane Destruction in South Carolina*, 114-15.

<sup>&</sup>lt;sup>148</sup> London and others, A Study of Shore Erosion, 41.

<sup>&</sup>lt;sup>149</sup> Rubillo, *Hurricane Destruction in South Carolina*, 114-115.

<sup>&</sup>lt;sup>150</sup> London and others, A Study of Shore Erosion, 41.

coast and single-handedly cut away between ten and twenty feet of the foredunes in Horry County. Yet it had little impact on the intense construction that was occurring in the area. Between 1972 and 1978, the number of visitors to the Grand Strand alone had gone from 2.9 million to 6.5 million, making it one of the most popular vacation areas on the east coast. Accommodations increased as visitors multiplied, and development in Horry County soared. 152

South Carolina has been spared the hit of a Category Five hurricane, at least in modern times. Hurricane Hugo, which dealt the state a direct strike in 1989, was a Category Four storm. On September 5, Hugo was known only as Tropical Depression 11. On September 20, the storm, then named as Hugo, had resulted in the issuance of a hurricane warning for the entire South Carolina coast, though it was still at sea, several hundred miles southeast of Charleston. By 7 a.m. on September 21, the lower coastal counties were already experiencing rain and 40 mile per hour winds as Hugo approached. By sundown, Hugo was classified as Category Four hurricane, with gusts higher than 150 miles per hour. Around 11 p.m., Hugo made landfall near McClellanville, immediately north of Mount Pleasant and Charleston. The eye of the storm passed over Charleston at approximately 11:50 p.m. By 5 a.m., it was apparent to those who had ventured outside that the damage to the coastal zone was calamitous. Twenty-six people died, and almost 65,000 had to find temporary shelter. 153

<sup>&</sup>lt;sup>151</sup> Kana, Beach Erosion in South Carolina, 28.

<sup>&</sup>lt;sup>152</sup> London and others, A Study of Shore Erosion, 40.

<sup>&</sup>lt;sup>153</sup> The News and Courier and The Evening Post, ...And Hugo Was His Name: Hurricane Hugo, A Diary of Destruction, September 21, 1989 (Sun City, AZ: C.F. Boone Publishers, 1989), 2-6, 10, 46.

Soon after Hugo, President George H. Bush declared twenty-four counties in South Carolina, including six counties in the coastal zone (Beaufort and Jasper being the exceptions), to be "Disaster Counties." The damage in these twenty-four counties was estimated at \$6.4 billion. Almost 80,000 single family homes were damaged, with nearly 4,000 of those being completely destroyed. In Charleston and Berkeley Counties alone, over 40,000 homes were damaged, with over 10,000 incurring major damage or being completely destroyed. Disturbingly, the effects could have been worse: the true erosional potential of this level of hurricane was not even realized because of the rapid forward motion of the storm. Hugo moved at approximately twenty-four-miles-per-hour, more than twice the normal rate of progression.

Hugo destroyed almost every foredune north of Kiawah Island, though some of the sand shifted only temporarily to protect the beach. Some beaches fared worse than others, losing large amounts of sand that were washed inland. Emergency expenditures for beach renourishment were close to \$10 million, and projects planned for the 1990-1995 period carried a price tag of \$62 million. Soon after Hugo, scraping of dunes from available sand on the beach was required to preserve property endangered by the loss of dunes and by the high tides that occurred after Hugo.<sup>157</sup>

The effects of Hugo varied by location and were based on a number of factors.

Areas with wide beaches and substantial dunes were more protected from the storm surge

<sup>&</sup>lt;sup>154</sup> The Fontaine Company, Inc., An Analysis of the Damage and Effects of Hurricane Hugo and Status of Recovery One Year Later, prepared for the Governor's Office, Division of Intergovernmental Relations (Columbia: The Fontaine Company, February 28, 1991), 1.

<sup>156</sup> National Research Council, *Managing Coastal Erosion*, 165.

<sup>&</sup>lt;sup>157</sup> Ibid., 46.

created by Hugo since the beaches acted as buffer zones. The more narrow beaches, many with a history of erosion, were most heavily affected. Development near the shore in locations with more narrow beaches suffered severe damage, despite efforts by some residents to fortify the beach with large stones or concrete rubble. Dunes all along the coast were severely damaged. On October 5, South Carolina began a project costing approximately \$100,000 per mile to rebuild dunes along about sixty-five miles of beach where the dunes were most affected by Hugo. While this project was viewed with criticism by scientists who favored allowing the sand to return to the dunes in its natural cycle, other scientists approved the program since it would provide protection to structures behind the dune system. This was deemed necessary because of excessively high tides expected because of a close alignment of the moon to Earth.

Hugo was the most damaging hurricane in United States history prior to

Hurricane Andrew. Hugo was not an overly large storm; as coastal researchers have

noted, it caused such a large amount of damage because of the level of development in
the low-lying coastal areas. Hugo's storm surge in Charleston measured 12.9 feet. In
comparison, when Hurricane Camille made landfall in Mississippi in 1969, it included a

22.4 foot storm surge, yet the property damage it caused was drastically less than that
inflicted by Hugo, primarily because of development practices. Another important
consideration is that the damage would have been much worse had the storm struck south

<sup>&</sup>lt;sup>158</sup> Earl J. Baker and others, *Hurricane Hugo: Puerto Rice, The U.S. Virgin Islands, and South Carolina, September 17-22, 1989*, an investigate series of the Committee on Natural Disasters, vol. 6, prepared for the National Research Council (Washington, D.C.: National Academy of Sciences, 1994), 8.

<sup>&</sup>lt;sup>159</sup> "South Carolina Begins Rebuilding Storm-Swept Beach Dunes," *The New York Times*, October 5, 1989. "South Carolina Begins Rebuilding Storm-Swept Beach Dunes," *The New York Times*, October 5, 1989.

<sup>&</sup>lt;sup>161</sup> Baker and others, *Hurricane Hugo*, 212, 214.

of Charleston instead of north. 162 Fortunately, the highest storm surge was experienced just north of the storm, near the mostly undeveloped area known as Bull's Bay. South Carolina was also fortunate that Hugo moved quickly, since the full erosion potential of the storm was not realized. 163

Folly Beach, despite being on the south side of the storm, experienced severe damage, even when compared to other barrier island communities. The primary factor involved in the damage to Folly Beach was its high rate of erosion. In the fifty years preceding Hugo, an entire row of houses on Folly Beach had been lost to erosion. <sup>164</sup> (To put this figure into perspective, single family homes on Folly currently range from \$445,000 to \$3,470,000.) A comparison to the damage suffered on the Isle of Palms, which, like Folly Beach, endured a storm surge of twelve feet, is useful. Beachfront houses on the Isle of Palms, though suffering water damage, generally survived because of the wide beaches and substantial dunes that were present. Sullivan's Island, which required a local setback of one hundred yards for development, resulted in fairly good conditions for structures during Hugo. 166 This is not to de-emphasize the extent of damage done to the Isle of Palms, Sullivan's Island and the structures located on both, as it was severe. In fact, it was several weeks before either the Isle of Palms or Sullivan's Island could be accessed by car since the only vehicular route to these barrier islands, Ben Sawyer Bridge, had been blown off its pilings. (The bridge was not hoisted out of

<sup>&</sup>lt;sup>162</sup> Ibid., 211.

<sup>&</sup>lt;sup>163</sup> Ibid., 215. <sup>164</sup> Ibid., 216. <sup>165</sup> Ibid., 218.

<sup>&</sup>lt;sup>166</sup> Ibid., 219.

the waterway and back into place until October 5.)<sup>167</sup> The comparison to Folly Beach is only to show that areas with wider beaches and stronger setback requirements fared better than those without them.

In addition to the wind and water, the Beachfront Management Act would have something to say about how the oceanfront would look after the hurricane. When Hugo made landfall in South Carolina, the BMA contained "some of the most stringent reconstruction provisions in the country." 168 While it had been contested here and there by a few property owners between its enactment and Hugo, it really had not affected that many property owners because the coast was already so developed. It affected numerous additional property owners after Hugo. Based on the policy of retreat contained in the legislation, many homes destroyed or damaged by Hugo could not be rebuilt. The BMA included restrictions both on new construction and on reconstruction in the event of a hurricane. A structure deemed "damaged beyond repair" could be rebuilt in the setback zone, but the reconstruction had to meet several requirements. The Council deemed structures determined to be damaged 66 and two-thirds or more to be destroyed beyond repair. 169 First, the construction had to be located at least twenty feet landward of the most landward point of the baseline. The new structure also could not exceed the original square footage, and the owner of the structure was required to renourish the beach in front of the structure on a yearly basis (unless it was already involved in a federal or state renourishment program). 170

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<sup>&</sup>lt;sup>167</sup> "South Carolina Begins Rebuilding Storm-Swept Beach Dunes," *The New York Times*, October 5, 1989.

<sup>&</sup>lt;sup>168</sup> Beatley, Brower and Schwab, An Introduction to Coastal Zone Management, 140.

<sup>&</sup>lt;sup>169</sup> Beatley, "Hurricane Hugo and Shoreline Retreat," 7.

<sup>&</sup>lt;sup>170</sup> S.C. Code 48-39-280-300.

Essentially, Hurricane Hugo and the damage that it caused allowed the BMA to work the way it was designed. In many places, it was a fresh start under the new law. Since houses were now gone, destroyed by the waves and wind, the construction to replace the destroyed houses had to comply with the BMA. This meant that all of a sudden numerous property owners were affected by the provisions. People who possessed fully constructed houses before Hugo had little reason to pay attention to the setback provisions. After Hugo, they were directly affected.

The initial estimate by the Council was that 213 structures that would be affected by the reconstruction provisions had been damaged beyond repair. Of this group, approximately 159 were located in the BMA's zone of retreat. The damaged buildings included hotels, motels and single-family beach homes. Predictably, the response to these restrictions by landowners was one of intense opposition. There were demands to suspend or even repeal the BMA, including a request by Ken Corbett, a legislator from the Grand Strand (Myrtle Beach area), for a special session of the General Assembly to consider suspension or repeal of the BMA. Notably, Corbett won his seat from one of sponsors of the BMA. The New York Times referred to the opposition to the BMA after Hugo as "its most wrenching test of all."

<sup>&</sup>lt;sup>171</sup> Beatley, "Hurricane Hugo and Shoreline Retreat," 8.

<sup>&</sup>lt;sup>172</sup> Beatley, Brower and Schwab, An Introduction to Coastal Zone Management, 140.

<sup>&</sup>lt;sup>173</sup> Beatley, Brower and Schwab, An Introduction to Coastal Zone Management, 141.

<sup>&</sup>lt;sup>174</sup> Beatley, "Hurricane Hugo and Shoreline Retreat," 12.

<sup>&</sup>lt;sup>175</sup> Cindi Ross Scoppe, "Beachfront Act Expected to Make 'Order Out of Chaos," *The State*, September 25, 1989

<sup>176</sup> Peter Applebome, "After Hugo, a Storm Over Beach Development," *The New York Times*, September 24, 1989.

Though these provisions of the BMA were neither suspended nor repealed at this particular time, they, however, were "loosened" by the Council. Several examples illustrate this impression, including the adoption of a 1990 emergency order allowing replacement of structures within the twenty-foot zone behind the baseline which were not damaged beyond repair, if certain conditions were met. Essentially, this allowed property owners to replace rather than repair buildings that were damaged below the Council's original standard. While this may have been more cost-effective for some of the property owners, it was outside the standard set by the BMA. 177 Another highly publicized exception was the Council's decision regarding the Kingfisher Pier seawall. The Council voted to allow reconstruction of this seawall, even though it was damaged beyond fifty percent and did not protect a structure. Critics argued that this decision went directly against the intent of the BMA, which was strongly against hard defense of the shoreline. 178 Another example of the Council's flexibility during this period was in reference to assessments as to the level of damage suffered by a structure. The Council allowed a second damage assessment when requested by the property owner, even though a second assessment was not required under the provisions of the BMA. This had dramatic results in some areas, often leading to a reversal of the original permitting decision.<sup>179</sup>

Timothy Beatley, who has studied this period in coastal zone management extensively, characterizes the actions of the Council during this time as a "tendency to be

<sup>&</sup>lt;sup>177</sup> Beatley, "Hurricane Hugo and Shoreline Retreat," 13-14.

Beatley, "Hurricane Hugo and Shoreline Retreat," 13-14.

<sup>&</sup>lt;sup>179</sup> Beatley, "Hurricane Hugo and Shoreline Retreat," 21.

as lenient as possible." Beatley attributes this tendency to several factors. First, this was a high level of damage, compounded by the fact that the rules were new. The regulations were not well-known, either to public officials or to coastal residents. Beatley notes that there was "genuine surprise" from coastal residents in regard to the reconstruction provisions of the BMA.<sup>180</sup>

Property owners, at least in some coastal counties, were further aggravated by local zoning provisions. Counties had the ability to create zoning or other setback restrictions as long as they did not conflict with state law. In Georgetown County, for example, there was a twenty-five foot frontyard setback requirement, and few variances were given. Horry County, on the other hand, gave a fifty-percent variance in terms of its twenty-foot frontyard setback requirement to homeowners after Hugo to reduce the potential burdens of reconstruction. As a result, a property owner could face two drastically different situations as to reconstruction after Hugo depending on what county their property was located.

The conclusion that there was a correlation between the extent of damage and the amount of setback of the structure is an intuitive one: the farther away a structure is from the water, the less damage it tends to have. Similarly, the idea that wider beaches and substantial dunes offered more protection from wind and waves seems obvious.

Nevertheless, property owners seemed reluctant to make this correlation after Hurricane Hugo. John Singleton, a partial owner of two motels in Myrtle Beach, told *The New York Times* that Coastal Council regulations restricting rebuilding after Hurricane Hugo was

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<sup>&</sup>lt;sup>180</sup> Beatley, "Hurricane Hugo and Shoreline Retreat," 13.

<sup>&</sup>lt;sup>181</sup> Beatley, "Hurricane Hugo and Shoreline Retreat," 19.

equivalent to "someone coming in here and slapping the heck out of your child." <sup>182</sup>

James Kennedy, a property owner in Folly Beach who rebuilt his oceanfront home after Hurricane Hugo, "readily acknowledges that Folly's shifting sand may well be the kind of place that should not have been built on." However, he "add[s] that he never gave a thought to not rebuilding, especially when insurance paid for everything but his \$20,000 seawall." <sup>183</sup>

The National Research Council, a private, non-profit institution that provides scientific, technological and health policy advice under a Congressional charter, recommended that no structures whatsoever should be permitted seaward of the ten-year erosion line, with the exception of piers and docks. Additionally, they suggested that only readily moveable structures should be permitted seaward of the sixty-year erosion line. This proposed rule would allow natural processes to continue in the shorefront area, maintain a permanent beach and conserve ecological processes and habitats. On the other hand, it would impinge on private property rights and would face a tremendous backlash from coastal property owners.

While South Carolina's initial coastal zone management legislation was a step up from nothing, it was insufficient to protect, preserve and restore the beach/dune system of the South Carolina coast. As noted by *The State*, South Carolina's daily newspaper based in Columbia, "Before 1988, South Carolina had virtually no control over beachfront

<sup>&</sup>lt;sup>182</sup> Applebome, "After Hugo, a Storm Over Beach Development."

<sup>&</sup>lt;sup>183</sup> Peter Applebome, "Hugo's 3-Year Wake: Lessons of a Hurricane," *The New York Times*, September 18, 1992.

<sup>&</sup>lt;sup>184</sup> National Research Council, *Managing Coastal Erosion*, 8.

construction."<sup>185</sup> Its problems, particularly the inadequate power granted to the Coastal Council to administer coastal zone policy, were quickly recognized. The General Assembly attempted to respond with changes to the legislation. They relied heavily on the recommendations of the Blue Ribbon Committee on Beachfront Management. The Committee's suggestions were made with the goal of protecting the beaches of the state for the good of the economy of the state. They did not consider the economics of individual coastal property owners. When the General Assembly wrote the amendments, they did not consider these individuals either. These amendments, passed in 1988, were known as the Beachfront Management Act or BMA.

At first blush, the two most important provisions of the BMA were the rejection of erosion control devices and the statement of the "retreat" policy. These two positions were scientifically informed and forward thinking in terms of the preservation of the beaches and dunes of the South Carolina coastal zone. In the long term, these measures would improve the natural health of the coastal zone and promote natural processes. Nevertheless, these provisions would not be without opponents and detractors. Two of the key factors that would help determine the future of the BMA were the forces of Mother Nature and the reactions of coastal property owners.

As indicated by Cotton Harness, the primary attorney for the Coastal Council during this period, the conflict between private property rights and public interest is significant on the oceanfront. <sup>186</sup> In South Carolina the battle to protect beaches seems to

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<sup>&</sup>lt;sup>185</sup> Jeff Miller, "Court Frees S.C. From Paying for Land Under Beachfront Law," *The State*, February 12, 1991.

<sup>186</sup> Peter Applebome, "After Hugo, a Storm Over Beach Development."

be a catch-22. The state requires healthy and visually pleasing beaches to attract tourists. Before Hurricane Hugo, the tourist industry in South Carolina was second only to textiles. In 1988, tourists spent \$4.6 billion in South Carolina, and forty percent of that amount was on the Grand Strand alone. This need to protect beaches for economic reasons is at odds with property rights and the desire of property owners for oceanfront development. While the BMA initially sided with conservationists and those with enough foresight to realize that the beaches must be preserved for the economic future of South Carolina, it faltered in the face of post-Hugo challenges. It would be further challenged by an individual property owner who, though not affected by the post-Hugo provisions, considered the BMA too restrictive in its regulation.

<sup>&</sup>lt;sup>187</sup> "South Carolina Tourist Lure: 100,000 Loads of Sand," *The New York Times*, December 3, 1989.

## **Chapter Three**

"That the house of every one is to him as his Castle and Fortress..." Sir Edward Coke Semayne's Case (1604)

"Today the Court launches a missile to kill a mouse." Justice Harry Blackmun Dissenting Opinion, Lucas v. South Carolina Coastal Council (1992)

While the demand for coastal property has intensified, especially since World War II, obviously the supply has not increased. As a result, conflicts have arisen among the many groups who wish to use the land. One of the most persistent and significant conflicts has been how to determine the best balance among economic, environmental, public use and aesthetic values to create the most suitable regulation of the coastal zone. Dennis Ducsik of the Massachusetts Office of Coastal Zone Management has characterized this conflict as "the struggle over sand," where "the needs for expanded recreational opportunities for the public" clash with "the desire for intensive private development," with both activities being "constrained by the existence of powerful natural forces as well as fragile ecological systems." 188 As the demand for outdoor recreation increased after World War II, so did mobility and extra income. Tourism, particularly in coastal areas, grew rapidly.

Frank Goodnow, a turn-of-the-century expert on constitutional and administrative law, argued that several of the social problems that were to be found in the United States in the early twentieth century that still exist today were the result of the conceptions of individual freedom and property rights found in the United States Constitution and these,

<sup>&</sup>lt;sup>188</sup> Ducsik, *Shoreline for the Public*, 4-5.

Goodnow notes, were themselves derived from a consideration of eighteenth-century economic conditions. Similarly, law professor James Huffman has contended that private property have been looked upon as an impediment to environmental regulation for two reasons: most environmental problems are not confined to legal boundaries and parcels of land, and the Constitution put restraints on governmental actions that involve private property. This is an apt observation when considering the management of the coastal zone, which reaches across state, county and municipal boundaries on the east coast.

The government sector is not the only active party offering input to coastal zone management decisions. Among the active parties participating in development and land use decisions that impact the coastal zone are property owners, developers and builders, homeowner associations, neighbors or other residents affected by the use of a particular site, lenders and realtors. All of these groups tend to look out for their best, and usually economic interests. As a result, many of these groups hamper the passage of regulation that would serve to restrict building and development for the purpose of conserving the coastal zone.

An issue often confronted by regulators, particularly by those wishing to regulate the coastal zone, is the question of takings. Takings are based on the Fifth Amendment to the U.S. Constitution, which states that private property may not be taken for public use

<sup>&</sup>lt;sup>189</sup> Goodnow, Social Reform and the Constitution, 27.

<sup>&</sup>lt;sup>190</sup> James L. Huffman, "Land Ownership and Environmental Regulation," *Ecology Law Quarterly* 25 (1999): 591-601.

<sup>&</sup>lt;sup>191</sup> National Research Council, *Managing Coastal Erosion*, 48.

without just compensation. 192 "Just compensation" is defined as what a willing buyer would pay a willing seller. There are two basic types of takings: physical occupations (such as the use of property to widen a road) and regulatory takings. Physical takings are accomplished through the concept of eminent domain, which is the power of the government to seize private property without consent. Regulatory takings occur when a governing body creates a regulation that affects land to a degree that it is as though it has been physically taken. Though the landowner still physically owns the land, he can make little or no use of the property under the terms of the regulation. The U.S. Supreme Court has defined regulatory takings and crafted rules regarding regulatory takings via a series of cases. Prior to the decision in *Lucas*, the rules were not particularly clear-cut, and the key decisions were separated by several years.

In Pennsylvania Coal v. Mahon, decided in 1992, the U.S. Supreme Court found a taking had occurred based upon a statute that denied the right to mine coal, even if the mining operation might cause the land above the mining operation to collapse. The Court settled on a broad rule regarding governmental regulation and takings. "The general rule at least is, that while property may be regulated to a certain extent, if regulation goes too far it will be recognized as a taking." 193 (emphasis added) The Court declined to state a "bright line rule" in *Pennsylvania Coal*, maintaining only that takings questions were questions of degree for which "cannot be disposed of by general propositions." 194

<sup>&</sup>lt;sup>192</sup> U.S. Const. Amend. V.

<sup>&</sup>lt;sup>193</sup> Pennsylvania Coal Company v. Mahon et al., 250 U.S. 393 (1922), 415. <sup>194</sup> Ibid., 416.

In *Nollan v. California Coastal Commission*, decided in 1987, the Court ruled that the state of California must compensate landowners if it requires them to grant an easement for public access to the beach, even if the state's reasoning is that it is for the public good. Specifically, the Nollans had requested a permit for oceanfront construction. California's Coastal Commission agreed to grant the permit on the condition that the Nollans record an easement on behalf of the public to pass along the beach. The Supreme Court ruled that this was a taking.<sup>195</sup>

According to Timothy Beatley, Professor of Sustainable Communities at the University of Virginia, the failure of the legislature to address the takings issue in the BMA was perhaps the most significant deficiency of the Act. This failure was brought to light in 1989, when David Lucas, an aggrieved property owner, filed a lawsuit against the Coastal Council, alleging that his inability to place structures on two oceanfront lots based on the Beachfront Management Act had resulted in a regulatory taking for which he had not received compensation. The Lucas case was significant for several reasons. First, it could impact the constitutionality of the BMA. (Any of the courts that considered the case could have declared the BMA unconstitutional because of potential conflict with the U.S. Constitution, thus making the BMA void.) Even if the constitutionality of the law was not affected, it could reflect South Carolina's monetary liability, or lack thereof, under the law. As noted by *The Sun News*, many real estate

<sup>&</sup>lt;sup>195</sup> Nollan v. California Coastal Commission, 483 U.S. 826 (1987). The other rule espoused in Nollan that is frequently cited is the "nexus" rule, the idea that there must be a logical nexus, or connection, between the regulation in question and the end it seeks to achieve.

<sup>&</sup>lt;sup>196</sup> Beatley, "Hurricane Hugo and Shoreline Retreat," 23.

transactions and investments depended upon the outcome of the case. <sup>197</sup> The case also reflected the discontent of many property owners with the new law. Lucas was not the only one filed in opposition to the BMA. In fact, when the first ruling was issued in the case, several similar suits had been filed, including one by 43 property owners in Horry County. <sup>198</sup> Finally, it had far-reaching implications for land-use regulations nationally, in terms of how it could affect takings law.

Wild Dunes is located on the Isle of Palms, one of several developed barrier islands located near Charleston. Beginning in the 1970s, the Isle of Palms was subject to extensive residential development. According to Lucas's own account, he purchased Lots 11 and 13 in the Dunesridge West subdivision in 1986 for \$475,000 and \$485,000 and planned to build a house for himself on Lot 11 and to build a "spec" house (a house that he would then sell) on Lot 13. According to Lucas, there were only five or six undeveloped beachfront lots in Wild Dunes when he purchased these two properties. 199

South Carolina's barrier islands were classified as "less developed," in that fewer than fifty percent of the state's barrier islands have been converted to urban uses or other built-up uses.<sup>200</sup> From the standpoint of development, barrier islands are some of the most vulnerable areas of the coastal zone to hurricanes, other storms and the natural forces of erosion. By their nature, they are mobile, not fixed, geological features that

<sup>&</sup>lt;sup>197</sup> Editorial, *The Sun News*, August 11, 1989.

<sup>&</sup>lt;sup>198</sup> Chrysti Edge and Sammy Fretwell, "Residents Cheer Beachfront Ruling, Ready New Cases," *Sun News*, August 11, 1989.

<sup>&</sup>lt;sup>199</sup> David Lucas, *Lucas vs. the Green Machine* (Alexander, N.C.: Alexander Books, 1995), 72.

<sup>&</sup>lt;sup>200</sup> James K. Mitchell, "A Management-Oriented, Regional Classification of Developed Coastal Barriers," in *Cities on the Beach: Management Issues of Developed Coastal Barriers*, ed. Rutherford H. Platt, Sheila G. Pelczarski and Barbara K.R. Burbank (Chicago: The University of Chicago Department of Geography, 1987), 31-42, 36-37.

grow and shrink in response to storms, changes in sea level and sediment supply. Barrier islands can also be thought of as the first line of defense in terms of hurricanes and other storms for the continental coastline.<sup>201</sup> They are often the sources of great conflict, since they are simultaneously in need of protection while often being dependent on tourism economically.

In this case, the parcels of land immediately adjacent to those purchased by Lucas in 1986 already held single-family homes. When Lucas acquired the lots, they were only subject to the weak, original coastal zone management legislation; the more stringent provisions did not appear until approximately two years after the purchase of the lots by Lucas. Under the original legislation, Lucas could have built houses on the two lots. The 1988 amendments "barred Lucas from erecting any permanent habitable structures on his parcels." Lucas was one of a small group of property owners who possessed undeveloped lots at the time the BMA was passed. He was not affected by Hugo; he had simply chosen not to develop the lots up to that point.

Under the BMA, land that had been under water in the past forty years could not be developed. As recently as 1963, Lucas's lots had been entirely underwater, and the parcels had been affected by high tides (i.e.-at least partially covered by water when the tide was high) as late as 1973. As a result, the setback for this area under the provisions of the BMA was well landward of the Lucas property. Structures on these lots were likely, from a historical standpoint, to be affected by erosion in the near future.

<sup>&</sup>lt;sup>201</sup> Clark, Coastal Zone Management Handbook, 234.

<sup>&</sup>lt;sup>202</sup> David H. Lucas v. South Carolina Coastal Council, 505 U.S. 1003 (1992).

<sup>&</sup>lt;sup>203</sup> Dean, *Against the Tide*, 200.

As Lucas recalled, he planned to begin construction in 1988 and wrote that he heard about "pending beachfront legislation in Columbia" around this same time. He revealed that he was "assured" that the pending legislation had a grandfather clause for existing projects that would be applied to his project. In Lucas's account, he wrote that the Coastal Council "gutted" the grandfather language and called for a new setback line to be drawn "using some pseudoscientific rationale." Lucas acknowledged that the Coastal Council line went all the way to behind his lots, taking away "any possible economic use." Though he referred to the science and techniques used to draw the setback as "pseudoscientific," photographic evidence showed that the lots had been underwater within the twentieth-century.

Lucas felt that he was being treated unfairly compared to other coastal property owners. He claimed that there only two lots (both his) out of the approximately two hundred affected lots in South Carolina that were "entirely taken by this harsh new law." (He claimed that others may have been reduced in the amount of buildable area but that they were still useable.) Lucas filed suit against the Coastal Council in the Charleston County Court of Common Pleas, under the contention that his inability to build on the lots "deprived him of all 'economically viable use' of his property and therefore effected a 'taking' under the Fifth and Fourteenth Amendments that required

<sup>&</sup>lt;sup>204</sup> Lucas, Lucas vs. the Green Machine, 78.

<sup>&</sup>lt;sup>205</sup> Ibid., 78-9.

<sup>&</sup>lt;sup>206</sup> Ibid., 79.

<sup>&</sup>lt;sup>207</sup> Ibid., 80

<sup>&</sup>lt;sup>208</sup> Lucas, Lucas vs. the Green Machine, 91.

the payment of just compensation."<sup>209</sup> His arguments were first heard by Judge Larry Patterson of the Charleston County Court of Common Pleas.

The ruling by Judge Patterson came ten days after the case was argued, on August 10, 1989. The court found for the Plaintiff in as much as it found the Council's action to be a taking. The judge found the taking compensable under the U.S. and South Carolina Constitutions in the amount of \$1,232,387.50. Lucas would, under this ruling, have to deed the lots to the state, and he would receive full compensation. 210 While this decision did not affect the constitutionality of the BMA, it was taken as an indication that South Carolina might be subject to millions of dollars of liability. Some estimates put the amount of potential liability as high as \$40 million. The ruling pleased many property owners, particularly developers and commercial owners. Joe Garrell, one of 43 Myrtle Beach oceanfront homeowners who were part of a pending suit challenging the BMA, called the decision "extremely significant." Garrell, not coincidentally, owned the Litus real estate firm in Myrtle Beach. He noted, "If the water comes in, we can live with that. But for the state to place an arbitrary line out there,...we find that unacceptable." But environmentalists were not pleased. Michael Murdoch, president of the state Sierra Club, stated, "I think this is a case where the public good has to be looked at... These kind of laws are unfortunate, but it's either that or not having any beach at all...It's either move back or have no beach."<sup>212</sup>

<sup>&</sup>lt;sup>209</sup> Lucas v. South Carolina Coastal Council, 505 U.S. at 1003.

Lucas, Lucas vs. the Green Machine, 141-2.

<sup>&</sup>lt;sup>211</sup> Bruce Smith, "Ruling Threat to Beach Act: State Could Face Millions in Liability," *Sun News*, August 13, 1989.

<sup>&</sup>lt;sup>212</sup> Edge and Fretwell, "Residents Cheer Beachfront Ruling, Ready New Cases."

The Coastal Council appealed the decision to the South Carolina Supreme Court. The Court reversed the decision of the trial court, determining "that the 1988 Act sought to prevent serious public harm and thus was a permissible restriction on the use of Lucas's property."<sup>213</sup> Therefore, as determined by the South Carolina Supreme Court, Lucas had not suffered a regulatory taking that entitled him to compensation. The South Carolina Supreme Court decision came down on February 11, 1991, after almost a year of deliberation. Chief Justice Jean Toal wrote the opinion for a 3-2 majority, reversing the Charleston County Court of Common Pleas, stating, in sum, that the Council's action did not amount to a regulatory taking. The Court reasoned that no compensation was due since the proposed use (construction on the lots too near the beach) threatened serious public harm. Toal wrote, "Lucas does not challenge the fact that the legislation here is necessary to prevent serious injury to the community, nor does he contend the setback requirements affecting him are unreasonable or disproportionate to the goal of preventing the specified harms. In fact, Lucas does not even seek an injunction to prevent enforcement of the Act. Instead, Lucas merely prays for damages and asserts that he is entitled to such, regardless of how the proposed use of his property harms the public..."<sup>214</sup> Chief Justice Toal reflected a clear understanding of the legislative purposes behind the BMA with this opinion, which were essentially to protect the beach from deterioration caused by unwise decisions by property owners.

Lucas did not surrender and appealed the decision of the South Carolina Supreme Court to the U.S. Supreme Court. The high court does not have to hear every case for

<sup>&</sup>lt;sup>213</sup> David H. Lucas v. South Carolina Coastal Council, 309 S.C. 424, 424 S.E.2d 484 (1992).

<sup>&</sup>lt;sup>214</sup> David H. Lucas v. South Carolina Coastal Council, 304 S.C. 376, 404 S.E.2d 895 (1992).

which review is sought. Of the numerous cases that seek to come before it, the Court chooses only a few to consider, usually those that are believed to have widespread application. In this matter, the Court granted the writ of certiorari, and the matter was argued before the body on March 2, 1992. Over sixty parties filed briefs of amicus curiae; approximately sixty percent of the briefs filed urged affirmance of the decision of the South Carolina Supreme Court (i.e.-urged that the State be allowed to regulate the property in the manner in question without compensation). The group that urged affirmance included over twenty states, including coastal states like Florida and California, landlocked states like Iowa and New Mexico (since this ruling could affect other environmental regulations), and Great Lakes states (to which the CZMA also applied) like Michigan and Wisconsin. 216

The Court first addressed the effect of the 1990 amendments to the BMA on the case, which had been passed after the hearing before the South Carolina Supreme Court. (These amendments will be discussed in depth in the following chapter.) The Council had suggested that the case was rendered unripe for review via the 1990 amendments. The Court held on this matter that the case was not rendered unripe by these changes to the law, which may have allowed Lucas to secure a special permit to build on his property. The Court determined that it would be unfair to insist that Lucas pursue this procedure as an precursor to considering the case ripe for review. 217

<sup>&</sup>lt;sup>215</sup> Lucas v. South Carolina Coastal Council, 505 U.S. at 1003.

<sup>&</sup>lt;sup>216</sup> Ibid. at 1005. Amicus curiae translates to "friend of the court." Groups with a strong interest in the outcome of the case but who are not parties file these types of briefs.

<sup>&</sup>lt;sup>217</sup> Lucas v. South Carolina Coastal Council, 505 U.S. at 1003. A case is normally considered "ripe" for judgment or review when all other avenues of advancement or determination of the matter have been exhausted, so that nothing remains but for the appropriate court to render judgment. Henry Campbell

The Court noted that under the 1977 legislation, the two subject lots were not in a "critical area." As such, Lucas would not have been required to obtain a permit from the Coastal Council under this legislation, which was the controlling legislation at the time he purchased the lots. As further noted by the Court, this situation changed dramatically after the application of the 1988 amendments, in that the two lots were seaward of the baseline established by the Council. Therefore, no construction of habitable structures was permitted. The Court then examined the primary issue of the case, the question of whether or not a regulatory taking had been effected upon the two lots. They cited *Pennsylvania Coal v. Mahon* for the proposition that regulatory takings, as opposed to direct appropriations of property, are compensable, further acknowledging the *Pennsylvania Coal* provided little guidance on when a given regulation could be considered a taking. The Court concluded that three basic principles would apply to this case and would thereby become law.

First, the Court determined that a taking has occurred in a situation where "the owner of real property has been called upon to sacrifice *all* economically beneficial uses in the name of the common good."<sup>221</sup> The Court's opinion in this regard, termed "narrow" by some commentators, only applies when a property owner is deprived of all economic value (as opposed to a reduction in value.)<sup>222</sup> Therefore, this ruling would not

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Black, *Black's Law Dictionary*, ed. Joseph R. Nolan and Jacqueline M. Nolan-Haley, abridged sixth ed. (St. Paul, MN: West Group, 1991), 922-3.

<sup>&</sup>lt;sup>218</sup> Lucas v. South Carolina Coastal Council, 505 U.S. at 1008.

<sup>&</sup>lt;sup>219</sup> Lucas v. South Carolina Coastal Council, 505 U.S. at 1008-1009.

<sup>&</sup>lt;sup>220</sup> Lucas v. South Carolina Coastal Council, 505 U.S. at 1015-1015.

<sup>&</sup>lt;sup>221</sup> Lucas v. South Carolina Coastal Council, 505 U.S. at 1019.

<sup>&</sup>lt;sup>222</sup> Linda Greenhouse, "Justices Ease Way to Challenge Land-Use Rules That Prevent Development," The *New York Times*, June 30, 1992.

apply to other landowners whose lots were effectively decreased in size under the BMA, as long as they still had some economic use as to the property. Second, the Court held that the determination of the South Carolina Supreme Court that this case should be decided by whether or not the proposed action caused serious public harm was inappropriate. As a result, the Court concluded, the only way that this matter would not be a taking is if Lucas never had the rights in question under state common law. In other words, if Lucas did not acquire the right to place structures on these two lots when he obtained title to the property, then it was not a regulatory taking for the Council to deny him this use. 224

While the Court found it "unlikely that common-law principles would have prevented the erection of any habitable or productive improvement" on the lots, it held that the issue was one of state law. While reversing the ruling of the South Carolina Supreme Court, the third and final holding of the high court was to remand the case to the South Carolina Supreme Court for adjudication of the common law issue. The Court emphasized, however, that to win the case the Council must "identify background principles of nuisance and property law that prohibit the uses he [Lucas] now intends in the circumstances in which the property is presently found." The majority opinion, written by Justice Antonin Scalia, was joined in by six of the Justices. (The decision was a 6-3 split decision; Chief Justice William Rehnquist and Justices Byron White, Sandra Day O'Connor and Clarence Thomas joined in the majority opinion.) Justice Anthony

<sup>&</sup>lt;sup>223</sup> Lucas v. South Carolina Coastal Council, 505 U.S. at 1022.

<sup>&</sup>lt;sup>224</sup> Ibid 1027

<sup>&</sup>lt;sup>225</sup> Ibid., 1031

<sup>&</sup>lt;sup>226</sup> Lucas v. South Carolina Coastal Council, 505 U.S. at 1031.

Kennedy filed a concurring opinion, while Justices Harry Blackmun and John Paul Stevens filed separate dissenting opinions. Justice David Souter filed a separate statement.<sup>227</sup> (Justice Souter's statement was based on the opinion that the Court should not have granted the writ of certiorari as an initial matter.)<sup>228</sup>

Justice Blackmun's dissent was particularly forceful, and in it he questioned not only the decision to review the case but also the principles upon which the decision was made. He noted that the lots in question, and in fact the entire area around them, was "notoriously unstable," and, further, that "in roughly half of the last forty years, all or part of petitioner's property was part of the beach or flooded twice daily by the ebb and flow of the tide."229 Justice Blackmun was particularly disturbed that the Court overturned years of precedent that assumed that "the State has full power to prohibit an owner's use of property if it is harmful to the public."<sup>230</sup> Blackmun concluded that the Court's ruling makes "sweeping," "misguided," and "unsupported changes in our takings doctrine." Justice Stevens disagreed both with the hearing of the case and with its reasoning. He argued that the case should not have been heard until Lucas had exhausted his administrative remedies (by applying for a permit under the newer BMA provisions). Additionally, he disagreed with the Court's expansion of the takings principle, which he termed "illogical." <sup>231</sup>

On remand from the U.S. Supreme Court, the South Carolina Supreme Court remanded the case to the trial court for a determination of damages based on a temporary

<sup>&</sup>lt;sup>227</sup> Ibid., 1003.

<sup>&</sup>lt;sup>228</sup> Ibid., 1076. <sup>229</sup> Ibid., 1038.

<sup>&</sup>lt;sup>230</sup> Ibid., 1052.

<sup>&</sup>lt;sup>231</sup> Ibid., 1061.

taking. The state court was not persuaded by the arguments of the Coastal Council "that any common law basis exists by which it could restrain Lucas's desired use of his land." Nor, the Court noted further, had their own research indicated any such common law principle. As a result, the Court directed the trial judge to make specific findings of damages to compensate Lucas for his temporary taking. (The taking was only deemed "temporary" as Lucas was now able to file for a special permit under the new BMA amendments.)<sup>233</sup>

Finally, in July 1993, the struggle ended. Lucas received \$1,575,000, to be paid to him by the State of South Carolina. He received less than \$10,000 after paying off the mortgages on the lots and his attorneys' fees.<sup>234</sup> The famous case was resolved in whole in November 1993 when, according to Lucas's account, the lots were sold via auction by the state to a developer for \$730,000.<sup>235</sup> (The lots were now potentially developable by consent of special permit as per the amendments passed after Hugo and the first *Lucas* decision.) The state was criticized for the decision, even by legislators. Senator Larry Richter, a Republican from Charleston, stated, "The state certainly looks pretty silly. It's the sort of stuff the public is ticked off about."<sup>236</sup>

The decisions in *Lucas* have had two primary impacts upon coastal zone management policy and legislation in South Carolina. First, the *Lucas* decision was

<sup>&</sup>lt;sup>232</sup> David H. Lucas v. South Carolina Coastal Council, 309 S.C. 424, 424 S.E.2d 484 (1992).

<sup>&</sup>lt;sup>233</sup> Ibid. Damages for a temporary regulatory taking had been established by the Supreme Court of the United States in *First English Evangelical Lutheran Church of Glendale v. County of Los Angeles*, 482 U.S. 304 (1987).

<sup>&</sup>lt;sup>234</sup> Lucas, Lucas vs. the Green Machine, 250.

<sup>&</sup>lt;sup>235</sup> Ibid., 252

<sup>&</sup>lt;sup>236</sup> The State, "State's Plan to Sell Lots Criticized," September 1, 1993.

significant because it brought to light the potential financial liability of the state as to prohibitions on building in the coastal zone. Second, the decision of the Charleston County Court of Common Pleas (the initial victory for Lucas as plaintiff), issued in August 1989, served as a buttress for property owners who were dissatisfied with the provisions of the BMA following Hurricane Hugo. As a result, this decision was one of the key factors in the writing and passage of the 1990 amendments to the BMA. These amendments would move South Carolina into an era of weaker coastal zone management policy and regulation. The *Lucas* case was an example of the type of property owner protest that occurred in response to BMA. Citizens viewed the BMA as a restraint on their private property rights, which they viewed as guaranteed by the Constitution. Property owners valued the environmental protection of the BMA less than they valued their property rights.

In a larger sense, Lucas's plight had an impact outside of South Carolina.

According to Susan Murray, a policy analyst for the National Audubon Society, "David Lucas has had an impact on the entire country." Murray remarked that Lucas, who she called a "sympathetic person," had more appeal to the general public than run-of-the-mill

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<sup>&</sup>lt;sup>237</sup> The NOAA, the agency responsible for the implementation and management of the CZMA, concurs in this view. In an article published on their website, it is stated that "The Lucas decision and Hurricane Hugo prompted the legislature to amend the Beachfront Management Act in 1990 to allow for rolling easement on any lot seaward of the setback line to avoid the need for 'takings' compensations. As a result, lots seaward of the setback line can be developed..." National Oceanic and Atmospheric Administration, "South Carolina's Rolling Easements," National Oceanic and Atmospheric Administration, http://coastalmanagement.noaa.gov/initiatives/shoreline\_ppr\_easements.html.

lobbyists. After the resolution of the case, Lucas formed the Council on Private Property, a national legal action and lobbying group. <sup>238</sup>

<sup>&</sup>lt;sup>238</sup> Brigid Schulte, "Property Rights Finds Symbol in S.C.—Lucas Case Hits a National Nerve," *The State*, December 25, 1993.

## **Chapter Four**

"The countryside is the most intense battleground of all in the environmental-developmental contest, and it is at the state level – in the General Assemblies, the administrative agencies, and the hearing boards and courts that these controversies can be best identified."

--Samuel P. Hays

A History of Environmental Politics Since 1945

As public policy professor Cary Coglianese has noted, "Just as environmental law came into existence due to politics, so too can it be changed due to politics." This idea is certainly applicable to coastal zone management legislation in South Carolina. In summer 1990, following Hurricane Hugo and the backlash to the 1988 amendments, as well as in the wake of the trial court's decision in *Lucas* (issued in August 1989), the General Assembly wrote revisions to South Carolina's coastal zone management law. These alterations have been referred to as "a political retreat from retreat." Like all elected bodies, members of the South Carolina General Assembly are subject to pressures from their constituents. In this case, many coastal citizens were angered by the provisions of the BMA, which fully came to light after the damage wrought by Hurricane Hugo. As a result, a number of legislators from coastal counties sought to weaken the BMA through amendment.

The amendments were introduced by Jim Waddell, a Democratic Senator from Beaufort (a coastal county located between Charleston and the Georgia border). In formulating the 1989 amendments, Waddell worked with the South Carolina Tourism Council, a group comprised largely of bankers and developers. Ironically, Waddell was a

<sup>239</sup> Coglianese, "Social Movements, Law, and Society," 115.

<sup>&</sup>lt;sup>240</sup> Beatley, Brower and Schwab, An Introduction to Coastal Zone Management, 141.

former member of the Coastal Council who supported the BMA when it was passed. He acknowledged that he lost votes in the November 1988 election due to his support of the BMA; this is likely the reason that he changed his position on the strength of the law. <sup>241</sup> Like Waddell, Senator Bud Long of Horry County (a coastal county that includes Myrtle Beach) pushed for changes that weakened the law. Long fought for more permissive seawall standards and fewer restrictions on coastal construction. <sup>242</sup>

Many developers and property owners protested the BMA "from the day it became law" as being too restrictive toward construction. Austin Beveridge of Fripp Island decried the passage of the BMA in a letter to the editor of *The State*. He wrote, "Nobody is going to invest along the beachfront in South Carolina. Everybody in South Carolina stands to lose from this misguided Beachfront Management Act." Developers and commercial landowners were pleased with the changes to the law. Doug Martin, president of the Myrtle Beach Area Hotel and Motel Association, was encouraged by the changes. "For developed areas of the beach," he said, "there's no question the [original BMA] lessened the value of property. If you can't put a building on a piece of property and protect it with a seawall, that obviously lessens the value." *The Sun News*, the daily paper for the greater Myrtle Beach area, supported the revisions. An editorial printed therein supported the amendments because of their treatment of seawalls, though it warned citizens that developers "have often found ways to challenge such laws." The

<sup>&</sup>lt;sup>241</sup> Cindi Ross, "Whatever the Approach, Bill Likely to be Overhauled," *The State*, February 18, 1989.

<sup>&</sup>lt;sup>242</sup> Charles Pope, "Beach Law Finds Middle Ground," Sun News, June 16, 1990.

<sup>&</sup>lt;sup>243</sup> Jeff Miller, "Court Frees S.C. From Paying for Land Under Beachfront Law."

Austin Beveridge, letter to the editor, *The State*, February 25, 1990.

<sup>&</sup>lt;sup>245</sup> Charles Pope, "Beach Law Finds Middle Ground."

newspaper was critical of the elimination of the dead zone but supported provisions that continued renourishment.<sup>246</sup>

Despite these criticisms, some positive aspects of the original version of the BMA remained in force. The revised BMA did maintain the forty-year erosion line and the size restrictions (5000 square feet) on structures that were added to the law in 1988.<sup>247</sup> Constraints on hard erosion control devices were actually increased; once seawalls are damaged beyond a certain extent (which changes via a stated timeline), they could not be rebuilt.<sup>248</sup> As previously discussed, this move away from hard erosion-control devices was crucial, both in terms of maintaining natural processes and conserving "downstream" beaches that often erode more severely due to the effects of seawalls placed to protect structures behind neighboring beaches. With the vocal exception of developers and commercial property owners, most citizens seemed to support the move away from erosion-control devices. An editorial in *The Sun News* stated, "Seawalls exacerbate scouring by the ocean, reducing the sand available on the recreational beach." The editorial also stated that eliminating the anti-seawall provision would be "kowtowing to the developers."<sup>249</sup>

There were, however, other major changes, as the "retreat from retreat" comment implies. The new BMA considerably weakened the setback provisions that had responded to the concerns of the Blue Ribbon Committee. The twenty-foot no construction zone was eliminated entirely. Construction seaward of the baseline,

<sup>&</sup>lt;sup>246</sup> Editorial, Sun News, June 19, 1990.

<sup>&</sup>lt;sup>247</sup> S.C. Code 48-39-280. <sup>248</sup> S.C. Code 48-39-290 (B)(2).

<sup>&</sup>lt;sup>249</sup> Editorial, Sun News, June 16, 1990.

although technically not allowed, was designated as tolerable, via eight listed, allowable exceptions.<sup>250</sup> Additionally, the new BMA created a procedure that allowed the Council to issue permits for construction seaward of the baseline if certain conditions were met, including that the owner must be willing to remove the structure if ordered to do so by the Council.<sup>251</sup> (This was the special permitting procedure considered by the U.S. Supreme Court in *Lucas*.) Overall, it is impossible to view these amendments in any way except as a deterioration of the 1988 version of the BMA.

Despite the indication that coastal voters were not behind the BMA, there were some outspoken coastal citizens who supported the stronger provisions. Constance Angeletti, a Hilton Head resident, applauded the BMA. She wrote, "Without a setback line, developers will continue to build close to the beach." She later complained to *The State* that "the 'greedy profiteers' will continue to rape our beaches and pollute the estuaries, marshes and the environment in general to the detriment of all South Carolinians." The amendments to the BMA, she wrote, "will make the aftermath of the Civil War pale into insignificance by comparison."

Furthermore, a 1989 South Carolina poll conducted by Metromark Market

Research for *The State* indicated that voters were concerned about beachfront

development. A third of those polled were in favor of leaving the BMA intact, and an

additional third were in favoring of strengthened to set even greater limits on beachfront

<sup>&</sup>lt;sup>250</sup> S.C. Code 48-39-290 (A). The exceptions are for walkways, decks, piers, golf courses, normal landscaping, structures by permit, pools and the maintenance and repair of existing groins.

<sup>&</sup>lt;sup>251</sup> S.C. Code 48-39-290 (B)
<sup>252</sup> Constance Angeletti, letter to the editor, *The State*, February 19, 1988.

<sup>&</sup>lt;sup>253</sup> Constance Angeletti, letter to the editor, *The State*, March 23, 1988.

construction. According to the poll, which consisted of 508 registered voters, only about eighteen percent favored weakening the BMA.<sup>254</sup>

The work of Coastal Council has been judged in a positive light. Environmental groups have praised the agency, and it has been viewed by many as the driving force behind the 1988 amendments. <sup>255</sup> In 1992, the South Carolina Coastal Council won the Excellence in Coastal Zone Management award given by the NOAA. 256 A year later, South Carolina had received \$21,704,612 in matching grants from the Office of Oceans and Coastal Resources Management for the administration of its coastal program.<sup>257</sup> Large portions of this money were used for general administration of the state's program, but a great deal of it was used for renourishment projects. Despite these positive indications, the Coastal Council did not continue as the administrative agency responsible for the legislation. South Carolina's coastal zone management legislation was amended again in 1993. As part of these amendments, the Coastal Council ceased to be an independent agency and was absorbed as a division of the South Carolina Department of Health and Environmental Control. It was renamed the Office of Ocean and Coastal Resource Management (OCRM). 258 The next year, former members of the South Carolina Coastal Council became members of the South Carolina Coastal Zone Appellate

<sup>&</sup>lt;sup>254</sup> Cindi Ross Scoppe, "Voters Want Beach Laws," *The State*, December 31, 1989.

<sup>&</sup>lt;sup>255</sup> Nancy Vinson, of the Coastal Conservation League, noted the Coastal Council "earned a reputation for 'getting the big picture." Brett Bursey, "The Incredible Shrinking Coastal Agency," South Carolina Progressive Network, www.scpronet.com/point/9609/p07.html. The South Carolina Progressive Network notes that "the Council successfully pushed the Beachfront Management Act through the legislature." Ibid. <sup>256</sup> National Oceanic and Atmospheric Administration, "Jones and NOAA Excellence Award Winners Through Time," National Oceanic and Atmospheric Administration, http://oceanservice.noaa.gov/programs/ocrm/jonesnoaa/05PastWinners\_by%20Category.pdf.

<sup>&</sup>lt;sup>257</sup> South Carolina Coastal Council, *Annual Report*, 1992-1993 (Columbia: The State Budget and Control Board, 1993).

<sup>&</sup>lt;sup>258</sup> S.C. Code, Regulations, Chapter 30, Department of Health and Environmental Control—Coastal Division, Section 30-1 (A) (1).

Panel, which was designated to "act as an advisory council" to DHEC. DHEC was given the Council's original mandate to administer the state's coastal zone management program, including the power to approve or deny permits for construction and development. Essentially, this meant that DHEC would have the final decision as the permitting and other regulatory decisions. The DHEC Commissioner was now the final decision-maker as opposed to the chair of the Coastal Council. Wayne Beam, a Chester, South Carolina, native with a doctorate in environmental sciences and part of the Coastal Council since its inception, was critical of the decision and observed, "We have gone out and written legislation. When we talk about being independent, I'm talking about going up against the Highway Department and the Department of Commerce. The forces that control DHEC won't do that."

During its tenure as the administrative body of South Carolina's coastal zone management program, OCRM seems to have erred on the side of private landowners. In 2001, the South Carolina Court of Appeals ruled in favor of the South Carolina Coastal Conservation League and the Sierra Club, organizations that protested DHEC's decision to issue a permit for the refurbishment of a groin field and the construction of new groins along the beach on Hilton Head Island. Such an act had been prohibited by the BMA. 261 (Groins are a type of hard shoreline defense.) The Court noted that BMA showed a clear

<sup>&</sup>lt;sup>259</sup> S.C. Code 48-39-40 and 48-39-50.

<sup>&</sup>lt;sup>260</sup> Brett Bursey, "The Incredible Shrinking Coastal Agency," South Carolina Progressive Network, www.scpronet.com/point/9609/p07.html.

<sup>&</sup>lt;sup>261</sup> South Carolina Coastal Conservation League and Sierra Club v. South Carolina Department of Health and Environmental Control, Office of Ocean and Coastal Resource Management; Port Royal Plantation; and Town of Hilton Head, 548 S.E.2d 887 (2001).

legislative choice against armoring of the shoreline. Additionally, the Court cited that portion of the BMA which denies construction seaward of the baseline. <sup>262</sup>

DHEC's argument was that the BMA did not specifically include groins in its list of erosion control devices. (While this is technically the case, the statute does not attempt to give an exhaustive list of all erosion control devices. It only states that erosion control devices "include" seawalls, bulkheads and revetments.)<sup>263</sup> The Court held as a matter of law that the BMA prohibited the issuance of permits for the construction or reconstruction of new or existing groins.<sup>264</sup> This case is significant for several reasons. DHEC was clearly erring on the side of the private property owners in making this decision. Hilton Head Island is an exclusive area with extremely high property values. As such, it is clear why property owners there wanted to construct shore armoring devices. However, the BMA is clear in its intent to end construction of erosion-control devices. By issuing this decision, DHEC seems to be indicating a preference contrary to the goal of the legislature.

Despite the state's movement away from strong regulation, some South Carolina communities have instituted stronger control of development. Spring Island, South Carolina, located south of Charleston near Beaufort, is an example of development based on strict environmental standards. Changes to the BMA altered nothing about Spring Island, which has self-imposed setback restrictions more stringent than those included in the 1988 form of the BMA. The owners and developers of Spring Island, James Chaffin

<sup>&</sup>lt;sup>262</sup> Ibid.

<sup>&</sup>lt;sup>263</sup> S.C. Code 48-39-270.

<sup>&</sup>lt;sup>264</sup> South Carolina Coastal Conservation League and Sierra Club v. South Carolina Department of Health and Environmental Control, Office of Ocean and Coastal Resource Management; Port Royal Plantation; and Town of Hilton Head, 548 S.E.2d 887 (2001).

and James Light, purchased the island in 1989 for \$17 million. The Spring Island developers transplant trees rather than cutting them down and offer no paved roads. A third of the 3,500 acre island has been set aside as a nature preserve. Chaffin and Light were approved for 5,500 units of development but chose to only have 500 units. Instead of the three possible golf courses for which they were approved, they chose to build only one, which would follow the contours of existing corn fields.<sup>265</sup>

Another example of a community committed to "protecting and nurturing the ecosystem" is Dewees Island, located eleven miles north of Charleston. Like Spring Island, Dewees Island has many restrictions designed to respect the land, water and wildlife. The only vehicles allowed on the island are golf carts, yet even they are not allowed on the beach. Recycling is mandatory, as is community service with the environmental staff of the island. Construction on the island is limited to 150 units, by agreement between the owners of the island and South Carolina. Activities that may harm "drainage, flood control, water conservation, erosion control or soil conservation, or fish and wildlife habitat preservation" are strictly prohibited. 267

While developments and communities like Spring Island and Dewees Island should succeed from the standpoint of conservation, they are unavailable to the majority of South Carolina residents because of their cost. Lots and homes on the islands are

<sup>&</sup>lt;sup>265</sup> Lyn Riddle, "Development With an Environmental Bent," *The New York Times*, June 28, 1992.

<sup>&</sup>lt;sup>266</sup> "Dewees Island Constitution," Dewees Island Property Owners Association, http://www.deweesislandpoa.org/item\_list.asp?subcat+100%subtitle=DeweesDEWEESISLANDCONSTIT UTION.

<sup>&</sup>lt;sup>267</sup> Ibid. and "Dewees island Conservation Agreement," Dewees Island Property Owners Association, http://www.deweesislandpoa.org/item\_list.asp?subcat+269&subtitle=Conservation+Agreement.

expensive, putting them out of the price range of the majority. Nevertheless, these progressive regulations are available to other communities, should they choose to implement and enforce them. The National Research Council has argued that "a single uniform national 'answer' to erosion problems is neither practical nor desirable." Further, the National Research Council has asserted that specific, localized conditions should determine rules for setbacks, relocation of endangered structures, beach nourishment and shoreline armoring. Locally enacted regulations may be the best system for protecting coastal resources, but up to this point, they have only been used by upscale communities.

Another possibility for conservation in the coastal zone is through the concept of sustainability. Sustainable use, or sustainability, of the coastal zone is defined as the planning and management of economic development of the coastal zone so as to achieve a balanced, maximum, and resource-constrained flow of benefits which is economically and environmentally sustainable. This movement has also been known as wise use or conservation. This idea is already being explored through the Center for Sustainable Living, a public-private-academic partnership located in Charleston. (The Center has several public "partners," including the South Carolina Sea Grant Consortium, Clemson University Extension Service, City of Charleston, Charleston County and Federal Management Agency. It is also supported by about fifty private donors, which include individuals and businesses. A full list of partners and donors can be found on the

<sup>&</sup>lt;sup>268</sup> Prices for homes on Dewees Island range from \$949,950 for 1,616 square feet to \$2,725,000 for 3,700 square feet. Prices for homes on Spring Island range from \$650,000 for 934 square feet to \$5,995,000 for 8,020 square feet. The average price for homes on both islands is between \$1.5 and \$2.5 million.

National Research Council, Managing Coastal Erosion, 8.

<sup>&</sup>lt;sup>270</sup> Clark, Coastal Zone Management Handbook, 436.

Center's website.) It was designed "to conduct education programs to help minimize threats from natural disasters and to enhance resource conservation." The Center develops techniques and offers assistance programs in the areas of natural hazards mitigation, sustainable building practices and sustainable living. Policies like those explored at the Center for Sustainable Living and regulations like those in place on Spring Island and Dewees Island are necessary for consideration since current policies and regulations are falling short in terms of protecting the coastal zone.

On the whole, it seems that South Carolina's journey into coastal regulation began positively (when it created regulation where none existed). It continued to improve with the passage of the BMA. Hugo and *Lucas*, however, revealed opposition to the BMA that resulted in amendments. This was backtracking from the point-of-view of coastal protection. These changes were possible due to the nature of the CZMA. Because of the flexibility of the CZMA, there was no "natural" way for coastal statutes to evolve. The CZMA was designed to be discretionary so that individual states were able to decide on the best policy for their geography, economy and political situation.

A comparison between the North Carolina and South Carolina programs is useful to demonstrate the unrestricted and flexible nature of the CZMA as well as to reveal the distinctive qualities of South Carolina's program and how the South Carolina program evolved. The character and structure of coastal zone management programs under the CZMA varied widely from state to state. Some states, including the Carolinas, passed comprehensive legislation as a framework for their programs. Others opted to use

<sup>&</sup>lt;sup>271</sup> "113 Calhoun St.: A Center for Sustainable Living," A Center for Sustainable Living, www.113calhoun.org.

existing land-use regulations as the foundation for their program or to link existing single-purpose laws into a comprehensive umbrella for coastal zone management. In the 1970s, South Carolina's geographical neighbor, North Carolina, also implemented a coastal management program under the CZMA. Although politically and economically relatively similar to South Carolina, North Carolina's coastal zone is different. It is much more dominated by highly dynamic barrier islands. Additionally, North Carolina beaches are more prone to erosion. As a result, the coastal management plan is also different in several respects.

North Carolina's coastline is almost 320 miles in length and includes 23 separate islands, including the Outer Banks area, that are extremely dynamic. The state has been hit by more storms that either South Carolina or Georgia, including more major hurricanes. North Carolina is also more prone to winter storms, which may also cause severe damage and increase shoreline erosion. Fortunately, almost half of North Carolina's ocean coasts are publicly owned, with the two most significant holdings being the Cape Hatteras and Cape Lookout National Seashores. Together these two federal holdings constitute 127 miles of ocean frontage. Another feature that makes North Carolina different involves waves. Experts classify those striking the North Carolina shoreline as "energetic," meaning that they move a great deal of sand. On the Outer Banks of North Carolina, it has been estimated that as much as seven hundred thousand

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<sup>&</sup>lt;sup>272</sup> In marked contrast to North and South Carolina, South Carolina's southern coastal neighbor, Georgia, was very slow to come to the coastal zone management table. Georgia's program was not approved until February 1998. National Oceanic and Atmospheric Administration, *Federal Approval of the Georgia Coastal Management Program*, February 17, 1998, 63 FR 7759-01

<sup>&</sup>lt;sup>273</sup> David W. Owens, "The Management of Oceanfront Development in North Carolina," in *Achievements of the '70s and Prospects for the '80s: Proceedings of the Seventh Annual Conference of the Coastal Society* (Bethesda, MD: The Coastal Society, 1981), 17-25.

cubic yards of sand annually may move from north to south along a stretch of beach.

This is as much as seventy thousand medium-sized dump trucks.<sup>274</sup> (South Carolina's coastline is transitional between the wave-dominated coast of North Carolina and the tide-dominated coast of Georgia. South Carolina is generally less susceptible to dramatic erosion trends than North Carolina.)<sup>275</sup>

North Carolina submitted its coastal zone management proposal for approval fairly quickly. Its Coastal Area Management Act (CAMA) was passed by the North Carolina legislature in 1974. CAMA involved "the most intense debate of any environmental bill in the state's history." In September 1978 CAMA received federal approval. It defines its coastal zone to include any county that either borders on the Atlantic Ocean or any body of water containing salt water. (As aforementioned, each state can designate its coastal zone, and thus the area subject to regulation under its program, as it sees fit. Some states, Florida and Delaware for example, have designated their entire state as a coastal zone.) CAMA has both a regulatory prong and a planning prong. Both parts receive policy direction through the Coastal Resources Commission (CRC), a group of fifteen citizens appointed by the governor. The CRC is advised by the Coastal Resources Advisory Council (CRAC), a group of forty-seven local government

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<sup>&</sup>lt;sup>274</sup> Dean, *Against the Tide*, 25.

<sup>&</sup>lt;sup>275</sup> London and others, A Study of Shore Erosion, iii.

<sup>&</sup>lt;sup>276</sup> Beatley, Brower and Schwab, *An Introduction to Coastal Zone Management*, 162. The primary debate centered around the question of whether or not coastal localities were being unfairly asked to infringe upon private property rights, as well as considering the amount of extra effort that the communities were being asked to take on. Beatley, Brower and Schwab, *An Introduction to Coastal Zone Management*, 163.

<sup>277</sup> Beatley, Brower and Schwab, *An Introduction to Coastal Zone Management*, 162.

representatives. Under the planning unit, local land use plans must be adopted. If a locality fails to adopt a plan, the CRC will write one for that locality.<sup>278</sup>

Similarly, South Carolina adopted local beach management plans as part of its post-Hugo amendments. The South Carolina provisions required that local governments must prepare, by July 1, 1991, a "local comprehensive beach management plan." These documents were required to incorporate, at a minimum, ten stated elements, including analysis of erosion control devices, an inventory of structures located seaward of the setback line and "a detailed strategy for achieving the goals of preservation of existing public access and the enhancement of public access to assure full enjoyment of the beach by all residents of this State."<sup>279</sup> The regulatory program only comes into play for what South Carolina early on termed critical areas—those designated by the CRC as areas of environmental concern. All development in these areas is subject to the CRC's permit standards, which are administered at the state level if deemed "major" or at the local level if deemed "minor." Development is considered "major" if it would require another state or federal permit, if it involves more than twenty acres of land disturbance or if it will be larger than 60,000 square feet.<sup>280</sup> The CRC hears appeals from both types of permitting decisions.<sup>281</sup> Like South Carolina, the CRC also banned shore-hardening devices. <sup>282</sup>

In June 1979, North Carolina adopted its setback provisions. Under these regulations, development in areas of environmental concern must be located at a minimum, the furthest landward of four designated points: "1) a distance 30 times the

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<sup>&</sup>lt;sup>278</sup> Owens, "The Management of Oceanfront Development in North Carolina," 18.

<sup>&</sup>lt;sup>279</sup> S.C. Code 48-39-350.

<sup>&</sup>lt;sup>280</sup> Beatley, Brower and Schwab, An Introduction to Coastal Zone Management, 164.

<sup>&</sup>lt;sup>281</sup> Ibid.

<sup>&</sup>lt;sup>282</sup> Ibid.

long-term annual erosion rate, measured from the vegetation line; 2) behind the crest of the 'primary' dune (defined as the first dune with an elevation equal to the 100 year storm level plus six feet); 3) behind the landward toe of the 'frontal' dune (defined as the first dune with sufficient height, vegetation, continuity and configuration to offer protective value; or 4) 60 feet landward of the vegetation line."<sup>283</sup>

After the adoption of these setback provisions, it was estimated by the CRC that approximately 800 oceanfront lots would be undevelopable. Two exceptions were adopted soon thereafter. These measures allowed insubstantial structures (such as parking areas, campgrounds and small gazebos) between the vegetation and setback lines, provided there is no dune alteration, and permitted an exemption to the erosion rate setback for lots that existed prior to June 1, 1979, if several extensive requirements were met. This is an important distinction when compared to South Carolina's 1988 version of the BMA. The BMA appeared to be harsher, in that it allowed no structures. Nevertheless, an estimated 500 lots were still left undevelopable under the North Carolina regulations. 285

As part of its coastal zone management program, North Carolina stressed education and policy development. Some coastal zone management scholars have argued the successful coastal management programs require public education to gain broad support for and participation in the program. North Carolina's educational program has focused on coastal hazards and sound development practices and was directed toward

<sup>&</sup>lt;sup>283</sup> Owens, "The Management of Oceanfront Development in North Carolina," 19-20.

<sup>&</sup>lt;sup>284</sup> Ibid., 20.

<sup>&</sup>lt;sup>285</sup> Ibid

<sup>&</sup>lt;sup>286</sup> Charlier and DeMeyer, *Coastal Erosion*, 21.

realtors, developers, bankers, planners and elected officials.<sup>287</sup> These initiatives were in line with 1990 recommendations of the National Research Council, which argued that "a more informed or educated public (including buyers, sellers, developers, planners, engineers, and public officials) would be able to make better long-term coastal development decisions."<sup>288</sup>

In 1990, South Carolina amended its coastal zone management legislation in the wake of two events: Hurricane Hugo and the trial court decision in *Lucas v. South Carolina Coastal Council*. The events following Hugo were significant because they indicated an extreme level of dissatisfaction with the 1988 version of the BMA, at least in terms of vocal coastal property owners. The decision of the trial court in *Lucas*, which had awarded significant monetary damages to the property owner, seemed to indicate that South Carolina would be in several expensive lawsuits if the BMA were not modified.

The 1990 amendments, while maintaining the general policy of retreat and reinforcing the commitment to move away from hard erosion control, weakened the state's regulatory power and its coastal zone management policy. In the face of the 1989 opposition, the General Assembly chose to ignore, at least in part, recommendations given to it only a few years earlier by the Blue Ribbon Committee on Beachfront Management. Now, property owners would be able to build in areas that had only recently been covered by water and that could be again, by meeting only a few

<sup>&</sup>lt;sup>287</sup> Ibid., 21

<sup>&</sup>lt;sup>288</sup> National Research Council, *Managing Coastal Erosion*, 13.

requirements. In its third attempt to sort out its policy, the General Assembly had backtracked.

In 1993, the General Assembly continued to tinker with coastal zone management legislation, this time changing the administration of the policy. The Coastal Council, which had been the agency responsible for the state's coastal zone management policy since its initial implementation, was absorbed by DHEC. This administrative body became merely a division in a larger state agency; it did not even have final decision-making authority. This change indicated a move toward the interests of property owners.

South Carolina's first three attempts at coastal regulation were not a natural evolution of policy. They were based on a series of choices made by legislators. A comparison to North Carolina's policy illustrates this conclusion. In several ways, South Carolina's program is similar to North Carolina's. First, both have experienced periods of contentiousness, though North Carolina's battles primarily occurred during the initial legislative process. As initially enacted, both launched a new agency for the administration of their programs. Both states made the decision to move away from, and eventually ban, hard coastal defenses, and each passed provisions that sought dune protection. Finally, both coastal zone management policies center on permits and permitting decisions as the primary vehicle for controlling unwise siting and development.

More significant are the differences between the two programs. North Carolina's administrative agency can regulate a much broader area, due to how it defined its coastal zone. Whereas North Carolina focused on the *type of activity* when considering whether

or not a permit will be issued, South Carolina focused more on where the development will occur, i.e.—what type of environment will be affected/effect on critical areas. The implication in this comparison, therefore, is that South Carolina's primary concern was in limiting construction and development in certain areas, particularly those in close proximity to the beach and its associated erosion zones. This conclusion made the 1990 amendments to the BMA much more difficult to grasp, as they seemed to undermine the entire thrust of the state's policy. It does, however, further illuminate the difficulty of writing and implementing environmental regulations that are amenable to citizens. In this case, significant portions of the population (coastal property owners generally) and vocal portions of the population (developers and commercial property owners) were unhappy with how their property was regulated. As a result, the regulation was revised. While this change was probably not the best thing for the coast as a whole, or even for the property owners in the long term, it satisfied most of the constituents for the short term.

#### **Conclusions**

"In the final analysis, the long-range public good is the same as the long-range private good. If the dry sand beaches of this State disappear because of the failure of its people and governmental natural resource managers to protect the beach/dune system, future generations will never have the opportunity to use and enjoy this valuable resource."

--South Carolina Coastal Council Regulations for Permitting in Critical Areas of the State's Coastal Zone (May 1991)

As regulatory historian Thomas McCraw has noted, "almost nobody ever declares his hostility to the 'public interest." Still, as Samuel Hays, environmental historian, has argued, many groups became increasingly frustrated and antagonistic toward what they considered to be "environmental roadblocks to their goals and objectives." This is the crux of the coastal zone management conflict of interest: everyone, in theory, wants to protect the coastal zone and its resources, yet most private property owners want to be free to develop their property as they see fit with no input from the government and no restrictions through regulations. The coastal zone has much to offer, in terms of aesthetics, recreation, scientific research and observation and potential economic benefits. Because there are so many competing interests that desire to use and benefit from the coastal zone, conflicts have been associated with its regulation. In South Carolina, the number of people who live in the coastal zone, in addition to the amount of money that depends on coastal tourism, has exacerbated this discord.

While the coastal zone management regulation went the way of environmental regulation generally in its formative years, it has proved, in some ways, more enduring

<sup>&</sup>lt;sup>289</sup> McCraw, "Regulation in America," 181.

<sup>&</sup>lt;sup>290</sup> Hays, "The Structure of Environmental Regulation," 726.

than other varieties of regulation. In the early 1980s, the Reagan administration spent considerable effort to curb environmental regulation. As Hays has observed, though, the CZMA proved somewhat more difficult to modify than some other statutes.<sup>291</sup> This is likely because, as the initial Senate support for the law indicated, money given to the states is hard to take away. The CZMA remains a part of the governing legislation that affects the coastal zone in the twenty-first century and has changed little. In the United States, both public and private sectors influence the formation of coastal zone policy. Additionally, all three levels of government, federal, state and local, are involved in writing and administering coastal zone management policies. The CZMA is the most prominent federal statute affecting the coastal zone, though there are several others that impact it. Though enacted during the early 1970s with many other federal environmental statutes, the CZMA is different in that state participation is completely voluntary. Local regulation usually comes in the form of zoning ordinances or subdivision regulations.<sup>292</sup> The private sector can play a strong role in determining the character of regulation that is passed in relation to the coastal zone and in terms of the environment generally. This can be a good thing and has created stronger environmental legislation in some cases. An example of this public participation can be seen in the mass passage of environmental regulation in the early 1970s. Alternatively, the public can emphasize other rights that conflict with environmental mandates, in turn weakening environmental laws. This is one of the factors that worked to dilute South Carolina's coastal zone management legislation in the early 1990s.

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<sup>&</sup>lt;sup>291</sup> Hays, Beauty, Health, and Permanence, 503.

<sup>&</sup>lt;sup>292</sup> Vernberg and Vernberg, *The Coastal Zone*, 145.

The flexibility of the CZMA was one of its biggest assets and one of its biggest downfalls. While it permitted states and localities to design plans that best fit their ecological and economic conditions, it also allowed for inadequate, even deficient, regulations since only base requirements need be met. As marine scientists John and Winona Vernberg have noted, "the most rigorous requirement that a state must meet is that its program strikes a balance between development and the environment." Each state decided how much or how little it wants to regulate its coastal resources. In the case of South Carolina, a once strong management program was weakened with no federal ramifications.

According to the writings of geologists Roger Charlier and Christian DeMeyer, the principal objectives of coastal management are to avoid development in areas susceptible to flooding, to ensure that natural systems continue to operate, and to protect human lives, property and economic activities. As a result, these authors contend, a successful program should give "full consideration to ecological, cultural, historic and aesthetic values and to the needs for human safety and economic development." As a review of South Carolina's policy has indicated, this is a difficult balance to achieve, especially considering that safety and ecology are often at odds with development and economics.

The Beachfront Management Act was a response to a growing threat to a \$3 billion industry in South Carolina—tourism. If beaches disappeared or became drastically degraded in terms of quality and/or accessibility, the state's profitable tourism

<sup>&</sup>lt;sup>293</sup> Vernberg and Vernberg, *The Coastal Zone*, 133.

<sup>&</sup>lt;sup>294</sup> Charlier and DeMeyer, *Coastal Erosion*, 21.

industry would suffer an enormous loss. Therefore, the program was refitted around the concepts of retreat (via the setback provisions) and elimination of erosion control structures. This legislation was aggressive and proactive, and it reflected modern scientific principles and ideas. As sustainability professor Timothy Beatley has noted, the 1988 revisions "represented a major and significant expansion of the state's control over coastal development."<sup>295</sup> These amendments were necessary since, as Justice Harry Blackmun noted in his dissenting opinion in Lucas, "the 1977 critical area was relatively narrow."<sup>296</sup> It did not, however, take into account the naïveté of coastal property owners in terms of governmental regulation, nor did it consider the financial implications for these citizens.

One of the key aspects of the BMA was to move away from hard defenses of the shoreline and toward soft defenses, especially beach renourishment. While definitely preferable to erosion control devices such as seawalls, renourishment is also not a perfect solution. Renourished beaches do not have a good record of longevity.<sup>297</sup>

Renourishment is, in short, *always* a work in progress. After Hurricane Hugo, for example, South Carolina spent approximately \$6.6 million in renourishment projects on a forty-five mile strip of beaches. Two years before Hugo, Myrtle Beach spent \$5 million renourishing its beach; one third of the 53,000 truckloads of sand brought in by Myrtle Beach in that effort disappeared after Hugo.<sup>298</sup> This is an indication of one of the

<sup>&</sup>lt;sup>295</sup> Beatley, "Hurricane Hugo and Shoreline Retreat," 5.

<sup>&</sup>lt;sup>296</sup> Lucas v. South Carolina Coastal Council, 505 U.S. at 1037.

<sup>&</sup>lt;sup>297</sup> Dean, Against the Tide, 99.

<sup>&</sup>lt;sup>298</sup> "South Carolina Tourist Lure: 100,000 Loads of Sand," *The New York Times*, December 3, 1989.

problems with coastal zone management: even the best available solutions are not perfect.

One of the positive features of South Carolina's coastal zone management policy was protection of dunes. South Carolina addressed this matter from the beginning in its coastal zone management planning. The "dune system" was recognized as part of the legislatively defined "critical area." 299 As a result, it was protected from any utilization without a permit.<sup>300</sup> Additionally, the destruction of dune vegetation seaward of the setback line was prohibited unless there was no feasible alternative; when that was determined to be the case, new vegetation was required to be planted wherever possible.<sup>301</sup> Dunes are an invaluable element in protecting property that lies behind the beach. During Hurricane Hugo, for example, Litchfield-by-the-Sea (a private condominium community located between Murrell's Inlet and Mt. Pleasant) was protected by artificial dunes that were twenty feet tall and more than eighty feet wide. Structures behind the dunes received only modest damage, though one and half dunes were washed away. 302

When South Carolina's setback provisions were created, they were designed with flexibility to accord with the variable nature of the South Carolina's shoreline. Because some beaches were accreting while others were rapidly eroding, the standard had to be a dynamic one so that all the beaches could be appropriately accommodated and so that development could proceed where possible. The setback line was tied to local conditions

<sup>&</sup>lt;sup>299</sup> S.C. Code 48-39-10(J)

<sup>300</sup> S.C. Code 48-39-130 S.C. Code 48-39-310.

<sup>302 &</sup>quot;South Carolina Begins Rebuilding Storm-Swept Beach Dunes," *The New York Times*, October 5, 1989.

and the local erosion rate, thereby accounting for the natural variation in shoreline trends among beaches.<sup>303</sup>

As has been noted by coastal zone management authorities, coastal erosion, while a natural process that is the result of many complex interactions within nature, is furthered by the actions of man. 304 Although winds, tides, changes in sea-level and hurricanes affect the rate and nature of coastal erosion, so too do construction of hard defenses, improvement of inlets, dredging for sand and construction of other structures near the shoreline and dune systems. There would be no "erosion problem" without human development. Erosion is a natural, ongoing process of the coastal zone. It has only become problematic because human beings have built structures too close to the shoreline.<sup>305</sup> That being said, it is unlikely that people will end beachfront construction, even if it is obviously unwise. Therefore, policies for coastal development should guide development so that it can be as prudent as possible considering the hazards of development in this area as well as the sensitivity of the area. While ending coastal erosion and shoreline retreat is generally acknowledged to be impossible (except, perhaps, by owners of property adjacent to the shoreline), coastal planners have strived to restore areas in danger and reduce the rate of erosion.<sup>306</sup>

Coastal storms, and especially hurricanes in the case of South Carolina, have had dramatic effects on the shoreline and coastal zone as a whole. Hurricanes have affected

<sup>&</sup>lt;sup>303</sup> Clark, Coastal Zone Management Handbook, 179.

<sup>&</sup>lt;sup>304</sup> Charlier and DeMeyer, *Coastal Erosion*, 155.

<sup>&</sup>lt;sup>305</sup> In fact, the South Carolina General Assembly recognized this fact: "Erosion is a natural process which becomes a significant problem for man only when structures are erected in close proximity to the beach/dune system." S.C. Code 48-39-250 (6)

<sup>&</sup>lt;sup>306</sup> Charlier and DeMeyer, *Coastal Erosion*, 174.

the shape of the shoreline, size of dunes and rate of erosion. Extremely accelerated rates of erosion have occurred during hurricanes. Additionally, shoreline and other coastal zone development have been damaged or completely destroyed if struck by a hurricane, depending largely on their location in relation to the shoreline. One of the primary factors associated with hurricane damage is storm surge, which can combine with high waves and strong winds to produce elevated damage levels in the coastal zone.

Table Five<sup>307</sup>
Damage in the United States Resulting from Hurricanes

Decade	Damage In Billions of 1990 Dollars
1900-1910	Less than 1 billion
1911-1920	Less than 1 billion
1921-1930	1.5 billion
1931-1940	4.5 billion
1941-1950	4.5 billion
1951-1960	11 billion
1961-1970	17 billion
1971-1980	18 billion
1981-1990	15 billion

Before the Hugo and *Lucas*-driven changes, South Carolina's coastal zone management program was described by some experts as the strongest in the country. It was compared favorably to North Carolina and Florida, two progressive and effective

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<sup>&</sup>lt;sup>307</sup> Table Five was adapted from Peter Applebome, "Outlook: Risky; Storm Cycles and Coastal Growth Could Make Disaster a Way of Life," *The New York Times*, August 30, 1992.

Hugo and *Lucas*, as "one of the country's most stringent laws aimed at discouraging oceanfront construction." The passage of the BMA was a response to directed research and investigation into how the coast could best be protected. The measures were strong but seem to have been a well-intentioned effort by the legislature to do the right thing for South Carolina's beaches. Because these types of laws were still in the early stages everywhere, South Carolina had little to use by way of a model, and it would have been difficult for them to predict the opposition that the BMA was to engender.

Hurricane Hugo amplified and enhanced opposition to the BMA and directly resulted in changes to the law made in the summer of 1990. As characterized by Cornelia Dean of the *New York Times*, South Carolina "caved in to the pleas of property owners" after Hugo; the state changed, and fundamentally weakened, its provisions regarding construction in the coastal zone. This opposition was lent support by the first trial court decision in *Lucas v. South Carolina Coastal Council*, which awarded the plaintiff damages as a result of the regulatory taking of his property through the provisions of the BMA. This decision seemed to indicate that the original version of the BMA could result in financial consequences for the state and served as an additional argument against these provisions by developers and private property owners who hoped to see the regulations modified or eliminated.

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<sup>&</sup>lt;sup>308</sup> Christopher L. Brooks, "State Perspective in Coastal Zone Management," in *Sustainable Development in the Southeastern Coastal Zone*, ed. F. John Vernberg, Winona B. Vernberg and Thomas Siewicki (Columbia: The University of South Carolina Press, 1996), 25-30 ,28.

<sup>&</sup>lt;sup>309</sup> Iver Peterson, "The Public-Private Clash Over Beaches," The New York Times, October 15, 1989. <sup>310</sup> Dean, *Against the Tide*, 189.

In addition to preserving the coastal zone for ecological and scenic reasons, there are other rationales for strong coastal zone management polices. First, unwise siting and coastal development can have consequences in terms of human lives. Hurricane Hugo, for example, caused twenty-nine deaths in South Carolina alone. Second, the cost of rebuilding these poorly sited structures usually does not fall on the property owner who built there with knowledge of the consequences; in many cases, taxpayers cover these costs. As noted by John Weingart, chief of the Department of Environmental Protection's Division of Coastal Resources, "public resources are invariably called upon to rescue private property when the coast is scoured by a serious storm, and taxpayers are asked to help pay for new roads, sewers, electric utilities and other services for some of the wealthiest...." Structures sited unwisely close to the shoreline will inevitably be destroyed or broken apart by hurricanes; this debris can, in turn, damage other structures. Additionally, private development often has the effect of closing of public, or seemingly public, beaches to other potential users.

As regulatory historian Cary Coglianese has written, "There will always be friction between environmentalism and capitalism. An economy that rests on private ownership of land (conferring more privilege than responsibility), on 'healthy growth' (the magic words), and on profits now (never mind the cost to the grandchildren), is one that strains the laws of both nature and ethical society. When dollars are the goal, uses of nature's bounty too easily become abuses." This friction is evident when considering

<sup>311</sup> Linda Greenhouse, "Justices Ease Way to Challenge Land-Use Rules That Prevent Development."

<sup>312</sup> Iver Peterson, "The Public-Private Clash Over Beaches."

<sup>&</sup>lt;sup>313</sup> Victor B. Scheffer, *The Shaping of Environmentalism in America* (Seattle: University of Washington Press, 1991), 168-9.

the history of coastal zone management in South Carolina. The state's best efforts at creating a strong and effective regulatory program to protect its beaches were defeated by citizens who valued their property rights above environmental protection. In the short term, this means that property owners can build houses or commercial buildings like hotels closer to the ocean. In the long term, this likely means that there will be little or no beach to draw tourists to South Carolina at some point in the future.

**Appendix One** Federal Agencies and Legislation Affecting the Coastal Zone 314

		Activities Implicating the Coastal
Legislation	Agency	Zone
Federal Flood Control	U.S. Army Corps of	Involved in wetlands permitting;
Acts	Engineers	provides assistance in beach
		nourishment and navigable waters
		dredging
Clean Air Act	E.P.A.	Establishes effluent standards for
	(Environmental	air pollutants
	Protection Agency)	
Clean Water Act	E.P.A.	Involved in wetlands permitting;
		involved in coastal pollution
		control; establishes effluent
		standards for water pollutants
Flood Insurance Act,	FEMA	Implements National Flood
Flood Disaster	(Federal Emergency	Insurance Program; provides pre-
Protection Act	Management Agency)	and post-disaster relief to coastal
		states and to local governments in
		coastal areas
Coastal Barrier	National Park Service	Maintains and manages national
Resources Act		seashores; oversees Coastal Barrier
		Resources System
Endangered Species Act	U.S. Fish and Wildlife	Enforces federal wildlife and
	Service	endangered species laws; maintains
		national wildlife refuges
Marine Mammal	National Marine	Manages fisheries; involved in
Protection Act	Fisheries Service	marine mammal protection

<sup>&</sup>lt;sup>314</sup> Adapted from Beatley, Brower and Schwab, *An Introduction to Coastal Zone Management*.

# Appendix Two

## **Lucas Timeline and Holdings**

Date	Court/Legislation	Holding/Outcome
1986	Original coastal zone legislation in	Lucas purchases lots which are
	force	not subject to permit
		requirements
1988	BMA amended	Lucas can not build on lots due
		to new permit requirements
1989	Charleston County Court of	Lucas awarded damages
	Common Pleas	
1990	BMA amended	Lucas may seek special permit
		to build on lots
1991	South Carolina Supreme Court	Ruling of trial court reversed;
		no taking found; regulation
		deemed in prevention of
		harmful or noxious uses.
6/29/1992	Supreme Court of the United States	South Carolina Supreme Court
		reversed; regulatory taking
		found based on loss of all
		economic value; case remanded
		for determination of common
		law basis of regulation.
11/20/1992	South Carolina Supreme Court	No common law basis for
		restricting Lucas's use of
		property; remanded to trial
		court for determination of
		temporary takings damages.
1993	Private Settlement	\$1,575,000.00 paid to Lucas by
		South Carolina; lots auctioned
		by state.

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