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**A HOUSE BUILT ON THE SAND:**  
RETHINKING RE-DEVELOPMENT  
IN THE AFTERMATH OF SUPERSTORM SANDY

Paul Juzdan\*

*“Therefore whoever hears these sayings of Mine, and does them, I will liken him to a wise man who built his house on the rock: and the rain descended, the floods came, and the winds blew and beat on that house; and it did not fall, for it was founded on the rock. But everyone who hears these sayings of Mine, and does not do them, will be like a foolish man who built his house on the sand: and the rain descended, the floods came, and the winds blew and beat on that house; and it fell. And great was its fall.”<sup>1</sup>*

In an article by Erin O’Neill of *The Star-Ledger*, published on November 6, 2012, New Jersey shore residents voiced their discontent at what seemed to be an unorganized attempt to facilitate a return home after Superstorm Sandy’s devastating effects.<sup>2</sup> “Questions — most of which start with ‘when?’ — remained unanswered for more than a week, fueling anger and frustration among homeowners and tenants who want... [to] salvage what’s left of their water-logged homes”, writes O’Neill.<sup>3</sup> Citizens are asking their municipal leaders the all too familiar question, “When?” In this article, I ask a similar question. “When” will the New Jersey Legislature realize how irresponsible it is to allow its citizens to build homes on the barrier islands? When will leaders of our state gather the courage to be honest with the residents of the New Jersey shore? The answer to the question, “When can we return?” may have to be, “Never!”

Andrew Cuomo, the governor of New York, offers insight concerning the irresponsible

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<sup>1</sup> Mat. 7:24-7.

<sup>2</sup> Erin O’Neill, *Angered Residents of N.J.’s Barrier Islands Want to Know: When Can They Return?*, NJ.COM (Nov. 6, 2012), [http://www.nj.com/news/index.ssf/2012/11/angered\\_residents\\_of\\_njs\\_barri.html](http://www.nj.com/news/index.ssf/2012/11/angered_residents_of_njs_barri.html).

<sup>3</sup> *Id.*

development along the New Jersey shore.<sup>4</sup> In an interview with the *Daily News Editorial Board*, Cuomo states, “at one point, you have to say maybe Mother Nature doesn’t want you here. Maybe she’s trying to tell you something.”<sup>5</sup> He reiterates the point in his February 2013 State of the State Address: “There are some parcels that Mother Nature owns. She may only visit once every few years. But she owns the parcel and when she comes to visit, she visits.”<sup>6</sup> Conversely, Governor Christie of New Jersey is adamant about rebuilding along the Jersey Shore and reverting back to the status quo.<sup>7</sup> Christie told reporters shortly after Superstorm Sandy that “There’s no question in my mind we’ll rebuild it. But for those of us who are my age, it won’t be the same. It’ll be different. Because many of the things that made it what it was are now gone and washed into the ocean.”<sup>8</sup> He acknowledges the brutal results of Sandy, but refuses to face the stark reality that rebuilding may not be the best option.

The following paper is aimed at addressing two specific questions: 1) Should the NJ legislature allow individuals who live on the Barrier Islands of the New Jersey coast to rebuild their homes and businesses after they have been destroyed by Hurricane Sandy? and 2) Is this prohibition a taking under the Fifth Amendment? Part I of this paper will explore the nature of the barrier islands, their location along the Jersey coast and the way in which homes are built on these islands. Part I will also describe the principle of littoral rights and important concepts such as avulsion, accretion, and reliction. Part II will illustrate the intensity of Superstorm Sandy, along with its economic and environmental effects on the barrier islands. Part III will outline the

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<sup>4</sup> Kenneth Lovett, *Gov. Cuomo to Sandy Victims on the Coasts: Sell Your House*, N.Y. DAILY NEWS (Jan. 24, 2013), available at <http://www.nydailynews.com/news/politics/cuomo-sandy-vics-sell-house-article-1.1246487>.

<sup>5</sup> *Id.*

<sup>6</sup> Matt Hickman, *Cuomo: Don’t Rebuild, Let Mother Nature Take Back Sandy-Damaged Areas*, MOTHER NATURE NETWORK (Feb. 5, 2013), <http://www.mnn.com/your-home/at-home/blogs/cuomo-dont-rebuild-let-mother-nature-take-back-sandy-damaged-areas>.

<sup>7</sup> Anna Sale, *Christie and Cuomo’s Dueling Visions for Post-Sandy Rebuilding*, WNYC (Nov. 23, 2012), <http://www.wnyc.org/articles/its-free-country/2012/nov/23/christie-and-cuomos-dueling-visions-post-sandy-rebuilding/>.

<sup>8</sup> *Id.*

laws associated with federal regulatory takings, specifically, analyzing the *Penn Central/Lucas/Nollan/Dolan* trajectory; this section will also evaluate current New Jersey takings law. In Part IV, I will propose distinct ways in which the NJ Legislature can prevent future development along the Barrier Islands. Finally, Part V will discuss the importance of regulating the New Jersey shore and the need to take immediate action to ensure future safety and stability.

It is important to note from the outset, that this paper will focus solely on the barrier islands along the New Jersey coast. There may at certain points in this paper, be mention of the New Jersey shore as whole, which would include areas such as Toms River, Point Pleasant, and Brick, NJ; however, the sole intention of this paper is to address the rebuilding of the infrastructure along the barrier islands of New Jersey. Therefore, when the phrase “New Jersey coast” is used, it will refer to land along the coast of the mainland of New Jersey; conversely, the phrase “New Jersey barrier islands” will denote the land separated from the mainland by a bay. There may be times when the phrase “New Jersey shore” is used to describe the entire coastal area of New Jersey; this would include both the mainland coast and the barrier islands.

## **Part I: The Barrier Islands along the New Jersey Shoreline**

### **1. The nature of the barrier islands**

Before addressing the ecological processes associated with barrier island formation, it is important to define certain coastal-related terms. The term “littoral” is often used to describe anything pertaining to a shore, especially a sea-shore; it is also used to describe anything living on, or occurring on the shore.<sup>9</sup> For example, the term “littoral rights” is often used to describe the rights and duties associated with land owned along an ocean. The “high water line” refers to

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<sup>9</sup> Brian Voigt, *Glossary of Coastal Terminology*, SW. WASH. COASTAL EROSION STUDY (March 1998), <http://www.ecy.wa.gov/programs/sea/swces/products/glossary.htm>.

the intersection of the mean high water<sup>10</sup> with the shore.<sup>11</sup> “Avulsion” is the rapid erosion of the shoreline by waves during a storm or a sudden cutting off of land by flood, currents, or change in course of a body of water.<sup>12</sup> Conversely, “reliction” is the increase in land by the sudden retreat of the sea.<sup>13</sup> The term “accretion”, or “alluvion”, is a latent increase in land so gradual that you cannot perceive at what moment of time it is added.<sup>14</sup> Lastly, to dispel any confusion on the part the reader, “littoral rights” and “riparian rights” are not interchangeable. The term “riparian” refers to anything relating to or living or located on the bank of a natural watercourse, such as a river; whereas “littoral” is associated with the seashore. Riparian rights will not be discussed in this paper.

*Living with the New Jersey shore*, a book outlining the dynamics of the New Jersey coast and barrier islands, gives a concise description of how coastal barriers are formed.<sup>15</sup> According to the authors, the New Jersey shoreline can be divided into three different types: 1) barrier islands and spits (known collectively as coastal barriers), 2) headlands, and 3) bayside shorelines (having both barriers and headlands).<sup>16</sup> In New Jersey there are two sections of coastal barriers: 1) a northern section that begins around Monmouth Beach and extends as a narrow sandy barrier northward to the tip of Sandy Hook and 2) a series of islands and bays that extends south from Bay Head to Cape May.<sup>17</sup> The authors point out that over the last 300 years records show a continuously changing shoreline along the New Jersey coast; different islands evolve in different

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<sup>10</sup> ENCYCLOPEDIA OF COASTAL SCIENCES 248 (Maurice Schwartz ed., 1st ed. 2005). The editor points out that average elevation of all high waters recorded at a particular point or station over a considerable period of time is usually 18.6 years (now rounded to 19 years).

<sup>11</sup> See Voigt, *supra* note 9.

<sup>12</sup> *Id.*

<sup>13</sup> *Id.*

<sup>14</sup> EUGENE ALLEN GILMORE, MODERN AMERICAN LAW 535 (5th ed. 2009).

<sup>15</sup> KARL F. NORDSTROM ET AL., LIVING WITH THE NEW JERSEY SHORE 20 (1986).

<sup>16</sup> *Id.*

<sup>17</sup> *Id.*

ways and at different rates.<sup>18</sup> Therefore, determining when and how the barrier islands formed involves a lengthy analysis of sea level changes during previous ice ages, an analysis I will not offer in this paper.<sup>19</sup> For the purposes of this paper, I will take for granted that the barrier islands exist and that they are constantly shifting.

The New Jersey coast, like many coastal areas around the world, accumulates and replenishes its sand content by collecting sediment from discharging rivers.<sup>20</sup> The rivers flow through the state and eventually discharge into the ocean, leaving behind much needed sediment deposits.<sup>21</sup> Unfortunately, barrier islands have no such replenishment system, the rivers of New Jersey discharge into bays and the bays catch all the sand, “we thus have no major natural source of beach sand” on barrier islands.<sup>22</sup> This is an important fact to consider when determining the viability of development along barrier islands; a lack of natural sand replenishment could be detrimental to infrastructure preservation.

There are several ways in which barrier islands shift, migration being one of them. Migration causes a shift in position, size and sand content. In order for a barrier to migrate, sand must be transferred from one side of the island to the other.<sup>23</sup> Usually it is the sand from the ocean side (front side), transferring to the bayside (back side) of the island; the front side moves back by erosion, while the back side moves back by growth and temporary widening.<sup>24</sup> This widening occurs as a result of waves and winds pushing sand from the ocean side of the island to the bayside; this natural transfer of sand can of course be altered by obstructions, such as homes

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<sup>18</sup> *Id.* This point is crucial in analyzing which areas of the Jersey shore are in the most need of regulation. The authors also point out that the width of Island Beach for example can be measure in a few hundred years, while Wildwood sits astride an island more than a mile in width.

<sup>19</sup> *Id.* at 21.

<sup>20</sup> *Id.* at 23.

<sup>21</sup> *Id.*

<sup>22</sup> *Id.*

<sup>23</sup> *Id.* at 24.

<sup>24</sup> *Id.*

and businesses. There are several ways in which an island can widen or migrate, one of these ways involves the formation of dunes; the other two are inlet formation and overwash, both of which are briefly explained below.

An inlet is the channel of water between adjacent barrier islands.<sup>25</sup> New inlets often form when water breaches the island during a major storm.<sup>26</sup> Pictures taken immediately following Superstorm Sandy clearly depict how catastrophic the formation of an inlet can be on a local community.<sup>27</sup> For example, after the storm, Lyman Street, in the barrier island town of Mantoloking became an inlet connecting Barnegat Bay to the Atlantic Ocean.<sup>28</sup> The formation of these inlets can cause numerous problems; one being, the significant transfer of sand through gaps in the islands and into the bays.<sup>29</sup> The destruction of towns by inlet formation is a problem New Jersey residents have faced in the past; in 1962 the Ash Wednesday Nor'easter formed inlets along the barrier town of Harvey Cedars, New Jersey.<sup>30</sup> This sparked "the nation's first widespread beach-replenishment program, bringing the Corps of Engineers<sup>31</sup> squarely into the people-versus-nature fray at the shoreline."<sup>32</sup> Evidently, this has done little to prevent future harm.

Another way that islands, especially narrow ones, widen is by the overwash of storm waves from the ocean side of the island to the bayside.<sup>33</sup> If water levels are high enough, waves

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<sup>25</sup> *Id.*

<sup>26</sup> *Id.*

<sup>27</sup> John Munson, *Video: Hurricane Sandy Cuts a New Inlet from Bay to Ocean in Mantoloking*, NJ.COM (Oct. 30, 2012), [http://videos.nj.com/star-ledger/2012/10/video\\_hurricane\\_sandy\\_cuts\\_a\\_n\\_2.html](http://videos.nj.com/star-ledger/2012/10/video_hurricane_sandy_cuts_a_n_2.html); *see also*, Appendix D.

<sup>28</sup> *Id.* This video depicts a rather horrifying scene; the ocean rips through the town and empties into the bay destroying homes and streets in its path.

<sup>29</sup> *See* NORDSTROM, *supra* note 15, at 24.

<sup>30</sup> ORRIN H. PILKEY & KATHARINE DIXON WHEELER, *THE CORPS AND THE SHORE* 8 (1996).

<sup>31</sup> This organization of engineers, functioning under the auspices of the U.S. Army, builds seawalls, pumps up beaches, dredges inlets with long rock jetties, gives permission to others to do any of these activities, and more.

<sup>32</sup> PILKEY & WHEELER, *supra* note 30, at xi.

<sup>33</sup> NORDSTROM, *supra* note 15, at 25.

carry sand through gaps in the dunes.<sup>34</sup> The sand is deposited in tongue or fan-shaped masses called overwash fans.<sup>35</sup> Different barrier islands respond differently to storms, for example, Island Beach, may not feel the effects of storm overwash; however, in areas such as Ludlam Island the overwash may reach as far back as the bay.<sup>36</sup> The barrier islands in New Jersey experienced a significant amount of overwash during hurricane Sandy; before and after pictures accurately depict this phenomenon.<sup>37</sup>

Before Sandy's landfall, scientists predicted that there would be several types of erosion due to storm surge. Along the Jersey Shore, where Sandy made landfall, "nearly all — 98 percent — of the coast was very likely to experience beach and dune erosion, 54 percent was very likely to overwash, and 21 percent was very likely to be inundated."<sup>38</sup> It is unknown whether or not these predictions have come true; however, only a brief look at the devastation is enough to realize the significant amount of erosion and the effect it has had on most if not all New Jersey barrier island residents. The significant devastation invites the question: What legislation has the federal government and the State of New Jersey enacted to prevent such consequences?

## **2. Federal and State Regulations and Assessments**

In New Jersey there are four counties in which barrier islands can be found, Monmouth, Ocean, Cape May and Atlantic.<sup>39</sup> Studies show that in New Jersey the problem of shrinking

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<sup>34</sup> *Id.*

<sup>35</sup> *Id.*

<sup>36</sup> *Id.*

<sup>37</sup> See Appendix A.

<sup>38</sup> *Storm Troubles for Sandy-Damaged Beaches*, DISCOVERY COMM'NS, LLC. (Dec. 13, 2012, 3:00 AM), <http://news.discovery.com/earth/weather-extreme-events/new-storm-trouble-121105.htm>.

Inundation is another form of coastal erosion where storm surge floods the beach and the dunes.

<sup>39</sup> See *infra* note 40. The cities located on the New Jersey barrier islands are: Atlantic City, Absecon, Avalon, Margate, Brigantine, and Ocean City, Wild Wood, Wild Wood Crest, Stone Harbor, Strathmere, Long Beach Island, Ship Bottom, Surf City, Harvey Cedars, Lavallette, Mantoloking, Seaside Heights, Long Beach Island State Park, Barnegat Light, Beach Haven, and Sea Bright.

barrier islands is more severe than in other areas.<sup>40</sup> Fortunately, the federal government has taken action to help preserve barrier islands and coastal resources across the US; in 1972 Congress passed the Coastal Zone Management Act.<sup>41</sup> This Act encourages coastal states to develop and implement coastal zone management plans. Under this legislation, two national programs emerged, first the National Coastal Zone Management Program (CZMP) and, second the National Estuarine Research Reserve System (NERRS).<sup>42</sup> The vision of the CZMP is to ensure that “the nation’s coast and oceans, including the Great Lakes and island territories, are healthy and thriving for this and future generation.”<sup>43</sup> The CZMP offers funding to states that seek to preserve or restore areas designated under the program or that have coastal resources of national significance.<sup>44</sup> The NERRS is similar in nature and seeks to “improve management of New Jersey coastal environments through science, education and stewardship.”<sup>45</sup>

Also in 1972, Congress implemented the Clean Water Act in order to provide “federally-mandated controls over industrial, agricultural and municipal sources of coastal and marine

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<sup>40</sup> Bayard Webster, *Reflections on New Jersey’s Barrier Islands: Their Current Status and Future Prospects*, in NEW JERSEY’S BARRIER ISLANDS: AN EVER-CHANGING PUBLIC RESOURCE 30 (1980). According to this study the New Jersey shoreline is eroding at an average rate of 2 ½ to 5 feet per year. The authors suggest that this is due to the fact that these islands were settled when little was known of their physical processes. Although, this study is somewhat dated, it offers a comprehensive look at the barrier islands and the problems associated with them; problems that remain till this day.

<sup>41</sup> See Coastal Zone Mgmt. Act, 16 U.S.C. § 1452 (1972). The Act reads in part, “The Congress finds and declares that it is the national policy... 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, which programs should at least provide for... the protection of natural resources, including... *barrier islands*...” (emphasis added).

<sup>42</sup> See NAT’L ESTUARINE RESEARCH RESERVE SYS., *Overview*, <http://www.nerrs.noaa.gov/BGDefault.aspx?ID=61> (last updated Mar. 17, 2011) (“The National Estuarine Research Reserve System is a network of 28 areas representing different biogeographic regions of the United States that are protected for long-term research, water-quality monitoring, education and coastal stewardship. Established by the Coastal Zone Management Act of 1972, as amended, the reserve system is a partnership program between the National Oceanic and Atmospheric Administration and the coastal states. NOAA provides funding, national guidance and technical assistance. Each reserve is managed on daily basis by a lead state agency or university, with input from local partners”).

<sup>43</sup> See NAT’L OCEANIC AND ATMOSPHERIC ADMIN., COASTAL ZONE MGMT. PROGRAM STRATEGIC PLAN: IMPROVING MGMT. OF THE NATION’S COASTAL AREAS FY 2007-2012 (2007), *available at* [http://coastalmanagement.noaa.gov/success/media/CZM\\_stratplan\\_final\\_FY07.pdf](http://coastalmanagement.noaa.gov/success/media/CZM_stratplan_final_FY07.pdf).

<sup>44</sup> See 16 U.S.C. § 1455(a).

<sup>45</sup> See JACQUES COUSTEAU NAT’L ESTUARINE RESEARCH RESERVE, *Mgmt. Plan 2009-2014* (Oct. 10, 2009), *available at* [http://www.nerrs.noaa.gov/Doc/PDF/Reserve/JCQ\\_MgmtPlan.pdf](http://www.nerrs.noaa.gov/Doc/PDF/Reserve/JCQ_MgmtPlan.pdf).

pollution.<sup>46</sup> Another key federal regulation, the Flood Insurance Act of 1968, discourages unwise floodplain development, by subsidizing insurance for structures built in floodplains, as long as communities exercise control over siting and building standards.<sup>47</sup> This legislation was enacted after Hurricane Betsy in 1965,<sup>48</sup> and states in part,

After December 31, 1971, no new flood insurance coverage shall be provided under this chapter in any area (or subdivision thereof) unless an appropriate public body shall have adopted adequate land use and control measures, which the Administrator finds are consistent with the comprehensive criteria for land management and use under section 4102 of this title.<sup>49</sup>

Unfortunately for the barrier islands, the federal government can only incentivize states and local communities to enact regulations to prevent further development

Another significant piece of federal legislation, the 1982 Coastal Barrier Resource Act (CBRA), addresses the many difficulties associated with coastal barrier development. CBRA places various undeveloped coastal barriers, illustrated by a set of maps, into the John H. Chafee Coastal Barrier Resources System (CBRS). These areas are ineligible for both direct and indirect federal expenditures and financial assistance, believed to encourage development of delicate, high-risk, and ecologically sensitive coastal barriers.<sup>50</sup> In New Jersey there are 21 CBRS units, which cover a total of 65,070 acres and 44 miles of coastline; these units include most if not all of the barrier islands.<sup>51</sup> CBRS also bans the sale of NFIP (National Flood Insurance Program) flood insurance for structures built or substantially improved on or after a specified date. For the initial CBRS designation, this date is October 1, 1983. For all subsequent

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<sup>46</sup> Webster, *supra* note 40, at 38.

<sup>47</sup> *Id.*

<sup>48</sup> Hurricane Betsy was the first tropical cyclone in the Atlantic Basin to cause at least \$1 billion in damage. See Arnold L. Sugg, *The Hurricane Season of 1965*, U.S. WEATHER BUREAU OFFICE, MIAMI, FLA. (Mar. 1966), available at <http://www.aoml.noaa.gov/general/lib/lib1/nhclib/mwreviews/1965.pdf>.

<sup>49</sup> 42 U.S.C. § 4022 (2012).

<sup>50</sup> Establishment of the John H. Chafee Coastal Barrier Resource System, 16 U.S.C.S. § 3503 (2013).

<sup>51</sup> U.S. FISH AND WILDLIFE SERVICES, JOHN H. CHAFEE COASTAL BARRIER RESOURCE SYSTEM: NEW JERSEY (2013), available at <http://www.fws.gov/cbra/Maps/Locator/NJ.pdf>.

designations, this date is the date the CBRS zone was identified. CBRS zones and their identification dates are shown on Flood Insurance Rate Maps (FIRMs). According to CBRS, these restrictions have saved the taxpayers more than a billion dollars in the past.<sup>52</sup> In 1991, Congress passed the Coastal Barrier Improvement Act (CBIA), which sought to triple the size of the system established by CBRA.<sup>53</sup> Clearly, the federal government understands the importance of preserving coastal barriers and restricting development; conversely, New Jersey does not seem too keen on enacting legislation that will effectively control development along the barrier islands.

There are several New Jersey statutes concerning coastal development; however, they due to little to address the problems I present in this paper. Some of the most significant New Jersey environmental protection statutes include the Freshwater Wetlands Protection Act<sup>54</sup> and the Coastal Area Facility Review Act.<sup>55</sup> Furthermore, local ordinances that define dune lines and establish set-back requirements also play a key role in coastal management. According to the authors of *New Jersey's Barrier Islands: An Ever-Changing Public Resource* these dune line ordinances need to be reviewed periodically and revised when there has been a significant shift in the environment.<sup>56</sup> It is unclear whether local governments have taken the initiative to restructure their coastal laws, in light of recent events. Regardless, it is reasonable to assume that the State should be at the forefront of responsibly regulating land use along the barrier islands. For the purpose of this paper, I will refrain from outlining the pros and cons of specific

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<sup>52</sup> U.S. FISH AND WILDLIFE SERVICES, COASTAL BARRIER RESOURCE SYSTEM: HARNESSING THE POWER OF MARKET FORCES TO CONSERVE AMERICA'S COAST AND SAVE TAXPAYERS' MONEY (2005), *available at* <http://www.fws.gov/cbra/Docs/CBRSFS.pdf>.

<sup>53</sup> *Coastal Barrier Resources System History*, FED. EMERGENCY MGMT. AGENCY (June 19, 2012, 7:59 AM), <http://www.fema.gov/national-flood-insurance-program/coastal-barrier-resources-system-history>.

<sup>54</sup> N.J. ADMIN. CODE § 7:7A (2012).

<sup>55</sup> N.J. ADMIN. CODE § 7:7E (2012). This statute includes details on certain activities that require permits, the qualifications for general permits or permits-by-rule, the details for pre-application meetings, contents and fees, review procedures, deadlines, permit appeals, and enforcement of the coastal laws and rules.

<sup>56</sup> Webster, *supra* note 40, at 39.

state statutes concerning coastal management; it is enough to note that none of these statutes prevent individuals from developing along these ecologically fragile strips of “land.” The goal of this paper is to highlight the importance of preserving the barrier islands by preventing development, as the federal acts, mentioned above, seek to do. A report issued by the New Jersey Department of Environmental Protection (NJ DEP) offers credence to this point.

In 2011, the NJ DEP published a report assessing the coastal hazards associated with the New Jersey shore and the barrier islands.<sup>57</sup> In the assessment the DEP suggests that the densely populated coast of NJ is highly susceptible to flooding, storm surge, episodic erosion, chronic erosion, sea-level rise, extra-tropical, tropical storms and hurricanes.<sup>58</sup> The agency also states that “the growing effects of climate change will complicate the nature of the coastal environment.”<sup>59</sup> The report goes on to cite an eye-opening study concerning sea-level rise; the study suggests that 1-3% of New Jersey’s land area will be subject to permanent inundation by the end of the century.<sup>60</sup> The DEP study cites research done by the Center for Remote Sensing & Spatial Analysis at Rutgers University, which found that, “all of New Jersey’s barrier island communities, as well as significant sections of the Barnegat, Delaware and Raritan Bays, are within an inundation zone. Approximately 16% of the predicted flood zone (240 km<sup>2</sup> or 90 mi<sup>2</sup>) is in developed land uses, primarily residential development (9%).”<sup>61</sup> The DEP study considers carefully the development of barrier islands along the coast, the hazards that are associated with this development and the need for reform. It is clear, as this report illustrates, that the entire barrier island system in New Jersey is susceptible to numerous risks, especially in the event of

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<sup>57</sup> N.J. DEP’T OF ENVTL. PROT., N.J. SEC. 309 ASSESSMENT 2011-2015 (2010), *available at* <http://www.state.nj.us/dep/cmp/nj2011-309assessment.pdf>.

<sup>58</sup> *Id.* at 11.

<sup>59</sup> *Id.*

<sup>60</sup> *Id.* at 12.

<sup>61</sup> RICHARD G. LATHROP JR. & AARON LOVE, VULNERABILITY OF NEW JERSEY’S COASTAL HABITATS TO SEA LEVEL RISE (2007), *available at* [http://www.crssa.rutgers.edu/projects/coastal/sealevel/report/Vulnerability\\_of\\_New\\_Jersey\\_coastal\\_habitats\\_v4.pdf](http://www.crssa.rutgers.edu/projects/coastal/sealevel/report/Vulnerability_of_New_Jersey_coastal_habitats_v4.pdf).

another mega-storm, like Sandy. Clearly, New Jersey does not have a coastal management program stringent enough to prevent future disaster. Furthermore, suggestions and regulations concerning the construction of homes are not attuned to the realities of living on a barrier island. An analysis of these inadequacies will outlined below.

### **3. The Inadequacies Associated with the Construction of Homes on Barrier Islands**

The phrase “history repeats itself” is no stranger to the New Jersey shore; inadequate structures along the coast have consistently given way to the forces of Mother Nature. In 1927, Tucker’s Island disappeared into the ocean due to shifting tides and sands; the ocean took with it a lighthouse and life-saving station.<sup>62</sup> In 1962, the Ash Wednesday Nor’easter decimated the New Jersey shore. An article in *The Star Ledger* recounts the destruction: “Roads became rivers, boardwalks were devoured by waves and some 45,000 buildings got flattened, according to National Oceanic and Atmosphere Administration estimates. The death toll in Jersey was 32. President Kennedy dispatched the military to help with disaster relief.”<sup>63</sup> Superstorm Sandy brought even worse devastation to the New Jersey shore, flattening homes throughout the barrier islands. An important question surrounding the devastation is, “How are these homes built?” and “Are building recommendations helping to mitigate the damage done by these storms?”

In response to the destruction of residential homes from Sandy, Governor Chris Christie announced that the state has adopted federal advisory flood elevation recommendations.<sup>64</sup> These recommendations come in the form of Advisory Base Flood Elevation (ABFE) maps. These

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<sup>62</sup> BURIED TREASURE AT TUCKER’S ISLANDS, <http://www.njhm.com/tuckersisland.htm> (last visited Apr. 6, 2013); see also Appendix B.

<sup>63</sup> Lisa Rose, *50 Years Later, N.J. Remembers the Storm that Swallowed the Jersey Shore*, NJ.COM (Mar. 8, 2012, 12:06 PM), [http://www.nj.com/news/index.ssf/2012/03/50\\_years\\_later\\_nj\\_remembers\\_wh.html](http://www.nj.com/news/index.ssf/2012/03/50_years_later_nj_remembers_wh.html); see also, Appendix C.

<sup>64</sup> *Hurricane Sandy Advisory Base Flood Elevations (ABFEs) in New Jersey and New York*, FEMA REGION II COASTAL ANALYSIS AND MAPPING, <http://www.region2coastal.com/sandy/abfe> (last visited Apr. 6, 2013).

maps can be found on FEMA's website, where individuals can also determine their ABFE.<sup>65</sup> The map offers details concerning the potential for flooding and ways to mitigate future damage by implementing safeguards if one chooses to rebuild.<sup>66</sup> The interactive map highlights many of the barrier islands in "red" and divides them into two different Advisory Flood Hazard Zones, "Zone A" or "Zone V". Areas marked "Zone A" are not subject to high velocity wave action but are still considered high risk flooding areas.<sup>67</sup> Areas marked "Zone V" are subject to more stringent building requirements than other zones because these areas are exposed to a higher level of risk.<sup>68</sup> Regardless of which Zone an individual inhabits, there remain numerous risks associated with building on any part of the barrier islands.

Ways in which some of the homes along the Jersey shore are built can be found in *Living with the New Jersey shore*. The preface of the chapter entitled, *Building or buying a house near the beach* includes the following statement,

Do not approach purchasing coastal property as if you were buying a lot in developed woodland in Morris County or a subdivided farm field in Monmouth County. The previous chapters illustrate that the shores of New Jersey, especially the barrier islands, are composed of fluctuating environments and are subjected to nature's most powerful and persistent forces.<sup>69</sup>

Although this book is somewhat dated, published in 1986, it still offers a comprehensive look at the difficulties associated with building on the New Jersey barrier islands, difficulties that have changed little over time. The authors' overall message remains well received, in light of the issues facing the New Jersey barrier islands today. The chapter continues to go into detail concerning building methods; for example, the authors suggest that in order to build a house

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<sup>65</sup> *What is my Advisory Base Flood Elevation (ABFE)?*, FEMA REGION II COASTAL ANALYSIS AND MAPPING, <http://www.region2coastal.com/sandy/table> (last visited Apr. 6, 2013).

<sup>66</sup> *Id.*

<sup>67</sup> *Glossary*, FEMA REGION II COASTAL ANALYSIS AND MAPPING, <https://sites.google.com/site/region2coastal/additional-resources-1/glossary#AFHZ> (last visited Apr. 6, 2013).

<sup>68</sup> *Id.*

<sup>69</sup> NORDSTROM, *supra* note 15, at 109.

along a barrier islands “one must fasten the structural members together in such a way that a force equal to about 25 percent of the vertical load on the member may come from any direction.”<sup>70</sup> In other words, the parts that tie the structure together are usually the parts that give way first; ensuring the security of these members is critical to the upkeep of the entire structure.<sup>71</sup> Another important factor to consider when building a home on a barrier island is whether to build pole, or “stilt”, houses.<sup>72</sup> These homes are built so that the first inhabitable floor of the home is above the 100-year storm-surge level.<sup>73</sup> FEMA offers a comprehensive guide concerning the structural formalities associated with building a home on stilts.<sup>74</sup> Whether the individual chooses to build on sand or on stilts seems trivial in light of Superstorm Sandy; structures along the New Jersey barrier islands would be unable to endure a storm like Sandy. Understanding this, the authors of *Living with the New Jersey shore* offer a final piece of wisdom before concluding their home building chapter,

Hurricane or calm, receding shore or accreting land, storm flooding or sunny sky, migrating dune or maritime forest, win or lose, the gamble of coastal development will continue. If you choose your site with natural safety in view, follow structural engineering design construction, and take a generally prudent approach to living at the shore, you become the gambler who knows when to hold them, when to fold them, and when to walk away.<sup>75</sup>

The time to walk away maybe at hand; the aftermath of Superstorm Sandy is a clear indication that the betting is over and the time to fold is quickly approaching. The impact of

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<sup>70</sup> *Id.*

<sup>71</sup> *Id.*

<sup>72</sup> See Appendix B.

<sup>73</sup> *Id.* at 114; see also, *Highways in the Coastal Environment: Second Edition*, U.S. DEP'T OF TRANSP. FED. HIGHWAY ADMIN. (Apr. 7, 2011), <http://www.fhwa.dot.gov/engineering/hydraulics/pubs/07096/3.cfm>. The "100-year storm surge level" is the surge elevation with a 1%-annual risk of exceedance. Each year, there is a 1% chance that a storm surge of this magnitude (or greater) will occur. Some coastal designs may justify a lower return period (e.g., 25- year or 50-year) in certain areas -balancing the greater risks affiliated with such design with engineering and economic considerations.

<sup>74</sup> FED. EMERGENCY MGMT. AGENCY, HOMEOWNER'S GUIDE TO RETROFITTING (2d ed. 2009), available at <http://www.fema.gov/pdf/rebuild/mat/sec5.pdf>; see also, N.J. DEPT. OF COMMUNITY AFFAIRS, GUIDANCE TO CODE OFFICIALS: ELEVATION OF EXISTING HOUSES (Feb. 11, 2013), available at [http://www.state.nj.us/dca/divisions/codes/alerts/pdfs/elev\\_of\\_exist-house\\_%20guid-to\\_code\\_officials.pdf](http://www.state.nj.us/dca/divisions/codes/alerts/pdfs/elev_of_exist-house_%20guid-to_code_officials.pdf).

<sup>75</sup> NORDSTROM, *supra* note 15, at 133.

Superstorm Sandy on the New Jersey barrier islands will illustrate the potential need to walk away.

## **Part II: Superstorm Sandy: “The Storm of the Century”**

Superstorm Sandy, the largest tropical system in the history of the Atlantic Basin, made landfall near Brigantine, NJ, just to the Northeast of Atlantic City, as a post-tropical cyclone with hurricane force winds (hence the name “Superstorm Sandy”). Sandy began its journey in the western Caribbean, making first landfall, as a hurricane, in Jamaica. It later emerged as a “Category 3” Hurricane and ravaged the island of Cuba. It weakened to a tropical storm, later strengthened to a Category 1 Hurricane, and finally made landfall in New Jersey as a post-tropical storm. Sandy wreaked havoc in New Jersey. Wind speeds reached up to 120 mph and waves along the coast of Atlantic City reached as high as 39.67 ft.<sup>76</sup> High winds and impressive storm surge caused unprecedented damage to the Jersey shore infrastructure. According to Stockton College’s Coastal Research Center, the average New Jersey beach is now 30 to 40 feet narrower; for example, towns like Mantoloking, which sits on a barrier island, have lost 150 ft. of beach.<sup>77</sup>

The damage done in New Jersey is overwhelming. According to Governor Chris Christie, 346,000 housing units were damaged or destroyed, with 22,000 units rendered uninhabitable. Approximately, 100,000 new storm-related unemployment claims have been filed and over 235,000 people have registered with FEMA for individual assistance. Seventy-five percent of New Jersey’s small businesses were adversely affected—ten percent of which, or

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<sup>76</sup> *The Stats Are In: Superstorm Sandy Totals*, ACCUWEATHER.COM (Nov. 1, 2012, 4:55 AM), <http://www.accuweather.com/en/weather-news/sandy-statistics-rain-wind-snow/876665>.

<sup>77</sup> *Study: New Jersey Beaches 30-40 Feet Narrower After Superstorm Sandy*, INSURANCE JOURNAL (Nov. 21, 2012), <http://www.insurancejournal.com/news/east/2012/11/21/271421.htm>.

nearly 19,000 sustained damage of \$250,000 or more.<sup>78</sup> Total business losses are estimated to have reached a whopping \$8.3 billion.<sup>79</sup> Aid has arrived at a somewhat glacial pace; as of February 11, 2013, nonprofit organizations in New Jersey could apply to the Hurricane Sandy New Jersey Relief Fund for a share of a \$5 million allocation.<sup>80</sup>

Partially to blame for this damage are those individuals who prevented regulation that would have hindered certain development along the barrier islands. Thomas Kean, a former New Jersey Governor, proposed a coastal commission in the 1980's, which would have curbed excessive development along the barrier islands; this proposal failed because of the strong desire, on the part of businesses and homeowners, to develop the New Jersey barrier islands.<sup>81</sup> Leonard T. Connors Jr., a former homebuilder and state senator who has served as mayor of Surf City since 1966, stated, in the aftermath of Sandy, "When we had the opportunity to direct people away from the shore, we didn't do it. The fact of the matter was that it was good for business."<sup>82</sup> The New Jersey shore was built on "greed and sand"; two elements that have proven ineffective in establishing a sound foundation. Ian McHarg, in a book entitled *Design with Nature*, states that, "Houses are built upon dunes, grasses destroyed, dunes breached for beach access and housing... Ignorance is compounded with anarchy and greed to make the raddled face of the Jersey shore."<sup>83</sup> *The Huffington Post* article, entitled *Jersey Shore Development Failures Exposed by Hurricane Sandy*, outlines the shortcomings of certain policies related to building

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<sup>78</sup> Christopher H. Smith, *Floor Statement on Sandy Supplemental* (Jan. 2, 2013), available at [http://chrissmith.house.gov/uploadedfiles/floor\\_remarks\\_on\\_sandy\\_jan\\_2\\_2013.pdf](http://chrissmith.house.gov/uploadedfiles/floor_remarks_on_sandy_jan_2_2013.pdf).

<sup>79</sup> *Id.*

<sup>80</sup> MaryAnn Spoto, *Hurricane Sandy NJ Relief Fund Releasing \$5 Million*, NJ.COM (February 11, 2013, 7:40PM) [http://www.nj.com/news/index.ssf/2013/02/hurricane\\_sandy\\_nj\\_relief\\_fund.html](http://www.nj.com/news/index.ssf/2013/02/hurricane_sandy_nj_relief_fund.html).

<sup>81</sup> *Jersey Shore Development Failures Exposed By Hurricane Sandy*, THE HUFFINGTON POST (Dec. 11, 2012, 9:24 AM), [http://www.huffingtonpost.com/2012/12/11/jersey-shore-development\\_n\\_2267557.html](http://www.huffingtonpost.com/2012/12/11/jersey-shore-development_n_2267557.html).

<sup>82</sup> *Id.*

<sup>83</sup> *Id.* Although this book was written in 1995, McHarg's analysis is relevant to understanding how the Jersey shore developed and the reasons behind the over development of the barrier islands.

along the New Jersey shore.<sup>84</sup> The article suggests that “much of the problem lies in the economic benefit of having a highly developed coast and the inability for the state and its citizens to deal with the reality that Hurricane Sandy offers.”<sup>85</sup>

In response to Hurricane Sandy, FEMA released the new guidelines mentioned in Part I.<sup>86</sup> FEMA advises individuals who wish to rebuild along the shore, to adopt standards of building based on the Advisory Base Flood Elevations (ABFE) to reduce the impact of storms in the future.<sup>87</sup> New Jersey has just recently adopted these new flood elevation standards.<sup>88</sup> The adoption of these FEMA standards was made possible through an emergency rule earlier this year and despite protests from many storm victims, the NJ DEP filed papers on March 25, 2013 to make that emergency order a permanent measure.<sup>89</sup> Although these measures are a step in the right direction, it is hard to predict whether these new standards can survive another Sandy, another reason why it may be time to bid the shore farewell. The ultimate question then becomes, how far can the New Jersey legislature go in enacting legislation that prevents development along the New Jersey barrier islands? Answering this question involves an understanding of federal and state regulatory takings law.

### **Part III: Federal and State Regulatory Takings Law**

#### **1. Federal Regulatory Takings Law**

Since *Pennsylvania Coal Co. v. Mahon*,<sup>90</sup> regulatory takings law has evolved into a rather complex area of jurisprudence. Justice Holmes gave birth to the concept of regulatory takings by

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<sup>84</sup> *Id.*

<sup>85</sup> *Id.*

<sup>86</sup> Vickie Frantz, *FEMA Releases Flood Risk Maps for New Jersey*, ACCUWEATHER.COM (Dec. 19, 2012, 7:14AM), <http://www.accuweather.com/en/weather-news/fema-releases-flood-risk-maps/2888596>.

<sup>87</sup> *Id.*

<sup>88</sup> Erin O’Neill, *New Jersey Formally Adopts Federal Advisory Flood Elevation Maps for Rebuilding After Sandy*, NJ.COM (March 26, 2013, 5:10 PM), [http://www.nj.com/news/index.ssf/2013/03/sandy\\_flood\\_maps\\_fema.html](http://www.nj.com/news/index.ssf/2013/03/sandy_flood_maps_fema.html)

<sup>89</sup> *Id.*

<sup>90</sup> *Pa. Coal Co. v. Mahon*, 260 U.S. 393 (1922).

stating that “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.”<sup>91</sup> Since then, a series of case law has emerged to help courts understand what is meant by *too far*.

The 1928 decision of *Miller v. Schoene*<sup>92</sup> takes us in the right direction. The case concerns a regulation that ordered plaintiff to remove a large number of red cedar trees growing on their property, in the hopes of preventing the spread of a plant disease, with which they were infected, to the apple orchards in the area.<sup>93</sup> Although this case involves the physical invasion of property, here the destruction of the red cedars, it is essentially a regulation that affected the taking and thus can accurately be described as a regulatory takings case. The Court reasoned that the public interest outweighed the property interest of the individual, and that the state should be permitted to use its police power to preserve the public interest, even if that entails destroying the cedar trees.<sup>94</sup> The importance of this public interest is extended in *Goldblatt v. Hempstead*,<sup>95</sup> a case in which Justice Clark writes that “a prohibition simply upon the use of property for purposes that are declared, by valid legislation, to be injurious to the health, morals, or safety of the community, cannot, in any just sense, be deemed a taking or an appropriation of property for the public benefit.”<sup>96</sup> In *Goldblatt*, the plaintiff brought a suit against the town of Hempstead arguing that the ordinance, which prohibited further mining excavation on the plaintiffs land, was unconstitutional.<sup>97</sup> The Court ruled that in fact the ordinance was a valid use of the town’s police power, it was therefore not a taking and no compensation was required.<sup>98</sup>

Although this case, along with *Miller*, offer little guidance in determining the standard that

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<sup>91</sup> *Id.* at 415 (emphasis added).

<sup>92</sup> *Miller v. Schoene*, 276 U.S. 272 (1928).

<sup>93</sup> *Id.* at 277.

<sup>94</sup> *Id.* at 280.

<sup>95</sup> *Goldblatt v. Hempstead*, 369 U.S. 590 (1962).

<sup>96</sup> *Id.* at 593.

<sup>97</sup> *Id.* at 592.

<sup>98</sup> *Id.* at 596.

should be used in determining when a taking has actually occurred, they do assist us in understanding the importance of the public interest as it compares to the private interest.<sup>99</sup> This public versus private interest discussion is a critical corollary to any analysis concerning the future of the New Jersey barrier islands, an analysis that will be further developed in the next section. For now, I will continue outlining pertinent case law surrounding regulatory takings and specifically address the standards utilized in determining when a regulatory taking has occurred.

In 1978, the Supreme Court decided, in *Penn Central v. New York City*, that if the restriction on land use “reasonably relates to a legitimate government interest, then it does not constitute a taking; diminution in property value alone does not constitute a taking.”<sup>100</sup> The Court ruled that in fact no taking had occurred because “the restrictions imposed [were] substantially related to the promotion of the general welfare and not only permit[ted] reasonable beneficial use of the landmark site but also afford[ed] appellants opportunities further to enhance not only the Terminal site proper but also other properties.”<sup>101</sup> This case gave birth to the standard of “investment-backed expectations”; in other words, as long as this expectation is not frustrated, there is no taking.<sup>102</sup>

The evolution of regulatory takings law continues in *Lucas v. South Carolina Coastal Council*, a case involving a statute that prevented plaintiff from erecting a single-family

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<sup>99</sup> See *Keystone Bituminous Coal Ass'n v. DeBenedictis*, 480 U.S. 470 (1987). This case stands for a similar proposition. In 1966 Pennsylvania enacted the Bituminous Mine Subsidence and Land Conservation Act, to prevent the mining of anthracite coal in a manner that would cause the subsidence of land on which certain structures were located. The Court in this case concluded that the Commonwealth had a strong public interest in preventing this type of harm, the environmental effect of which transcends any private agreement between contracting parties.

<sup>100</sup> *Penn Cent. Transp. Co. v. New York City*, 438 U.S. 104, 131 (1978). In this case, the application by the plaintiff's to build an office building above Grand Central Terminal was denied because the area was deemed a historic landmark. The plaintiffs argued that this restriction constituted a taking under the Fifth Amendment and therefore just compensation was required.

<sup>101</sup> *Id.* at 138.

<sup>102</sup> *Id.* at 127.

residence on beachfront property; plaintiffs argued that this constituted a taking.<sup>103</sup> The Beachfront Management Act, the legislation at issue in the case, required individuals to obtain permits before building; it also sought to preserve the shore as a “valuable public resource and prevent erosion and destruction of that resource.”<sup>104</sup> In deciding the case, the Court presented yet another regulatory takings standard; if a regulation goes so far as to prohibit all “economically beneficial use” of the land, there is a taking under the Fifth Amendment.<sup>105</sup> *Lucas* stands for the proposition that there is a clear distinction between “regulatory takings” and “regulatory deprivations;” the former requires compensation unlike the latter, which does not.<sup>106</sup> *Lucas* and *Penn Central* help establish principles and standards that will guide my analysis of whether legislation in response to Superstorm Sandy would in fact implicate regulatory takings law.

Other cases that provide important context in determining whether a taking has occurred include *Palazzolo v. Rhode Island* and *United States v. Riverside Bayview Homes, Inc.*; however, both cases decide issues concerning when a takings claim becomes ripe for adjudication, rather than what situations constitute a taking.<sup>107</sup> A firm understanding of state regulatory takings law is another important pre-requisite to an analysis of proposals concerning barrier island development. This leads us into the realm of New Jersey regulatory takings law.

## **2. New Jersey Regulatory Takings Law**

The New Jersey State Constitution, similar to the US Constitution, prohibits the

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<sup>103</sup> *Lucas v. South Carolina Coastal Comm’n*, 505 U.S. 1003, 1008 (1992).

<sup>104</sup> *Id.* at 1022.

<sup>105</sup> *Id.* at 1029.

<sup>106</sup> *Id.*

<sup>107</sup> *See Palazzolo v. R.I.*, 533 U.S. 606 (2001) (holding that the state court erred in finding that the claims were unripe, because the landowner obtained a final decision from the council determining the permitted use for the land); *see also, United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121 (1985) (holding that a constitutional takings analysis was inappropriate, where respondent had not tried to obtain a permit, where there was no evidence that the denial of a permit would deny respondent economically viable use of its land, and where relief at was available should a taking occur).

acquisition of private property for public use without just compensation.<sup>108</sup> Furthermore, Title 20 of the New Jersey Statutes, also known as the Eminent Domain Act of 1971, grants the State, the Director of the Division of Purchase and Property or the board of trustees of a State college the power to acquire land through a condemnation action.<sup>109</sup> The statute outlines specific guidelines concerning condemnation, compensation and the definition of property for purposes of the title.<sup>110</sup> The following cases have helped develop this law of eminent domain within the State of New Jersey.

The following case not only addresses issues concerning takings law, but also sheds light on the importance of littoral rights along the New Jersey shore. The case of *City of Long Branch v. Jui Yung Liu* concerns the movement of the ocean and the shift in the high water mark along the New Jersey shore and its effect on the property holder's littoral rights. The Court posed a critical question: "Who owns the property that previously was below the mean high water mark and that becomes dry land as a result of a government funded beach replenishment project?"<sup>111</sup> A two-week beach replenishment program produced approximately 225 additional feet of dry land seaward from the mean high water mark described in the Lius' 1977 deed.<sup>112</sup> Before the Court determined whether the Lius had a right to the more than two acres of newly created beach, Justice Albin went into an analysis of the law governing the ownership of tidally flowed lands.<sup>113</sup> Employing a public trust doctrine analysis, the Court emphasized the importance of maintaining a shore that is "common to mankind" and ensuring that the State holds "ownership, dominion and sovereignty" over tidally flowed lands.<sup>114</sup> The Court notes that in New Jersey, the

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<sup>108</sup> N.J. CONST. art. 1, § 20.

<sup>109</sup> N.J. REV. STAT. § 20:1-3.11.

<sup>110</sup> *Id.*

<sup>111</sup> *City of Long Brach v. Jui Yung Liu*, 4 A.3d 542, 548 (N.J. 2010).

<sup>112</sup> *Id.* at 547.

<sup>113</sup> *Id.* at 548.

<sup>114</sup> *Id.*

state owns in fee simple all lands that are flowed by the tide up to the high-water mark.<sup>115</sup> In the case of avulsion, the sudden loss or addition of land, the property line does not experience a shift; in other words, the prior mean high water mark remains the demarcation line between the property rights of the oceanfront owner and the State.<sup>116</sup>

The Court ruled that the replenishment program did not constitute avulsion and therefore the people of New Jersey are the beneficiaries of the lengthening of the dry beach created by the government funded program. Consequently, the Lius were not entitled to compensation related to the two acres of beach.<sup>117</sup> In light of Superstorm Sandy, this concept of avulsion presents a problem for legislation that seeks to relinquish private ownership of lands consumed by the sea. A serious conversation concerning the theory of avulsion, and its application within the context of natural disasters, is long overdue and may address some of the serious shortcomings concerning littoral rights along barrier islands.

The New Jersey Supreme Court, in *Gardner v. New Jersey Pinelands Com.*, focuses primarily on the beneficial or economic uses allowed to property owners who reside in a *sensitive* environmental region.<sup>118</sup> In *Gardner*, the plaintiff brought an action for inverse condemnation against the defendant claiming that the New Jersey Pineland's Protection Act resulted in an unlawful taking of his property.<sup>119</sup> The court concluded that:

The restriction on lands to farmland and related uses, given the distinctive and special characteristics of the Pinelands, does not deprive plaintiff of the economic or beneficial use of all or most of his property, sufficiently diminish the value or profitability of his land, or otherwise interfere with his ownership interest to constitute a taking of property without just compensation.<sup>120</sup>

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<sup>115</sup> *Id.* at 549.

<sup>116</sup> *City of Long Brach v. Jui Yung Liu*, 4 A.3d 542, 550 (N.J. 2010).

<sup>117</sup> *Id.* at 555.

<sup>118</sup> *See Gardner v. N.J. Pinelands Com'n*, 593 A.2d 251, 260 (N.J. 1991).

<sup>119</sup> *Id.* at 253.

<sup>120</sup> *Id.* at 262.

This line of reasoning can prove extremely beneficial in an analysis concerning the future of the New Jersey barrier islands, because just as the Pinelands, the barrier islands along the New Jersey shore, have “very distinctive and special characteristics.”

*East Cape May Assoc. v. State, N.J. Dept. of Environmental Protection*, poses a similar question concerning the need to preserve environmentally fragile areas of New Jersey. The Supreme Court addressed whether a DEP decision prohibiting the construction of residential homes on the plaintiff’s parcel was a taking under the Fifth Amendment.<sup>121</sup> The NJ DEP gave numerous reasons as to why it would not grant a permit to the plaintiff. These reasons included the identification of wetlands on the property and the habitation of several threatened and endangered species.<sup>122</sup> Justice Brochin carefully pointed out that this case “presents the unsettled state of New Jersey and Federal law on the question of how to determine the relevant “property” for the purpose of deciding whether police power statutes or regulations have deprived the owner of substantially all viable economic use of its property.”<sup>123</sup> This case, along with *Gardner*, emphasizes the importance of preserving New Jersey’s fragile environment. Any regulation seeking to prevent development by describing the fragile environment of the barrier islands, the need to protect endangered species and the importance of protecting the public, will be reviewed under the auspices of cases such as *Gardner* and *East Cape May*.

*Bernardsville Quarry v. Borough of Bernardsville*, another case that offers a similar line of reasoning, involved an ordinance that regulated the depth to which a property may be quarried.<sup>124</sup> The plaintiffs brought a claim asserting that the ordinance effectively prohibited the

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<sup>121</sup> *E. Cape May Associates v. State, N.J. Dep’t of Env’tl. Prot.*, 693 A.2d 114, 119 (N.J. Super. Ct. App. Div. 1997).

<sup>122</sup> *Id.* at 116.

<sup>123</sup> *Id.* at 128.

<sup>124</sup> *Bernardsville Quarry v. Borough of Bernardsville*, 608 A.2d 1377, 1378 (N.J. 1992).

use of the quarry, and therefore constituted a governmental taking.<sup>125</sup> The Court noted, in its analysis that the ordinance was passed to meet environmental, safety, and public health and welfare concerns; the ordinance declares that its mission is “to protect the environment by minimizing air pollution and prevent surface and substance water pollution.”<sup>126</sup> The Court ruled that, because “the regulation [was] not excessive or unreasonable, nor [did] it deprive the property of substantial value or prevent its use for other economically viable purposes”, it [did] not effectuate an unconstitutional government taking.<sup>127</sup> Similar to the U.S. Supreme Court cases cited above, this case stands for the proposition that the public interest takes precedence over an individual’s property expectations. The need for increased safety and public health was tantamount and these ordinances constituted a proper exercise of the police power. The following sections will analyze distinct ways in which New Jersey can take steps to slowly depopulate the barrier islands, through the enactment of effective legislation.

#### **Part IV: Barrier Islands: Take Them? or Regulate Them?**

##### **1. Take Them: Exercising Eminent Domain Along the Barrier Islands**

The cost of a physical invasion on the barrier islands would be astronomical. Let’s take for example houses located in Mantoloking, NJ; as of March 2013 (after Superstorm Sandy), prices for some of these homes ranged from \$599,000<sup>128</sup> to \$6.2M.<sup>129</sup> Whether or not these list prices accurately depict the fair market value (FMV) is uncertain; however, it remains a well-known fact that properties along the New Jersey shore are expensive, and if the state wishes to exercise its power of eminent domain, by means of physical invasion, it may have to pay a high

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<sup>125</sup> *Id.*

<sup>126</sup> *Id.* at 1383.

<sup>127</sup> *Id.* at 1390.

<sup>128</sup> *Mantoloking Real Estate*, ZILLOW.COM, [http://www.zillow.com/homes/Mantoloking-NJ\\_rb/](http://www.zillow.com/homes/Mantoloking-NJ_rb/) (last visited Apr. 16, 2013).

<sup>129</sup> *Id.*

price. Other factors to take into consideration, when determining the FMV of property along the barrier islands, include the \$16 billion tourism industry, the \$50 billion maritime industry and the \$100 million commercial fishing industry.<sup>130</sup>

Regardless of the fair market value of specific properties, the State would most surely have the right to take property for public use after offering just compensation.<sup>131</sup> The “public use” requirement is by no means a difficult hurdle to overcome;<sup>132</sup> the transformation of the barrier islands into public parks or public access beaches are some obvious justifications. Take for example Island Beach State Park in New Jersey, “one of the few remaining undeveloped barrier beaches on the north Atlantic coast.”<sup>133</sup> Patrons are charged fees to enter the park with their vehicles and the park offers several recreational activities including, fishing, hunting, picnicking, kayaking and many more.<sup>134</sup> The entrance fees range from \$5 to \$20 depending on the type of vehicle and whether or not the individual is a resident of New Jersey.<sup>135</sup> This park is visited by nearly two million people per year.<sup>136</sup>

Not only does the park offer the citizens of New Jersey a glimpse of an undeveloped beachfront ecosystem, but it also has a “natural” way of dealing with hurricanes and tropical storms. An article in the *Star-Ledger* indicates that,

From the main road that cuts through Island Beach State Park, there is scant

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<sup>130</sup> See MATTHEW J.P. COOPERS ET AL., FUTURE SEA LEVEL RISES AND THE NEW JERSEY COAST: ASSESSING POTENTIAL IMPACTS AND OPPORTUNITIES 3 (Nov. 2005), available at <http://www.princeton.edu/step/people/faculty/michael-oppenheimer/recent-publications/Future-Sea-Level-Rise-and-the-New-Jersey-Coast-Assessing-Potential-Impacts-and-Opportunities.pdf>.

<sup>131</sup> See N.J. CONST. art. 1, § 20.

<sup>132</sup> See *Kelo v. City of New London*, 545 U.S. 469 (2005) (“taking property for the purpose of economic development satisfies the ‘public use’ requirement of the Fifth Amendment”); see also, *United States v. Gettysburg E. R. Co.*, 160 U.S. 668 (1896) (determining that “the power of Congress to take land devoted to one public use for another and a different public use upon making just compensation cannot be disputed”).

<sup>133</sup> *Island Beach State Park*, N.J. DEP’T OF ENVTL. PROT., <http://www.state.nj.us/dep/parksandforests/parks/island.html#recarea> (last updated Apr. 15, 2013).

<sup>134</sup> *Id.*

<sup>135</sup> *Id.*

<sup>136</sup> MaryAnn Spoto, *Island Beach State Park Reopens After Sandy*, NJ.COM (Jan. 27, 2013, 7:18AM), [http://www.nj.com/news/index.ssf/2013/01/island\\_beach\\_state\\_park\\_reopen.html](http://www.nj.com/news/index.ssf/2013/01/island_beach_state_park_reopen.html).

evidence of the disaster that unfolded three months ago. There are no collapsed buildings here, not like the ones just to the north on the barrier island, in Ortley Beach, Seaside Heights and Lavallette. There are no massive sinkholes like the craters that once pocked Route 35.<sup>137</sup>

Although the article indicates that some damage was done to several government buildings and dunes across the park, this damage pales in comparison to the devastation on other barrier islands.<sup>138</sup>

There are clear benefits to establishing State run parks along the barrier islands of New Jersey; barrier islands, in their nature, are meant to protect the coastline by mitigating ocean swells and other storm events. A state park with minimal development would be able to withstand future storms that would otherwise destroy homes and businesses. None the less, an outright physical invasion of the barrier islands is unrealistic; therefore, regulations addressing future developments may be the most effective method of addressing the problem.

## **2. Regulate Them: Placing Regulations on Barrier Island Development**

First, and most importantly, the State legislature should impose regulations preventing the rebuilding of homes along the barrier islands, specifically those that have been destroyed by Superstorm Sandy. Clearly, New Jersey has not taken the steps necessary to deal with the problem of overdevelopment along the barrier islands, and has done even less to address the issues surrounding re-development. The NJ DEP website indicates that an individual homeowner may receive automatic permits for redevelopment;<sup>139</sup> clearly not a step in the right

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<sup>137</sup> *Id*; see also, *Island Beach State Park Spared Significant Damage*, THE OCEAN SIGNAL (Nov. 16, 2012), <http://www.oceancountysignal.com/2012/11/16/island-beach-state-park-spared-significant-damage/9478/>.

<sup>138</sup> See *Island Beach State Park Spared Significant Damage*, *supra* note 137.

<sup>139</sup> See *Frequently Asked Land Use Permitting Questions Post Superstorm Sandy*, N.J. DEP'T OF ENVTL. PROT., <http://www.nj.gov/dep/landuse/SandyFAQ.html#qig> (last updated Feb. 12, 2013) ("The DEP regulates building elevations through its Flood Hazard Area Control Act rules. Under the emergency Flood Hazard Area Control Act rule just adopted, you are eligible for what is known as a permit-by-rule (effectively an automatic permit) as long as the lowest floor is elevated to at least one foot above the state's design flood elevation and provided the building stays within its original footprint. Slight variations in size and location can sometimes be allowed. You will still

direction. In New Jersey, under the Coastal Zone Management Rules, individuals are permitted to build new developments or expand already existing ones, granted they comply with the requirements for impervious cover and vegetative cover.<sup>140</sup> Even with these regulations, the barrier islands remain overdeveloped.<sup>141</sup> The Rules rely on Coastal Area Facility Review Act (CAFRA)<sup>142</sup> classifications; these classifications are broken down into urban centers, hamlets, villages, towns, etc.<sup>143</sup> The Rules indicate that landowners must comply with “Impervious Cover Percentage”<sup>144</sup> regulations according to the site classifications.<sup>145</sup> For example, if a site is located on a “CAFRA hamlet”, the maximum impervious cover percentage is 60 percent.<sup>146</sup> Fortunately, for the barrier islands, the Code “discourages” the development of arenas and convention centers.<sup>147</sup> One can read the Code and the regulations set forth concerning coastal development and realize that more needs to be done. The New Jersey Coastal Management Program, in an Assessment and Enhancement Strategy set forth in June of 2006, outlines the need for rule changes and revisions concerning development along the barrier islands.<sup>148</sup> The NJ DEP indicates that,

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need to secure local construction permits. A state Coastal Area Facility Review Act (CAFRA) permit is not needed if you reconstruct in place”).

<sup>140</sup> 7 N.J.A.C. § 7.26E (2011).

<sup>141</sup> *Id.*

<sup>142</sup> N.J. DEP’T OF ENVTL. PROT., SINGLE FAMILY HOMES AND DUPLEXES: A GUIDE CAFRA (May 2002), available at [http://www.nj.gov/dep/landuse/download/cp\\_007.pdf](http://www.nj.gov/dep/landuse/download/cp_007.pdf) (“Legislation designed to protect the vital shore areas of New Jersey from being overdeveloped. In accordance with CAFRA, residential development, commercial development, industrial development, and public development in these areas are regulated through permitting from the New Jersey Department of Environmental Protection”).

<sup>143</sup> *See* 7 N.J.A.C. § 7.26E (2011).

<sup>144</sup> “Impervious cover” includes artificial structures that are covered by impenetrable materials. For example sidewalks, roads, driveways and parking lots that are covered with materials such as asphalt, concrete, brick or stone. *See* Highlands Water Protection and Planning Council, *Draft Method for Determination of Impervious Surfaces for Redevelopment Waivers* (Feb. 4, 2008), available at [http://www.highlands.state.nj.us/njhighlands/news/hotspot/impervious\\_surface\\_method.pdf](http://www.highlands.state.nj.us/njhighlands/news/hotspot/impervious_surface_method.pdf).

<sup>145</sup> 7 N.J.A.C § 7:7E-5B.4 (2012).

<sup>146</sup> *Id.*

<sup>147</sup> *Id.*

<sup>148</sup> *See* N.J. DEP’T OF ENVTL. PROT., N.J. COASTAL MANAGEMENT PROGRAM: ASSESSMENT AND ENHANCEMENT STRATEGY FY 2006-2010 25 (June 2006), available at [http://www.nj.gov/dep/cmp/309\\_combined\\_strat\\_7\\_06.pdf](http://www.nj.gov/dep/cmp/309_combined_strat_7_06.pdf).

In light of the increasing threats posed by storm frequency and intensity, as well as sea level rise, the NJCMP intends to examine the necessity for rule changes and develop recommendations for rule revisions. This task conforms to the Section 309 Programmatic Objective to direct future public and private development and redevelopment away from hazardous areas.<sup>149</sup>

Unfortunately, the advice has fallen on deaf ears; between 1980 and 2010 Ocean County's population increased nearly 70% and more residential permits were issued in that county in 2010 than anywhere else in New Jersey.<sup>150</sup> A report concerning the development of the New Jersey shore, published by Princeton University in 2005, suggests that there has been an overwhelming surge in residential and industrial development, which has also accompanied an influx of new residents to the New Jersey coast.<sup>151</sup> The report predicts that the population of the New Jersey coast will rise well above 6 million by 2020 and property values, which are already high, will rise as well.<sup>152</sup>

Clearly, reform measures in the area of coastal barrier development are well overdue. The risks, cited above, are becoming a reality for many coastal dwellers and New Jersey residents are paying the price.<sup>153</sup> Marc Poirier, a Professor of Law at Seton Hall Law School, indicates, in an article concerning beachfront management, that,

Prohibitions on rebuilding have an interesting characteristic as a regulatory tactic. Generally, prohibitions on rebuilding can be viewed as providing a way of amortizing the cost to beachfront property owners of changes in society's approach toward the risks of beachfront development.<sup>154</sup>

This argument holds weight in light of recent events; with destruction caused by Superstorm Sandy, "rebuilding restrictions might be viewed as a compromise that is fair in terms of giving

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<sup>149</sup> *Id.*

<sup>150</sup> See N.J. DEP'T OF LABOR AND WORKFORCE DEV., CENT. REG'L CMTY. FACT BOOK: OCEAN COUNTY EDITION (Feb. 2012), available at <http://lwd.dol.state.nj.us/labor/lpa/pub/factbook/ocefct.pdf>.

<sup>151</sup> See COOPERS, *supra* note 130.

<sup>152</sup> *Id.*

<sup>153</sup> See Hilary Russ, *In New Jersey, Spared by Sandy but Paying the Price in Taxes*, YAHOO.COM (Apr. 11, 2013, 5:55 AM), <http://finance.yahoo.com/news/jersey-spared-sandy-paying-price-095531871.html>.

<sup>154</sup> Marc R. Poirier, *Takings and Natural Hazards Policy: Public Choice on the Beachfront*, 46 RUTGERS L. REV. 243, 290 (1993).

some weight to prior expectations.”<sup>155</sup> This argument also raises an important question: Do the consequences of irresponsible shore development have to extend to all New Jersey citizens? The risks of developing the barrier islands are well known to all coastal dwellers; consequently, homeowner’s who have lost their homes should not be allowed to accomplish this type of irresponsible re-development. Rebuilding restrictions would also address several other issues specifically, unsafe, hasty and unwise reconstruction plans. A regulation, disallowing the rebuilding of structures destroyed by Hurricane Sandy, would promote the gradual decrease in development and slowly establish a sustainable coastal environment.<sup>156</sup>

Another proposal that would prevent further development along the shore would be one that establishes set-back requirements extending as far back as the mainland. States like South Carolina offer some helpful guidance in the area of beach development regulation. The Beachfront Management Act of 1988 suggests that “unwise development has been sited too close to and has jeopardized the stability of the beach/dune system [in South Carolina].”<sup>157</sup> The Act requires that a property owner whose building is destroyed more than 66 2/3 % cannot rebuild, unless the rebuilding occurs landward of the minimum setback line.<sup>158</sup>

The Beachfront Management Act recognizes and acts upon the need for reform in the area of coastal development. The New Jersey legislature should enact legislation prohibiting the reconstruction of homes that have been destroyed by a certain percentage, which would be

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<sup>155</sup> *Id.*

<sup>156</sup> Legislative discussion concerning restrictions on rebuilding should include an analysis of the concept of avulsion specifically, within the context of barrier islands. The concept may be tenable along headlands and coastal areas, but may not work for barrier islands, specifically due to their fragile environment and overall vulnerable nature.

<sup>157</sup> See S.C. DEP’T OF HEALTH AND ENVTL. CONTROL, FINAL REPORT OF THE SHORELINE CHANGE ADVISORY COMM. (Apr. 2010), available at <http://www.scdhec.gov/administration/library/CR-009823.pdf>; see also, *Ocean & Coastal Resource Mgmt.*, S.C. DEP’T OF HEALTH AND ENVTL. CONTROL (2012), [http://www.scdhec.gov/environment/ocrm/beachfront\\_management.htm](http://www.scdhec.gov/environment/ocrm/beachfront_management.htm) (This Act was at issue in *Lucas v. S.C. Coastal Commission*; however, it was not declared unconstitutional, the plaintiffs instead argued that the regulation triggered a taking).

<sup>158</sup> See S.C. DEP’T OF HEALTH AND ENVTL. CONTROL, *supra* note 157, at 37.

established after considerable investigation by the legislature. Further, the legislation should seek to designate a set-back requirement that extends as far back as the New Jersey coastline.

Barrier islands are essentially large strips of sand that constantly shift and transform at the whim of Mother Nature; set-back requirements should not regulate large strips of sand. This type of regulation would in effect prevent any re-development along the barrier islands; this does not pose unreasonable restrictions, especially considering the fact that the restriction only applies to structures that have been significantly destroyed.

In light of these recommendations an important question arises: Would these types of regulations be a proper use of the police power or would they constitute a regulatory taking? In the cases cited above, the police power was invoked in order to protect the well-being of the state and its citizens.<sup>159</sup> However, as the Court stated in *Bernardsville Quarry*, the regulation cannot be “excessive or unreasonable, [neither can it] deprive the property of substantial value or prevent its use for other economically viable purposes.”<sup>160</sup> A regulation prohibiting the construction of residential homes and commercial buildings on barrier islands would be a serious issue for state and the local residents. However, taking into consideration the Court’s reasoning in *Bernardsville Quarry*, one could fairly ask: Is it “excessive or unreasonable” to prevent individuals from developing a fragile, volatile and rather unruly area of the State?

*Miller v. Schoene*, the case involving the destruction of the diseased red cedars, offers guidance.<sup>161</sup> The principle driving the Court’s decision was that private property may have to be destroyed in order to preserve and protect the public at large.<sup>162</sup> No compensation was required

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<sup>159</sup> See *Miller v. Schoene*, 276 U.S. 272 (1928).

<sup>160</sup> See *Bernardsville Quarry*, 608 A.2d at 1390.

<sup>161</sup> See *Miller v. Schoene*, 276 U.S. 272 (1928).

<sup>162</sup> *Id.*

by the Court and the apple industry was saved because of the State's police power.<sup>163</sup> *Goldblatt v. Hempstead* offers a similar line of reasoning; use the police power to prevent harm to the public.<sup>164</sup> *Gardner and East Cape May Associates* also offer insight into the importance of preserving New Jersey's environment and the use of the police power. In *Lucas*, Justice Blackmun addresses an important point concerning the use of the police power; he states that "this Court repeatedly has recognized the ability of government, in certain circumstances, to regulate property without compensation no matter how adverse the financial effect on the owner may be."<sup>165</sup> A prohibition intended to protect the "safety of the community" and the public health, "cannot in any just sense, be deemed a taking or an appropriation of property."<sup>166</sup> In reference to Blackmun's analysis, Scalia notes that the court should require more than "artful harm-preventing characterizations."<sup>167</sup> In the case of New Jersey barrier island preservation, an "artful characterization" is unnecessary; there is a clear and present need to prevent overdevelopment along the coastal barriers, a need that can be practically presented by the New Jersey legislature. This analysis raises the question, is the case for disallowing reconstruction along barrier islands much different from those cases which seek to preserve other environmentally fragile areas of the state?

Numerous studies indicate the sensitive nature of the barrier islands, the importance of preserving the wildlife habitat in the area and the danger that overdevelopment may cause.<sup>168</sup> These determinations have been made time and time again. In a 1977 Environmental Message, President Jimmy Carter iterated the importance of preserving barrier islands throughout the

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<sup>163</sup> *Id.*

<sup>164</sup> *See Goldblatt v. Hempstead*, 369 U.S. 590 (1962).

<sup>165</sup> *Lucas v. South Carolina Coastal Comm'n*, 505 U.S. 1003, 1047 (1992) (Blackmun, J., dissenting).

<sup>166</sup> *Id.*

<sup>167</sup> *Id.* at 1025 n.12.

<sup>168</sup> *See COOPERS*, *supra* note 130; *see also*, N.J. DEP'T OF ENVTL. PROT., *supra* note 57; *see also*, NORDSTROM, *supra* note 15.

United States. He points out that barrier islands form the shoreline's first line of defense against storms and hurricanes along the several thousand miles of East and Gulf Coasts.<sup>169</sup> The President suggests that "many of them are unstable and not suited for development, yet in the past the federal government has subsidized and insured new construction on them. Eventually, we can expect heavy economic losses from this shortsighted policy."<sup>170</sup> The population growth in these environmentally fragile areas, also addressed in the President's speech, often has a devastating effect; the initial attraction that individuals experience is slowly destroyed by development and overpopulation.<sup>171</sup> The President raises an important question, one I address above,<sup>172</sup> "whether the federal government should subsidize the recurring costs, costs often paid and then paid a second time and even a third for the same property damage."<sup>173</sup> Although, the President's speech took place more than 30 years ago, there remains to this day a government interest in regulating barrier islands.

Currently, the forces driving the development of the barrier islands are controlled by local ordinances; these local ordinances do not form a firm defense against overdevelopment. Safety and economic considerations, along with an interest in preserving the fragile environment of the barrier islands, are valid concerns. Another "superstorm" could have a devastating effect on the economy, the environment, and the people of the New Jersey barrier islands.

## **Part V: Conclusion**

Superstorm Sandy caused almost \$50 billion worth of damage in the United States. Swaths of the New Jersey coast were destroyed by rain, wind and storm surge and much of this

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<sup>169</sup> Jimmy Carter, 39th President of the United States, The Environment Message to Congress (May 23, 1977).

<sup>170</sup> *Id.*

<sup>171</sup> Amy H. Moorman, *Let's Roll: Applying Land-Based Notions of Property to the Migrating Barrier Islands*, 31 WM. & MARY ENVTL. L. & POL'Y REV. 459, 469 (2007).

<sup>172</sup> *See supra* test accompanying note 153.

<sup>173</sup> *Id.*

destruction took place along the coastal barrier islands. For decades, environmental scientists and responsible politicians have cited the need to reform coastal development regulations. It is time for New Jersey to act and implement serious reform in the area of barrier island development so as to avoid the catastrophic consequences of another Superstorm Sandy. This reform should be aimed at gradually preventing the redevelopment of property that has already been destroyed by Sandy and disallowing future development. The State must take steps, utilizing regulatory takings law and the police power, towards establishing a safer, more regulated New Jersey barrier island system.

Appendix A<sup>174</sup>

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<sup>174</sup> This is an oblique aerial photographs of Island Beach State Park, NJ. View looking west along the New Jersey shore. Storm surge and waves eroded the front face of the dunes and overwash is indicated by sand deposited in the parking lot behind the beach. The yellow arrow in each image points to the same feature. See *Hurricane Sandy Pre- and Post-Storm Photo Comparisons-New Jersey*, ST. PETERSBURG COASTAL AND MARINE SCIENCE CENTER, <http://coastal.er.usgs.gov/hurricanes/sandy/photo-comparisons/newjersey.php> (last modified Jan. 18, 2013, 9:12 AM).

Appendix B<sup>175</sup>



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<sup>175</sup> See BURIED TREASURE, *supra* note 62.

Appendix C<sup>176</sup>



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<sup>176</sup> See Rose, *supra* note 63.

Appendix D<sup>177</sup>

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<sup>177</sup> See *Daily Eye Wonder November 2012*, WJLA (Oct. 31, 2012), <http://www.wjla.com/pictures/2012/10/daily-eye-wonder-november-2012/mantoloking-october-31-2012-27896-1879.html>. This is a picture of new inlet that was cut across the barrier island of the New Jersey coastal town Mantoloking just north of where Hurricane Sandy made landfall in Ocean County New Jersey.