

2014

# Mitigating Myopia: Climate Change, Rolling Easements, and the Jersey Shore

Kevin J. Mahoney

Follow this and additional works at: [https://scholarship.shu.edu/student\\_scholarship](https://scholarship.shu.edu/student_scholarship)

---

## Recommended Citation

Mahoney, Kevin J., "Mitigating Myopia: Climate Change, Rolling Easements, and the Jersey Shore" (2014). *Law School Student Scholarship*. 146.

[https://scholarship.shu.edu/student\\_scholarship/146](https://scholarship.shu.edu/student_scholarship/146)

**Mitigating Myopia:**  
**Climate Change, Rolling Easements, and the Jersey Shore**

Kevin J. Mahoney\*

I. Introduction

In early October 2012, Long Beach, New Jersey's municipal website had a peculiarly contentious display. Below more typical township announcements was a list of property owners' addresses written above a question, "Why won't these homeowners sign their Easements?"<sup>1</sup> Further down the page were two images of contemporary homes standing on fragile cliffs of sand, feet from the Atlantic Ocean. The motive of the listing was to pressure recalcitrant landowners into signing perpetual storm damage reduction easements allowing the State to periodically build and rehabilitate sand dunes on the signers' property.<sup>2</sup> Despite the tactic, many still refused to sign, fearing loss of control of their property, a drop in land value, and obstructed beach access, ocean views, and sea breezes.<sup>3</sup>

On October 22, 2012, a tropical depression in the Caribbean Sea strengthened into Tropical Storm Sandy.<sup>4</sup> Sandy soon became a Category 1 Hurricane, striking the Caribbean and Bahamas before moving up the eastern United States as a gigantic "super storm" covering 1000

---

\*

<sup>1</sup> TOWNSHIP OF LONG BEACH (last visited October 20, 2012), <http://web.archive.org/web/20121101111755/http://longbeachtownship.com/homepage.html> (accessed by searching for Township of Long Beach in the Internet Archive index). An easement is an "interest in land, entitling one person to make some use of another's property; the interest must be a property right protected against the possessor and others." Mahony v. Davis, 469 A.2d 31, 34–35 (N.J. 1983).

<sup>2</sup> See Kristina Fiore, *Shifting Sands*, N.J. MONTHLY (May 9, 2011), <http://njmonthly.com/articles/jerseyshore/shifting-sands.html>.

<sup>3</sup> *Id.* The purpose of the easements was to allow Long Beach Township and the State of New Jersey to, among other things: construct and repair dune systems, deposit sand, re-nourish the dunes periodically, and ensure public access to the beach under the state's Public Trust Doctrine. Letter from Craig R. Homesley, Chief, Civil Projects Support Branch, Real Estate Div., Dep't of the Army to Dave Rosenblatt, Adm'r, Office of Eng'g and Constr., N.J. Dept. of Env't'l Prot. and Joseph H. Mancini, Mayor of Long Beach Twp., N.J. (June 17, 2010), *available at* [http://www.longbeachtownship.com/images/explanation\\_of\\_easements.pdf](http://www.longbeachtownship.com/images/explanation_of_easements.pdf).

<sup>4</sup> See Willie Drye, *A Timeline of Hurricane Sandy's Path of Destruction*, NAT'L GEOGRAPHIC NEWSWATCH (Nov. 2, 2012), <http://newswatch.nationalgeographic.com/2012/11/02/a-timeline-of-hurricane-sandys-path-of-destruction/>.

miles.<sup>5</sup> At 8 PM on October 29, Sandy, since downgraded to a tropical nor'easter,<sup>6</sup> made landfall at Atlantic City, New Jersey.<sup>7</sup> Severe winds and flooding followed, resulting in one of the most catastrophic storms in U.S. history and the worst New Jersey had ever seen.<sup>8</sup> More than than eighty-seven Americans died.<sup>9</sup> And the storm is estimated to have cost New York and New Jersey over \$71 billion.<sup>10</sup>

Coastal communities in the region were particularly devastated. Water inundated lower Manhattan, shutting down significant portions of the city.<sup>11</sup> In New Jersey, flooding and fire destroyed entire blocks of houses.<sup>12</sup> In the coastal town of Mantoloking, for example, the Atlantic Ocean carved two inlets directly through the barrier island and wiped dozens of houses directly off their foundations.<sup>13</sup> In nearby Seaside Heights, the town's famous beachfront amusement park and boardwalk were obliterated.<sup>14</sup> Even five months after the storm, the park's iconic Jet Star Roller Coaster was still submerged by ocean waters.<sup>15</sup>

---

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

<sup>6</sup> A nor'easter is a type of cyclonic storm system made up of northeasterly winds that strike the eastern coast of North America. *Know the Dangers of Nor'easters*, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (Feb. 7 2013), [http://www.noaa.gov/features/03\\_protecting/noreasters.html](http://www.noaa.gov/features/03_protecting/noreasters.html). A hurricane is downgraded to a tropical storm when its sustained winds go below seventy-four miles per hour. *See Tropical Cyclone Climatology*, National Weather Service, National Hurricane Center (last visited April 2, 2013), available at <http://www.nhc.noaa.gov/climo/#bac>.

<sup>7</sup> Drye, *supra* note 4.

<sup>8</sup> *Id.*; Stephen Stirling, *Hurricane Sandy is Worst Storm in N.J. History, Experts Say*, THE STAR-LEDGER (Newark, N.J.), (Oct. 31, 2012, 3:27 PM), [http://www.nj.com/news/index.ssf/2012/10/hurricane\\_sandy\\_is\\_worst\\_storm.html](http://www.nj.com/news/index.ssf/2012/10/hurricane_sandy_is_worst_storm.html).

<sup>9</sup> Eric S. Blake et al., National Hurricane Center, Tropical Cyclone Report, Hurricane Sandy 14 (Feb. 12, 2013), [http://www.nhc.noaa.gov/data/tcr/AL182012\\_Sandy.pdf](http://www.nhc.noaa.gov/data/tcr/AL182012_Sandy.pdf).

<sup>10</sup> Hilary Russ, *New York, New Jersey Put \$71 Billion Price Tag on Sandy*, REUTERS, April 22, 2013, available at <http://www.reuters.com/article/2012/11/27/us-storm-sandy-cost-nyc-idUSBRE8APOSZ20121127>.

<sup>11</sup> *Sandy Hits City with Record Flooding, Power Outages*. NY1 NEWS, (Oct. 30, 2012, 9:04 AM), [http://www.nyl.com/content/top\\_stories/171568/damage-controlsandy-hits-city-with-record-flooding--power-outages](http://www.nyl.com/content/top_stories/171568/damage-controlsandy-hits-city-with-record-flooding--power-outages).

<sup>12</sup> Jon Huang et al., *Aerial Photographs of the Damage in New Jersey*, N.Y. TIMES, (Oct. 31, 2012), <http://www.nytimes.com/interactive/2012/10/31/us/sandy-zoomers.html>.

<sup>13</sup> Blake et al., *supra* note 9, at 17.

<sup>14</sup> *Id.*

<sup>15</sup> Erin O'Neill, *Go-Kart Racing a 'Baby Step' to Recovery: Seaside Heights' Pier Prepares Steadily for Summer*, The Star-Ledger (Newark, N.J.), April 1, 2013, at 3, available at, [http://www.nj.com/ocean/index.ssf/2013/03/seaside\\_heights\\_casino\\_pier\\_sandy.html](http://www.nj.com/ocean/index.ssf/2013/03/seaside_heights_casino_pier_sandy.html).

The importance of dune protection became obvious amidst Sandy's devastating aftermath.<sup>16</sup> Unsurprisingly, shorelines with the largest dunes suffered the least amount of damage.<sup>17</sup> In Mantoloking, fifty-six homes were swept away by floodwaters and another two hundred destroyed.<sup>18</sup> Yet homes built behind nearby twenty-two-foot high, one-hundred-foot wide dunes suffered little, if any, damage.<sup>19</sup> Overlooking the post-Sandy recovery efforts, New Jersey governor Chris Christie joined the fight to gain storm-protection easements on beachfront properties, calling landowners who still refused to sign "extraordinarily selfish and shortsighted."<sup>20</sup>

After the storm, Long Beach Township mayor Michael Mancini appeared confident that the lessons learned from Sandy would provide him with enough leverage to leave landowners with no choice but to sign them.<sup>21</sup> Indeed, Mancini upped the ante by enforcing a never used 2010 town ordinance requiring beachfront owners who had not signed the storm-reduction easements to engineer and construct their own dunes—an expensive task.<sup>22</sup> Without construction of the dunes, building permits would not be issued to the landowners.<sup>23</sup> In response,

---

<sup>16</sup> See, e.g., Ryan Hutchins, *Where No Dunes Were Built, an Unmeasurable Cost*, THE STAR LEDGER (Newark, N.J.), Nov. 6, 2012, at 13, available at [http://www.nj.com/news/index.ssf/2012/11/dune\\_size\\_determined\\_extent\\_of.html](http://www.nj.com/news/index.ssf/2012/11/dune_size_determined_extent_of.html); MaryAnn Spoto, *Dunes Were the Difference in Damage Control*, THE STAR-LEDGER (Newark, N.J.), Nov. 18, 2012, at 12.

<sup>17</sup> See, e.g., Hutchins, *supra* note 16, at 13.

<sup>18</sup> *Witnessing What's Left of Sandy-Ravaged Mantoloking, N.J.*, CBSNEWYORK, (Jan. 15, 2013, 8:09 PM), <http://newyork.cbslocal.com/2013/01/15/exclusive-witnessing-whats-left-of-sandy-ravaged-mantoloking-n-j/>.

<sup>19</sup> Spoto, *supra* note 16, at 12.

<sup>20</sup> Kirk Moore, *Reluctance to Sign Construction Easements in Mantoloking Jeopardizes Full Restoration*, ASBURY PARK PRESS, Jan. 15, 2013, at A3, available at <http://www.app.com/article/20130114/NJNEWS/301140114/>.

<sup>21</sup> See Hutchins, *supra* note 17 ("[Sandy] is a potential flashpoint in a long-running, long-controversial government effort to replenish the beaches on LBI, and a microcosm for the overall picture of beach replenishment along the Jersey Shore.")

<sup>22</sup> MaryAnn Spoto, *Mayor: Dunes Tab is on Residents "Holdouts" on Long Beach Replenishment Plan May Have to Pay Before Eligible to Rebuild Home*, THE STAR-LEDGER (Newark, N.J.), Nov. 26, 2012, at 3, available at [http://www.nj.com/politics/index.ssf/2012/11/long\\_beach\\_mayor\\_dunes\\_tab\\_is.html](http://www.nj.com/politics/index.ssf/2012/11/long_beach_mayor_dunes_tab_is.html).

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

landowners accused Mancini of extortion and civil rights violations.<sup>24</sup> Given the continued gridlock and heated rhetoric, litigation seems imminent.<sup>25</sup>

Litigation surrounding littoral,<sup>26</sup> or coastal, property is not uncommon in New Jersey.<sup>27</sup> This is because the private interests of New Jersey landowners are often at odds with those of the general public, who are trustees of much of the shore under the New Jersey's Public Trust Doctrine.<sup>28</sup> That doctrine provides that the government holds, in trust, the State's tidal waters, and guarantees public access to them for recreation and economic purposes.<sup>29</sup> In one recent conflict, for example, the New Jersey Appellate Division upheld a \$375,000 judgment against a coastal borough because its construction of a large dune, built to preserve the beach for public access, obstructed the plaintiff's ocean view.<sup>30</sup> Some argue that that decision, now under review in the Supreme Court of New Jersey, incentivizes the rejection of beach protection easements by landowners who hope to gain a payday from the state through litigation and eminent domain.<sup>31</sup>

---

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

<sup>25</sup> And continued gridlock also appears likely. Residents in other New Jersey shore towns like Mantoloking and Toms River have refused to sign access easements for dune replenishment. See MaryAnn Spoto, *To Protect Property, Landowners Become Barrier to Rebuilding Dunes in Toms River*, THE STAR LEDGER (Newark, N.J.), Jan. 5, 2013, at 1, available at [http://www.nj.com/news/index.ssf/2013/01/toms\\_river\\_homeowners\\_slow\\_to.html](http://www.nj.com/news/index.ssf/2013/01/toms_river_homeowners_slow_to.html); Moore, supra note 20.

<sup>26</sup> Littoral is a noun meaning “[o]f or relating to the coast or shore of an ocean, sea, or lake.” BLACK’S LAW DICTIONARY (9th ed. 2009).

<sup>27</sup> See e.g., MaryAnn Spoto, *In Wake of Couple’s Court Victory, Officials Review Blueprint for Beach Replenishment*, THE STAR-LEDGER (Newark, N.J.), Apr. 13, 2012, at 13, available at [http://www.nj.com/news/index.ssf/2012/04/emergency\\_beach\\_replenishment.html](http://www.nj.com/news/index.ssf/2012/04/emergency_beach_replenishment.html) (“[T]here have been numerous lawsuits contesting everything from the height of the dunes to loss of privacy to the decline in property values.”).

<sup>28</sup> See e.g., *Matthews v. Bay Head Imp. Ass’n*, 471 A.2d 355, 358 (N.J. 1984) (“The public trust doctrine acknowledges that the ownership, dominion and sovereignty over land flowed by tidal waters, which extend to the mean high water mark, is vested in the State in trust for the people. The public’s right to use the tidal lands and water encompasses navigation, fishing and recreational uses, including bathing, swimming and other shore activities.”);

<sup>29</sup> See e.g., *id.*; Marc R. Poirier, *Environmental Justice and the Beach Access Movements of the 1970s in Connecticut and New Jersey: Stories of Property and Civil Rights*, 28 CONN. L. REV. 719, 742 (1996) (describing conflict between public access to beaches and private housing and industrial development in the 1960s and 70s).

<sup>30</sup> *Borough of Harvey Cedars v. Karan*, 40 A.3d 75 (N.J. Super. Ct. App. Div. 2012), cert. granted, 40 A.3d 75 (N.J. 2012).

<sup>31</sup> See Editorial, *Play Hardball on Easements*, ASBURY PARK PRESS, Jan. 16, 2013, at A10, available at <http://www.app.com/article/20130116/NJOPINION01/301160025/Editorial-Play-hardball-easements>.

One source of such conflicts is a characteristic unique to coastal and riparian property boundaries: they move—often slowly, but sometimes suddenly and unexpectedly too. And because the public typically owns most tidal waters, but not necessarily the land abutting them, there is an inherent tension when the land gives way to the water, and vice-versa.<sup>32</sup> Legal principles try to accommodate such changes, however, so as to prevent constant conflict over the reconfiguration of boundary lines.<sup>33</sup> Three of these principles are the doctrines of accretion, erosion, and avulsion. Accretion occurs when water causes deposits to build on dry land.<sup>34</sup> Erosion occurs when land is slowly and imperceptibly lost to moving water.<sup>35</sup> Finally, avulsion occurs when land is suddenly and perceptibly lost to water.<sup>36</sup> When the sea gradually rises or falls and accretion or erosion occurs, title shifts with the waterline.<sup>37</sup> When an avulsive event happens, however, the boundaries traditionally remain the way they were.<sup>38</sup>

The accretion and erosion doctrines grant a degree of flexibility to boundaries adjacent to water by permitting property title to adapt to common, predictable changes in water boundaries.<sup>39</sup> Similarly, the avulsion doctrine prevents the hardship that would result if such principles were applied to quick, unpredictable changes.<sup>40</sup> In the absence of an avulsive event, then, courts treat the interplay between public water and private land as a type of zero-sum game: dynamic shoreline boundaries will sometimes eat away at private property while, in other places,

---

<sup>32</sup> See generally Joseph J. Kalo, *North Carolina Oceanfront Property and Public Waters and Beaches: The Rights of Littoral Owners in the Twenty-First Century*, 83 N.C. L. REV. 1427, 1438 (2005); Joseph L. Sax, *The Accretion/Avulsion Puzzle: Its Past Revealed, Its Future Proposed*, 23 TUL. ENVTL. L.J. 305, 306–08 (2010).

<sup>33</sup> See WALLACE KAUFMAN & ORRIN H. PILKEY, *THE BEACHES ARE MOVING: THE DROWNING OF AMERICA'S SHORELINE* 12–16 (7th ed. 1998).

<sup>34</sup> Phillip Wm. Lear, *Accretion, Reliction, Erosion, and Avulsion: A Survey of Riparian and Littoral Title Problems*, 11 J. ENERGY NAT. RES. & ENVTL. L. 265, 265 (1991).

<sup>35</sup> See *id.*

<sup>36</sup> See *id.*; Sax, *supra* note 32, at 306.

<sup>37</sup> See Sax, *supra* note 32, at 306.

<sup>38</sup> See *id.*

<sup>39</sup> See *Wildwood Crest v. Masciarella*, 240 A.2d 665, 667 (N.J. 1968) (“The proprietor of lands having a boundary on the sea is obliged to accept the alteration of his boundary by the changes to which the shore is subject.” (quoting *Ocean City Ass’n v. Shriver*, 64 N.J.L. 550, 554 (N.J. 1900) (internal quotation marks omitted))).

<sup>40</sup> Donna R. Christie, *Of Beaches, Boundaries and Sobs*, 25 J. LAND USE & ENVTL. L. 19, 47–48 (2009).

add to them in equal measure.<sup>41</sup> These doctrines have a sound scientific basis, for shorelines generally maintain a “dynamic equilibrium”; while often shifting shape and size, they maintain a total “net balance” of area as a larger system of sand.<sup>42</sup>

Global climate change will upset this equilibrium, however, by causing sea levels to rise and inundate the coasts.<sup>43</sup> The Atlantic Coast is in a particularly precarious position because sea levels are rising up to four times faster than average global rates.<sup>44</sup> Roughly eighty percent of New Jersey’s coast is considered to be highly vulnerable to flooding.<sup>45</sup> To make matters worse, New Jersey’s extremely dense population already strains the environmental stability of the coast.<sup>46</sup> Not only will planning for the future require solutions that permit beach preservation but it must also acknowledge that such efforts might one day be economically unfeasible and even unsafe.<sup>47</sup> This reality requires the implementation of planning policies that permit adaptation to the uncertainties of climate change while allowing for at least a partial coastal retreat, if necessary.<sup>48</sup>

---

<sup>41</sup> See *Ocean City*, 64 N.J.L at 554 (“He is subject to loss by the same means that may add to his territory, and, as he is without remedy for his loss, so he is entitled to the gain which may arise from alluvial formations.”).

<sup>42</sup> See KAUFMAN & PILKEY, *supra* note 33, at 14–15 (“Despite . . . incessant motion, beaches continue to border the continent with about the same area from one year to the next. But like a person constantly changing position in a large armchair, not everything will be in the same place all the time.”).

<sup>43</sup> See DAVID CLING & JAMES N. SANCHIRICO, RES. FOR THE FUTURE, AN ADAPTATION PORTFOLIO FOR THE UNITED STATES COASTAL AND MARINE ENVIRONMENT 14 (2009), *available at*, <http://www.rff.org/rff/documents/RFF-Rpt-Adaptation-KlingSanchirico.pdf>; Christie, *supra* note 40, at 25.

<sup>44</sup> Leigh Phillips, *U.S. Northeast Coast is Hotspot for Rising Sea Levels*, NATURE, (June 24, 2012), <http://www.nature.com/news/us-northeast-coast-is-hotspot-for-rising-sea-levels-1.10880>.

<sup>45</sup> CLING & SANCHIRICO, *supra* note 43, at 28.

<sup>46</sup> NORBERT P. PSUTY & DOUGLAS D. OFIARA, COASTAL HAZARD MANAGEMENT: LESSONS AND FUTURE DIRECTIONS FROM NEW JERSEY 1 (2002).

<sup>47</sup> See, e.g., *id.* at 280 (advocating for coastal management practices focused on adapting to environmental changes rather than attempting to stabilize shorelines); RAYMOND J. BURBY, *Hurricane Katrina and the Paradoxes of Government Disaster Policy: Bringing About Wise Governmental Decisions for Hazardous Areas*, 604 ANNALS OF THE AM. ACAD. OF POLITICAL SCI. 171, 171–91 (2006), *available at* [http://www.wcu.edu/WebFiles/PDFs/Paradox\\_of\\_Disaster\\_Policy.pdf](http://www.wcu.edu/WebFiles/PDFs/Paradox_of_Disaster_Policy.pdf) (describing how making hazardous areas safe for development in Pre-Hurricane Katrina New Orleans paradoxically decreased public safety by placing large populations in ecologically vulnerable locations).

<sup>48</sup> See JAMES G. TITUS, ENVTL. PROT. AGENCY, ROLLING EASEMENTS 10 (2011) (defining rolling easements and describing how they might be implemented throughout the United States), *available at* <http://water.epa.gov/type/oceb/cre/upload/rollingeasementsprimer.pdf>.

One such planning strategy is the implementation of rolling easements. First, an easement is an interest in land that gives the easement holder a right to use a designated portion of someone else's land for a designated and limited use.<sup>49</sup> For example, if A wished to periodically drive on B's private road in order to gain quicker access to a local highway, A might pay B for an easement permitting him such access. To combat climate change and sea level rise, then, the government could obtain rolling easements on private littoral property. In the event that the property burdened by the easement becomes permanently inundated, a rolling easement does not remain underwater with the land it was attached to before the inundation but, rather, shifts landward onto beachfront property.<sup>50</sup> To reconfigure the metaphor, in one sense the easement does not roll at all but remains bound to the beach locale as it moves landward.

This comment will explain why rolling easements are necessary in New Jersey and the problems that might arise if they are implemented. Part II of this Comment will give a brief description of the New Jersey coastline and the science behind climate change and sea-level rise. Part III will then provide a background on rolling easements, with a focus on Texas, where the doctrine has had its greatest impact but has recently been repudiated by the state's Supreme Court in *Severance v. Patterson*.<sup>51</sup> Part IV will discuss the lessons New Jersey can learn from *Severance*, namely a need to fine-tune the avulsion doctrine and strike a more appropriate balance between private and public interests in shoreline protection and compensation. Finally, Part V concludes.

---

<sup>49</sup> See *supra* note 1.

<sup>50</sup> TITUS, *supra* note 48, at 4.

<sup>51</sup> 370 S.W.3d 705, 708 (Tex. 2012).

## II. Preserving the Shore: Past, Present, and Future

### A. The New Jersey Shore and Sea Level Rise

The New Jersey shoreline is made up of 127 miles of barrier islands, inlets, and bays, among other features.<sup>52</sup> New Jersey is the most densely populated state in the United States<sup>53</sup> and, unsurprisingly, the coast is crowded too, especially in the summer.<sup>54</sup> Housing and commercial properties take up most of the state's coastal land, the most developed in the country.<sup>55</sup> Accordingly, the state derives most of its annual billion-dollar tourism revenue from its coastal counties.<sup>56</sup> In coastal states like New Jersey, the enormous economic value of coastal property has traditionally justified beach stabilization efforts, which seek to maintain a static, unchanging shoreline.<sup>57</sup> Increased sea levels, however, will make stabilization efforts more costly.<sup>58</sup>

This increase is, in part, an effect of global warming.<sup>59</sup> The Earth's average temperature has gone up by 1.4°F over the last one hundred years and will continue to rise from 2°F to 11.5°F over the next century.<sup>60</sup> Human activities are partly responsible for the warming of the Earth, namely our burning of fossil fuels, which leads to heat-trapping gases in our atmosphere.<sup>61</sup> This warmer climate causes sea level rise because water expands when it warms and higher global

---

<sup>52</sup> Psuty & OFIARA, *supra* note 46, at 9–10.

<sup>53</sup> UNITED STATES CENSUS 2010: RESIDENT POPULATION DATA: POPULATION DENSITY (2010), *available at* <http://2010.census.gov/2010census/data/apportionment-dens-text.php>.

<sup>54</sup> NATIONAL CONFERENCE OF STATE LEGISLATURES, NEW JERSEY: ASSESSING THE COSTS OF CLIMATE CHANGE 2 (2008), *available at* <http://www.ncsl.org/print/enviro/ClimatechangeNJ.pdf> [hereinafter NATIONAL CONFERENCE]; *see* PSUTY & OFIARA, *supra* note 46, at 1 (“In some locations along the shore, the summer population expands by a factor of five to ten or more compared with permanent winter residents.”).

<sup>55</sup> PSUTY & OFIARA, *supra* note 46, at 1.

<sup>56</sup> NATIONAL CONFERENCE, *supra* note 54, at 2.

<sup>57</sup> *See* TITUS, *supra* note 48, at 1 (“Shore protection is common because it generally costs less than what the protected property is worth.”).

<sup>58</sup> *Id.* at 30.

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

<sup>60</sup> *Climate Change Basics*, EPA.GOV, <http://www.epa.gov/climatechange/basics> (last visited Oct. 22, 2012).

<sup>61</sup> *Id.*

temperatures cause the melting of land-based ice on the poles, which consequently results in meltwater flowing into oceans.<sup>62</sup>

Deeper seas lead not only to shoreline change but also to an increase in coastal flooding after storms.<sup>63</sup> This is because storm surge—or the rise in normal tide levels caused by a storm—moves further inland when water levels are higher.<sup>64</sup> To make matters worse for New Jersey, the Northeastern United States is seeing much higher sea-level rise than average.<sup>65</sup> Scientists are unsure about why this is so, but some suggest that slower circulation of water in the North Atlantic and the sinking of landmass in the Northeast might be the cause.<sup>66</sup> The combination of deeper seas and stronger storm surge puts the New Jersey shore in ecological and economic danger.<sup>67</sup> What is more, storms are getting stronger as a result of the increases in ocean temperatures.<sup>68</sup> The New Jersey coast is particularly vulnerable to “cold-core cyclones” called nor’easters, which, if conditions are right, can cause even more damage than a hurricane.<sup>69</sup>

## B. Arming the Shore: Traditional Approaches

For a layman, the problem of coastal erosion and flooding might seem easily solved. Why not just build a wall? But walls have their limitations, and they have been tried before.<sup>70</sup> Even without sea level rise, coastal areas are already vulnerable to flooding and storm damage that result in shoreline erosion. In fact, coastal protection in New Jersey historically focused on

---

<sup>62</sup> *Id.*

<sup>63</sup> See PSUTY & OFIARA, *supra* note 46, at 155.

<sup>64</sup> NATIONAL HURRICANE CENTER, STORM SURGE UNIT: INTRODUCTION TO STORM SURGE 1, *available at* [http://www.nhc.noaa.gov/ssurge/surge\\_intro.pdf](http://www.nhc.noaa.gov/ssurge/surge_intro.pdf) (last visited Feb. 11, 2013).

<sup>65</sup> See Michael D. Lemonick, *Sea Level Rising Faster than Average in Northeastern U.S.*, CLIMATE CENTRAL (Oct. 18, 2012), <http://www.climatecentral.org/news/east-coast-faces-rising-seas-from-slowing-gulf-stream-15587>.

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

<sup>67</sup> Ben Horton & Ken Miller, *Understanding Sea Level Rise in the Mid-Atlantic*, THE JERSEY SHORELINE (2010), [http://www.njseagrant.org/jersey-shoreline/vol26\\_no4/articles/understanding-sea-level-rise.html](http://www.njseagrant.org/jersey-shoreline/vol26_no4/articles/understanding-sea-level-rise.html).

<sup>68</sup> John Roach, *Warming Oceans are Fueling Stronger Hurricanes, Study Finds*, NATIONAL GEOGRAPHIC NEWS (Mar. 16 2006), [http://news.nationalgeographic.com/news/2006/03/0316\\_060316\\_hurricanes.html](http://news.nationalgeographic.com/news/2006/03/0316_060316_hurricanes.html).

<sup>69</sup> PSUTY & OFIARA, *supra* note 46, at 110.

<sup>70</sup> See, e.g., Orrin H. Pilkey, Op-Ed, *We Need to Retreat From the Beach*, N.Y. TIMES, Nov. 14, 2012, at A35, *available at* <http://www.nytimes.com/2012/11/15/opinion/a-beachfront-retreat.html>. (“As experience in New Jersey and elsewhere has shown, sea walls eventually cause the loss of protective beaches.”).

stabilization or armoring methods, like seawalls, to prevent erosion.<sup>71</sup> The following brief exploration of stabilization methods will provide not only a historical lens into traditional beach policies but also will show how sole focus on such methods is inadequate for dealing with sea level rise and how beaches function as a larger ecological system of shifting sands.

Shoreline armoring involves a diverse array of approaches to beach preservation. Generally, we can group these methods into two categories: structural “hard” approaches and non-structural “soft” approaches.<sup>72</sup>

### 1. “Hard” Approaches

Hard approaches use large structures that extend along the shoreline and protect the coastline from the effects of waves.<sup>73</sup> An example of a hard approach is the fifteen-foot seawall built in Sea Bright and Monmouth Beach, New Jersey.<sup>74</sup> The goal of a hard approach is to reduce the rate of shoreline loss where the structure stands—in other words, to defend a line.<sup>75</sup> These solutions, however, are not only short-term but also economically and ecologically counter-productive.<sup>76</sup> Hard structures like seawalls prevent the dispersal of sand and reflect energy from waves.<sup>77</sup> As a result, beaches get steeper as waves hit the shore with more force.<sup>78</sup> Moreover, structures like seawalls are expensive and do not last long because they are worn away by the relentless power of the ocean.<sup>79</sup> Finally, hard structures have significant negative

---

<sup>71</sup> See, e.g., PSUTY & OFIARA, *supra* note 46, at 159 (“The history of shoreline stabilization in the state is a long narrative of attempts to maintain a shoreline position.”).

<sup>72</sup> See generally *id.* at 157–174.

<sup>73</sup> See PSUTY & OFIARA, *supra* note 46, at 162–63.

<sup>74</sup> See *id.* at 41.

<sup>75</sup> *Id.*

<sup>76</sup> *Id.* at 162; see also KAUFMAN & PILKEY, *supra* note 33, at 192 (“Shoreline engineering is brought into the natural system by the people who are responsible for creating the problems, and their solutions usually cost taxpayers more money than the property behind the shoreline is worth, especially since the beach is often destroyed by its fortification.”).

<sup>77</sup> *Id.*

<sup>78</sup> *Id.*

<sup>79</sup> PSUTY & OFIARA, *supra* note 46, at 162.

externalities,<sup>80</sup> for they decrease the amount of sand that cycles throughout the coastal region and nourishes other beaches.<sup>81</sup>

## 2. “Soft Approaches”

Due to the shortcomings of hard methods like seawalls, today “soft” approaches are more common.<sup>82</sup> Soft approaches often include “beach nourishment,” which involves placing sand from another source, usually an offshore site or inlet, onto an eroded beach or dune in order to counter erosion and to broaden and heighten coastal surfaces.<sup>83</sup> Much like hard approaches, beach nourishment is also very costly.<sup>84</sup> Beaches are much more complex than what one sees when walking along the shoreline.<sup>85</sup> Scientists describe the “true beach” as “a wedge of sediment three or four miles wide stretching underwater to depths of thirty or forty feet.”<sup>86</sup> Beach nourishment consequently places sand on only a small part of the upper beach.<sup>87</sup> As with seawalls, the result is often steeper beaches that erode more quickly than natural ones.<sup>88</sup> What often follows after this erosion is a costly cycle of replenishment: sandfill costs hundreds of dollars per linear foot and replacement usually occurs every two to six years.<sup>89</sup> Because of the cyclical nature of these projects, governments find it useful to create projects that incorporate periodic replenishment over a long period of time.<sup>90</sup>

---

<sup>80</sup> Externalities refer to instances where the actions of a community have deleterious effects on others and the community responsible for creating them ignores those effects. PSUTY & OFIARA, *supra* note 46, at 5.

<sup>81</sup> *Id.* at 162.

<sup>82</sup> KAUFMAN & PILKEY, *supra* note 33, at 192.

<sup>83</sup> See PSUTY & OFIARA, *supra* note 46, at 174–77.

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

<sup>85</sup> See KAUFMAN & PILKEY, *supra* note 33, at 216.

<sup>86</sup> *Id.*

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

<sup>88</sup> *Id.*

<sup>89</sup> PSUTY & OFIARA, *supra* note 46, at 176; see also Fiore, *supra*, note 2 (“Replenishment has other hidden costs. In Surf City, [New Jersey] the Army Corps had to pay \$15.7 million for a cleanup after residents started turning up World War I-era munitions on the beach. These had been unexpectedly sucked up by the dredger from a borrow pit two miles offshore.”).

<sup>90</sup> PSUTY & OFIARA, *supra* note 46, at 176.

Historically, the cost of beach re-nourishment in New Jersey has been split between the federal government and the state, with the federal government footing sixty-five percent of the bill.<sup>91</sup> This is an agreement actually central to the Long Beach dispute described in Part I; the Army Corp of Engineers refuses to push forward with the beach restoration project until storm-reduction easements are signed by all affected properties.<sup>92</sup> The dispute is emblematic of the forces, both natural and man-made, that influence the environmental, social, and economic landscape of the shoreline.

### III. Rolling Easements: A Solution

The potential consequences of sea level rise and coastal erosion require forward planning, including a consideration of approaches that address the real possibility that continuous beach stabilization will one day be either impossible or economically unjustifiable. And the pervasiveness of residents' recalcitrance in granting easements to their individual municipalities means that a statewide approach is appropriate.<sup>93</sup> Indeed, in difficult economic times, such a strategy is the best option.<sup>94</sup> This Part will explore the use of rolling easements to address sea level rise. After an explanation of useful terms, it will introduce and define the rolling easement concept and then discuss its implementation in other states.

#### A. Essential Terms Designating Littoral Boundaries

Before exploring rolling easements in more depth, a brief primer on essential terms used to describe littoral boundaries is necessary. First, most American jurisdictions, including New

---

<sup>91</sup> *Id.* at 183.

<sup>92</sup> *See* Fiore, *supra* note 2.

<sup>93</sup> *See, e.g.,* Spoto, *supra* note 25.

<sup>94</sup> *See e.g.,* PSUTY & OFIARA, *supra* note 46, at 7 (“In the absence of large subsidies from the federal government or the state to rebuild and defend the present shoreline position, coastal planning should shift toward managing coastal hazards rather than strictly coastal stabilization.” (internal quotation marks omitted)).

Jersey,<sup>95</sup> follow the English rule in delineating the boundary between state and private lands as the mean high-water mark.<sup>96</sup> The mean high-water mark is simply the average point at which tidal waters reach on a beach.<sup>97</sup> On public tidal lands, data over the past 18.6 years is used to calculate the line.<sup>98</sup> The area between the mean high-water mark and the mean low-water mark is typically known as the “wet beach.”<sup>99</sup> Immediately landward of the wet beach is the “dry beach,” which extends from the mean high-water mark to the edge of dune grass or other plant life, known as the “vegetation line.”<sup>100</sup> States use these terms to describe both boundary lines between public and private property as well as to structure the extent of public access to the wet beach.<sup>101</sup> On a private beach in New Jersey, the public will own the area of the beach from the mean high water mark to the water while the private owner will have title to the dry beach.<sup>102</sup>

#### B. What is a Rolling Easement?

A rolling easement can be “a broad collection of arrangements under which human activities are required to yield the right of way to naturally migrating shores.”<sup>103</sup> The most unique part of the instrument is that it is an interest in land that attaches to the shoreline, no

---

<sup>95</sup> See, e.g., *Neptune City v. Avon-by-the-Sea*, 294 A.2d 47, 49 (N.J. 1972) (“The tide-flowed land lying between the mean high and low water marks, as well as the ocean covered land seaward thereof to the state's boundary, is owned by the State in fee simple . . .”).

<sup>96</sup> See generally A. Dan Tarlock, RIPARIAN LAND—LOCATION OF WATER BOUNDARIES—BOUNDARIES OF TIDAL NAVIGABLE WATERS, L. OF WATER RIGHTS AND RES. § 3:35 (2012) (describing origin of state ownership of navigable waters in England). Other states, such as Virginia and Massachusetts, draw the line more in favor of private landowners, at the mean *low*-water mark. *Id.*

<sup>97</sup> See *id.*

<sup>98</sup> See *id.* The figure of 18.6 years is derived from “theoretical considerations of an astronomical character.” *Borax Consol. v. Los Angeles*, 296 U.S. 10, 27 (1935).

<sup>99</sup> See TITUS, *supra* note 48, at 16.

<sup>100</sup> *Id.*

<sup>101</sup> See, e.g., *id.* at 15–18 (describing littoral property laws in the fifty states).

<sup>102</sup> See *Raleigh Ave. Beach Ass’n v. Atlantis Beach Club, Inc.*, 879 A.2d 112, 119 (N.J. 2005). Even if the dry beach is privately owned, “reasonable” access must be provided to the public in order to access the publicly owned wet beach. *Id.*

<sup>103</sup> James Titus, *Rising Seas, Coastal Erosion, and the Takings Clause: How to Save Wetlands and Beaches Without Hurting Property Owners*, 57 MD. L. REV. 1279, 1313 (1998).

matter where it moves.<sup>104</sup> But it might also be drafted to prevent harmful shoreline armoring or the construction of permanent structures on portions of the property.<sup>105</sup>

Consider the following example. Blackacre is beachfront property on a two-mile wide barrier island. The property has a house set back approximately five feet from a dune in poor condition. The mean-high watermark is 150 feet from the dune. The owner of Blackacre signs an easement that allows the government to enter and periodically replenish and reinforce the dune. The easement also prohibits the owner of the property from building permanent structures, such as bulkheads or seawalls. In return, the owner receives guaranteed continuous protection from beach erosion at no cost, but on one condition: that the dune line must hold a required minimum distance from the mean-high watermark. If the minimum threshold is met, the government has the power to shift the dune landward and remove any structures that might prevent such movement.

One obvious consequence of such an agreement is that it may eventually require the complete removal of a landowner's home. This concern can be assuaged for two reasons. First, the easement line would shift only when the ocean is precipitously close to the dune such that reinforcing permanent structures like houses is prohibitively expensive or even physically impossible.<sup>106</sup> In such a case, a house would already be in danger of imminent damage from coastal flooding and storms.<sup>107</sup> Second, most forecasted sea level rise will occur in the second half of this century, meaning that the removal of permanent structures might not occur for decades, if ever.<sup>108</sup> Indeed, for a "typical coastal parcel, submergence by the rising sea is so

---

<sup>104</sup> See TITUS, *supra* note 48, at 23–25.

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

<sup>106</sup> *Id.* at 89–90.

<sup>107</sup> *Id.*

<sup>108</sup> See Lemonic, *supra* note 65.

uncertain and far in the future that it has no practical impact on how an owner uses the land, whether or not there is a rolling easement.”<sup>109</sup>

Thus, the use of rolling easements acknowledges two realities: (1) that preventing development altogether on valuable coastal lands is unpopular and unfeasible; and (2) that these lands may nevertheless one day have to be abandoned to the rising sea.<sup>110</sup> Rolling easements accommodate this notion by fostering a “living shoreline”—one that allows coastal ecosystems to move inland with a rising sea while simultaneously permitting certain stabilization efforts.<sup>111</sup>

### 1. In Practice

Recognition of sea-level rise and the need for adaptive responses to it are a part of coastal regulation in several states.<sup>112</sup> Maine’s Coastal Sand Dune Rules<sup>113</sup> are one example.<sup>114</sup> They regulate coastal sand dune systems, which are broadly defined as “sand and gravel deposits within a marine beach system, including, but not limited to . . . frontal dunes, dune ridges, back dunes and other sand and gravel areas deposited by wave or wind action.”<sup>115</sup> The rules restrict construction in any zone within an “erosion hazard area,” the definition of which is also appropriately broad.<sup>116</sup> If any part of a dune system can reasonably be expected to become a coastal wetland<sup>117</sup> due to shoreline change in the next century, it is an erosion hazard area.<sup>118</sup>

---

<sup>109</sup> TITUS, *supra* note 48, at 151.

<sup>110</sup> *See id.* at 57.

<sup>111</sup> *Id.* at 4–5.

<sup>112</sup> *See generally* Meg Caldwell & Craig Holt Segall, *No Day at the Beach: Sea Level Rise, Ecosystem Loss, and Public Access Along the California Coast*, 34 *ECOLOGY L.Q.* 533, 572–75 (2007) (describing legislative responses to coastal erosion in Maine, Massachusetts, North Carolina, South Carolina, Oregon, and California).

<sup>113</sup> 06-096 ME. CODE R. ch. 355 § 3 (LEXISNEXIS 2013).

<sup>114</sup> *See* Caldwell & Segall, *supra* note 112, at 572.

<sup>115</sup> 06-096 ME. CODE R. ch. 355 § 3(H).

<sup>116</sup> 06-096 ME. CODE R. ch. 355 § 3(P).

<sup>117</sup> The rules define coastal wetlands as “all tidal and subtidal lands; all areas with vegetation present that is tolerant of salt water and occurs primarily in salt water or estuarine habitat; and any . . . contiguous lowland that is subject to tidal action during the highest tide level for each year in which an activity is proposed . . . .” 06-096 ME. CODE R. ch. 355 § 3(I).

<sup>118</sup> 06-096 ME. CODE R. ch. 355 § 3(P).

Accordingly, the construction or rehabilitation of structures that prevent the movement of wind, water, or sand is prohibited in these locations.<sup>119</sup>

Although the term is not found within them, the rolling easement doctrine plays a significant role in Maine's Coastal Sand Dune Rules. Natural landward migration, for example, is an aspect of the regulations' definition for coastal sand dune system.<sup>120</sup> For example, the rules' conditions for shoreline construction permits state that if a "shoreline recedes such that a coastal wetland . . . extends to any part of the structure . . . for a period of six months or more, then the approved structure along with appurtenant facilities must be removed and the site must be restored to natural conditions within one year."<sup>121</sup> Maine's coastal regulations are thus strikingly forward looking. They explicitly recognize the folly of prescribing rigid guidelines for shoreline construction and instead put landowners on notice that their land use expectations must adapt to a rising sea.

Massachusetts and South Carolina also have legislation addressing future coastal erosion.<sup>122</sup> The Massachusetts Code of Regulations asserts that a dune's ability to move landward on retreating shorelines protects the coast from storm damage.<sup>123</sup> Appropriately, the regulations prohibit any structure within 100 feet of a coastal dune from "interfering with the landward or lateral movement of the dune."<sup>124</sup> And South Carolina's Beachfront Management Act states that both the public and private sectors have an interest in allowing the beach system sufficient space to "accrete and erode in its natural cycle . . . ."<sup>125</sup> The legislation also explicitly

---

<sup>119</sup> 06-096 ME. CODE R. ch. 355 § 3(J), (W).

<sup>120</sup> See 06-096 ME. CODE R. ch. 355 § 10(A).

<sup>121</sup> *Id.*

<sup>122</sup> See Caldwell & Segall, *supra* note 112, at 572–75.

<sup>123</sup> 310 MASS. CODE. REGS §10.28(1) (2013).

<sup>124</sup> *Id.* See also Caldwell & Segall, *supra* note 112, at 572.

<sup>125</sup> S.C. CODE ANN. REGS §48-39-250(6) (2012); see also Caldwell, *supra* note 112, at 573.

encourages those who own permanent structures on the coast to retreat from it.<sup>126</sup> Consistent within these states' legislation is an acknowledgement of the vulnerability of the coast and the critical importance of minimally invasive strategies, and even retreat, to protect it.

## 2. *Severance v. Patterson*

Traditionally, however, the State of Texas applied the rolling easement doctrine “more forcefully and for a longer period of time than any other U.S. state.”<sup>127</sup> The Court of Appeals of Texas, in *Feinman v. State*, first explicitly elucidated the concept.<sup>128</sup> In *Feinman*, a hurricane caused a vegetation line in Galveston, Texas to shift landward onto coastal property.<sup>129</sup> As a result, several landowners found that all or part of their land was seaward of the vegetation line.<sup>130</sup> Because such structures inhibited the public's access to the ocean, the Texas Attorney General prevented the landowners from repairing or rebuilding any structures seaward of the line.<sup>131</sup>

The Attorney General based his authority to do so on the Texas Open Beaches Act (OBA).<sup>132</sup> The OBA prohibits landowners from erecting permanent structures that interfere with the public's access to Texas beaches.<sup>133</sup> The law, passed in 1959, protects the public's access to the shoreline up to the vegetation line in locations where the public has a right of use or an easement.<sup>134</sup> The OBA says explicitly that any beachfront property abutting the Gulf of Mexico

---

<sup>126</sup> § 48-39-250(6).

<sup>127</sup> Richard J. McLaughlin, *Rolling Easements as a Response to Sea Level Rise in Coastal Texas: Current Status of the Law after Severance v. Patterson*, 26 J. LAND USE & ENVTL. L. 365, 369 (2011).

<sup>128</sup> *Feinman v. State*, 717 S.W.2d 106 (Tex. Ct. App. 1986); *see also* Richard McLaughlin, *supra* note 127, at 376.

<sup>129</sup> *Feinman*, 717 S.W.2d at 107.

<sup>130</sup> *Id.*

<sup>131</sup> *Id.*

<sup>132</sup> *Id.*

<sup>133</sup> Tex. Nat. Res. Code Ann. § 61.012 (West 2011); *Feinman*, 717 S.W.2d at 718–19.

<sup>134</sup> *Feinman*, 717 S.W.2d at 107, 111.

is burdened by a public access easement.<sup>135</sup> The single issue presented in *Feinman* was whether or not, under the OBA, a public access easement established along a vegetation line moved automatically with the line after a hurricane.<sup>136</sup> The court in *Feinman* said yes, ruling that although the OBA did not specifically use the phrase “rolling easement,” the concept was implicit in the act.<sup>137</sup>

The court ruled this way for three reasons. First, the court said that an easement’s purpose should withstand changes to the terrain it is attached to. Texas case law previously recognized that easements alongside rivers and seas survived such changes.<sup>138</sup> Second, because the purpose of the OBA was to protect public access beaches where the public had a right to use them, the easement could shrink significantly or even, as in this case, disappear.<sup>139</sup> Allowing such a result would frustrate the OBA’s purpose of securing public access to the shoreline.<sup>140</sup> Finally, the court believed that allowing the easement to remain at the original vegetation line would be unfeasible because it would require that the boundary be determined by pure guesswork once that line disappeared or moved.<sup>141</sup> After all, the previous dune line had been “obliterated” by the hurricane.<sup>142</sup> After *Feinman*, Texas courts consistently held that the public access easement moved with the vegetation line, whether inland or towards the sea.<sup>143</sup>

---

<sup>135</sup> § 61.012 (“If the property is in close proximity to a beach fronting the Gulf of Mexico, the purchaser is hereby advised that the public has acquired a right of use or easement to or over the area of any public beach by prescription, dedication, or presumption, or has retained a right by virtue of continuous right in the public since time immemorial, as recognized in law and custom.”).

<sup>136</sup> *Feinman*, 717 S.W.2d at 110.

<sup>137</sup> *Id.*

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

<sup>139</sup> *Id.* at 111.

<sup>140</sup> *Feinman*, 717 S.W.2d at 111.

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

<sup>142</sup> *Id.* at 107.

<sup>143</sup> See *Severance v. Patterson*, 370 S.W.3d 705, 752 (Tex. 2012) (Lerhrmann, J. dissenting) (“[E]very Texas appellate court that has considered the issue has concluded that the public’s easement on the dry beach rolls, even if they have not used the term ‘rolling easement.’”); see also *Brannan v. State*, 365 S.W.3d 1 (Tex. Ct. App. 2011), vacated 390 S.W.3d 301 (Tex. 2013); *Arlington v. Tex. Gen. Land Office*, 38 S.W. 3d 764 (Tex. Ct. App. 2001); see generally *McLaughlin*, *supra* note 127, at 375.

In 2012, however, the Supreme Court of Texas ruled that the state did not recognize the rolling easement doctrine.<sup>144</sup> The facts of that case, *Severance v. Patterson*,<sup>145</sup> were much like *Feinman*. A hurricane caused the vegetation line on Galveston Island’s West Beach to move significantly, placing two of landowner Carol Severance’s three properties seaward of the vegetation line.<sup>146</sup> The most seaward lot (“Lot 1”) was destroyed by the storm but was previously encumbered by a public use easement. The adjacent lot (“Lot 2”), now on the seaward side of the shifted vegetation line, was not so encumbered.<sup>147</sup> The Texas Attorney General claimed that the easement on Lot 1 rolled landward with the vegetation line onto Lot 2.<sup>148</sup> Thus, Severance’s house on Lot 2 interfered with the public’s use of the beach and was in violation of the OBA.<sup>149</sup> Accordingly, the State sought removal of the house on that lot.<sup>150</sup> In response, Severance sued state officials in federal court.<sup>151</sup> Severance argued that Texas, by trying to enforce the easement without proving its existence on land never encumbered by an easement, infringed her constitutional protection against uncompensated takings.<sup>152</sup>

The subsequent procedural history of *Severance* is complex. Severance brought suit in the United States District Court for the Southern District of Texas, which ruled that the easement had indeed shifted onto Lot 2 as a result of the Hurricane.<sup>153</sup> Severance appealed that ruling to the Fifth Circuit Court of Appeals.<sup>154</sup> The Fifth Circuit then certified unsettled questions of

---

<sup>144</sup> *Severance v. Patterson*, 370 S.W.3d 705, 708 (Tex. 2012).

<sup>145</sup> *Id.*

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

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

<sup>148</sup> *Id.*

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

<sup>150</sup> *Severance*, 370 S.W.3d at 712.

<sup>151</sup> *Id.*

<sup>152</sup> *Id.* at 711.

<sup>153</sup> *Id.* at 712.

<sup>154</sup> *Id.*

Texas law to the Texas Supreme Court.<sup>155</sup> Those questions asked: (1) Does Texas recognize rolling easements?; (2) If so, does the concept derive from the OBA or the common law?; and (3) If a rolling easement shifts onto a lot previously unencumbered by any easement, is the landowner entitled to any compensation?<sup>156</sup>

In response, the Texas Supreme Court ruled that in the case of an avulsive event, like a hurricane, easements do not shift landward with the vegetation line.<sup>157</sup> The court, however, later granted Texas's motion for a rehearing.<sup>158</sup> When Severance sold the property at issue, the Court sent the case back to the Fifth Circuit to address whether the case was now moot.<sup>159</sup> The Fifth Circuit ruled that it was not, and reinstated Texas's rehearing of the certified questions at issue.<sup>160</sup> At long last, the court finally ruled on the issue in March of 2012.<sup>161</sup>

After the rehearing, the Supreme Court of Texas weighed the public's right to beach access against private property owners' right to exclude others from their property.<sup>162</sup> In its analysis of the OBA, the court emphasized that the Act did not create any new property rights for Texans<sup>163</sup> and, therefore, the State had the burden of establishing that a public access easement exists on any given parcel of land, as there was no evidence of a right of public use on the beach.<sup>164</sup> Thus, the court held that, despite years of appellate courts saying otherwise, Texas did not recognize the rolling easement doctrine.<sup>165</sup> Citing the doctrines of erosion, accretion, and

---

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

<sup>156</sup> *Severance v. Patterson*, 566 F. 3d 490, 504 (5th Cir. 2009).

<sup>157</sup> *Severance v. Patterson*, 345 S.W.3d 18 (Tex. 2010) *superseded by Severance*, 370 S.W.3d 705.

<sup>158</sup> *Severance*, 370 S.W.3d at 708.

<sup>159</sup> *Id.* at 712.

<sup>160</sup> *Id.*

<sup>161</sup> *Id.*

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

<sup>163</sup> *Id.* at 713.

<sup>164</sup> *See Severance*, 370 S.W.3d. at 711 (“The OBA did not purport to create public easements along Texas’s ocean beaches, but recognized that mere pronouncements of encumbrances on private property rights are improper.”).

<sup>165</sup> *Id.* at 721–25.

avulsion,<sup>166</sup> the court said “avulsive events such hurricanes that drastically alter pre-existing littoral boundaries do not have the effect of allowing a public use easement to migrate onto previously unencumbered property.”<sup>167</sup>

*Severance*, then, rebuts the holding in *Feinman* that preventing an easement from shifting with the shoreline would frustrate the purpose of the OBA.<sup>168</sup> Instead, the *Severance* court held that a public use easement could not exist in the State of Texas unless proven under the OBA or the common law.<sup>169</sup> A newly made beachfront property such as Lot 2, then, could never be burdened by an easement. Since no such easement could be proven on Carol Severance’s property, the State could not force her to remove her property without compensating her.<sup>170</sup> Most importantly, the public use easement adjacent to the property was lost to the sea.<sup>171</sup>

Justice Medina, in his dissent, argued that the majority’s erosion/avulsion distinction was merely an exercise in semantics, stating that if “an easement was established over the dry beach before the avulsive event, it must remain over the new dry beach.”<sup>172</sup> Joining Medina, but writing separately, Justice Lehrmann said that the precise metes and bounds of the original easement were unimportant.<sup>173</sup> Instead, the critical inquiry was the “locale” and purpose of the easement.<sup>174</sup> In this case, the purpose of the easement was access to the Gulf of Mexico and,

---

<sup>166</sup> See *supra* Part I.

<sup>167</sup> 725.

<sup>168</sup> See *id.* at 724 (“In those situations, when changes occur suddenly and perceptibly to materially alter littoral boundaries, the land encumbered by the easement is lost to the public trust, along with the easement attached to that land. Then, the State may seek to establish another easement as permitted by law on the newly created dry beach and enforce an asserted public right to use the private land.”).

<sup>169</sup> *Id.* at 723–24.

<sup>170</sup> *Id.* at 724, 732.

<sup>171</sup> *Id.* at 726. The remaining questions were dependent on the Court stating that the state did, in fact, recognize the rolling easement doctrine and were not addressed by the court. *Id.* at 705.

<sup>172</sup> *Id.* at 725 (Medina, J. dissenting).

<sup>173</sup> *Severance*, 370 S.W.3d at 752 (Lehrmann, J. dissenting).

<sup>174</sup> *Id.* (Lehrmann, J. dissenting). Such reasoning is consistent with an easement created by custom, which “is not limited to one particular individual or the owner of a particular estate, nor is it constricted by metes and bounds. Instead, it attaches to a locale, in this case the dry beach.” *Id.* at 745 (Lehrmann, J. dissenting).

thus, the easement was attached to the beach in that location.<sup>175</sup> In addition, Justice Lehrmann said that the ruling would be unfair to non-littoral property owners, who obviously purchased property nearby the beach with the expectation that they will have access to it.<sup>176</sup> That expectation would, of course, be in danger after *Severance*'s ruling that public access easements could disappear with a suddenly changed shoreline.

#### IV. Lessons from *Severance*

In considering the use of rolling easements in New Jersey, two important lessons concerning coastal land use and protection can be learned by reading *Severance*. First, the long-established avulsion doctrine, which New Jersey also follows, requires fine-tuning, lest it directly interfere, as it did in *Severance*, with the shifting of an established easement in the event of a sudden inward shoreline encroachment. Second, as Justice Lehrmann in his *Severance* dissent noted, courts should not allow shorefront landowner's private interests to trump the wider community's interest in access, enjoyment, and preservation of the nearby beach. These lessons, and the issues surrounding them, are particularly pertinent in New Jersey, because they recently arose in two cases in front of New Jersey courts, *City of Long Branch v. Liu*<sup>177</sup> and *Borough of Harvey Cedars v. Karan*.<sup>178</sup>

##### A. Lesson One: Fine-Tuning the Avulsion Doctrine

As stated, an avulsion is a sudden, perceptible "loss or addition to land by the action of water or otherwise" that is often the result of "violent shifts of land" caused by storms and

---

<sup>175</sup> See *id.* (Lehrmann, J. dissenting) ("Here, the easement provided the public with access to the Gulf and the associated recreational opportunities. The specific metes and bounds location of the easement is unimportant to that purpose; instead, proximity to the Gulf is the critical determinant of its utility and thus its location.").

<sup>176</sup> *Id.*

<sup>177</sup> 4 A.3d 542 (N.J. 2012).

<sup>178</sup> 45 A. 3d 983 (2012).

floods.<sup>179</sup> Under, the common law,<sup>180</sup> Texas law,<sup>181</sup> and New Jersey law,<sup>182</sup> when an avulsion occurs, property lines do not shift and the previous mean high water mark remains as the dividing line between public and private property. Avulsion is the opposite of accretion, a slow and imperceptible addition or reduction in land, where title shifts.<sup>183</sup> Much judicial ink is therefore spent on deciding whether an addition or loss of land is the result of an avulsion or an accretion, and thus title often turns on how courts choose to interpret the innately nebulous term “perceptible.”<sup>184</sup>

*Severance* shows that the avulsion doctrine is likely to be viewed by some courts as incompatible with rolling easements. The easement at issue in *Severance* shifted onto Severance’s property after a classic avulsive event: a hurricane.<sup>185</sup> The Court used the doctrine to extinguish the easement that had previously burdened Severance’s adjacent property but was now underwater, stating that it was “unsupported by ancient common law precepts, to hold that a public easement can suddenly encumber an entirely new portion of a landowner's property or a different landowner's property that was not previously subject to that right of use.”<sup>186</sup>

The Supreme Court of New Jersey itself, in *City of Long Branch v. Liu*,<sup>187</sup> recently bolstered the strength of the avulsion doctrine, applying it to man-made as well as natural

---

<sup>179</sup> *City of Long Branch v. Liu*, 4 A.3d 542, 550 (N.J. 2012) (quoting *Garret v. New Jersey*, 289 A.2d. 542, 546 (N.J. Super. Ct. Ch. Div. 1972).

<sup>180</sup> *Stop the Beach Renourishment v. Florida Dept. of Env'tl. Prot.*, 130 S. Ct. 2592, 2599 (2010).

<sup>181</sup> *Severance v. Patterson*, 370 S.W.3d 705, 722 (Tex. 2012).

<sup>182</sup> *Liu*, 4 A.3d at 550.

<sup>183</sup> *Stop the Beach Renourishment*, 130 S. Ct. at 2598.

<sup>184</sup> See *Sax*, *supra* note 32, at 351 (“[T]he deeply rooted doctrinal “accretion/avulsion” distinction. . . continues to generate a good deal of wasteful litigation, with pointless and expensive lay and expert testimony, and dispute over distinctions that ought to make no difference.”). Indeed, this was a central purpose behind Justice Medina’s dissent in *Severance*. See *Severance*, 370 S.W.3d at 735 (Medina, J. dissenting) (“Because the Court’s vague distinction between gradual and sudden or slight and dramatic changes to the coastline jeopardizes the public’s right to free and open beaches, recognized over the past 200 years, and threatens to embroil the state in beach-front litigation for the next 200 years, I respectfully dissent.”).

<sup>185</sup> *Severance*, 370 S.W.3d at 720.

<sup>186</sup> *Id.* at 723.

<sup>187</sup> 4 A.3d 542.

events.<sup>188</sup> In that case, the coastal town of Long Branch sought to acquire a portion of the Lius' land by eminent domain.<sup>189</sup> The Lius contested the valuation of their property, asserting that a government-sponsored 225-foot extension of the dry beach in front of their home enlarged their property, as their deed said that their property extended to the mean high water mark.<sup>190</sup> The court held that the man-made addition was in fact an avulsive event and, therefore, the new beach was state-held public land.<sup>191</sup> Interestingly, *Liu* shows that, while the avulsion doctrine may frustrate rolling easement legislation, it can also preserve the fruits of the State's restoration efforts by protecting newly created beaches from claims by nearby private property owners.<sup>192</sup>

The problem remains, however, that, as a result of climate change, avulsive events like floods and hurricanes will become more common and the doctrine could frustrate efforts to protect beaches.<sup>193</sup> Unsurprisingly, the implications of global climate change were completely outside the concern of those who crafted the common law principles.<sup>194</sup> As Professor Joseph Sax points out, at common law, littoral landowners often had a duty to protect eroding shorelines with seawalls.<sup>195</sup> Accordingly, the doctrine of accretion served a balancing function to provide compensation for the burden of such duties.<sup>196</sup> Today, however, seawalls are seen as detrimental

---

<sup>188</sup> *Id.* at 549.

<sup>189</sup> *Id.* at 547.

<sup>190</sup> *Id.*

<sup>191</sup> *See id.* at 554–555. The legislature could provide, in the event they repudiate the avulsion doctrine, that man-made additions to beaches sponsored by taxpayer money are held in trust for the public. Thus the result in *Liu* would remain the same.

<sup>192</sup> Rolling easement legislation, then, would have to explicitly provide that, notwithstanding changes in the background principles of avulsion, additions of land with taxpayer funds are property of the public at large, not the adjacent private landowners.

<sup>193</sup> *See Christie, supra* note 40, at 61 (“restoring beaches to deal with modern day problems caused by erosion and sea level rise simply does not neatly fit into common law categories of accretion or avulsion-it is *sui generis*. New legal principles are necessary to address the public interests and effect on private property rights. The legislature and the courts have the ability to fill in gaps in the common law that fail to address these modern day problems and issues adequately.”)

<sup>194</sup> Sax, *supra* note 32

<sup>195</sup> *Id.*

<sup>196</sup> *Id.*

to the health of the shoreline and, instead, retreat is more desirable for shore preservation, no matter how quickly the inundation occurs.<sup>197</sup>

In the age of sea level rise, an emphasis on the perceptibility of erosive events in designating littoral boundaries is therefore misplaced. The avulsion doctrine attempts to protect the injustice that would occur if a landowner's title disappeared suddenly and unexpectedly.<sup>198</sup> The soundness of that justification, however, weakens when severe weather events and coastal flooding become more frequent and predictable. If the shoreline shifts landward because of an avulsion, courts should therefore be permitted, as the dissent noted in *Severance*, to consider the “locale” and purpose of the easement rather than its precise metes and bounds.<sup>199</sup>

In *Severance*, the purpose of the easement was access to the beach on the Gulf of Mexico and, the dissent argued, the easement should be attached to the beach as it moves inland.<sup>200</sup> So the issue is really one of perception: the *Severance* court viewed the beach on Galveston Island as a single entity, which, once underwater, was destroyed. When the water moved inland, whatever sand was in front of it was a new beach, free from the restraints on the inundated one. But it is doubtful that most people view beaches so rigidly. Beaches are not static. As such, it is entirely sensible to allow flexible legal devices that secure and preserve access to the beach to remain with it when it shifts inland.<sup>201</sup>

## B. Lesson Two: Balancing Interests in Obtaining Rolling Easements

---

<sup>197</sup> See *Severance v. Patterson* 370 S.W.3d 705, 725 (Tex. 2012) (“[A]vulsive events such as storms and hurricanes that drastically alter pre-existing littoral boundaries do not have the effect of allowing a public use easement to migrate onto previously unencumbered property.”).

<sup>198</sup> See *Christie*, *supra* note 40, at 25.

<sup>199</sup> *Id.* at 752.

<sup>200</sup> See *id.* (“Here, the easement provided the public with access to the Gulf and the associated recreational opportunities. The specific metes and bounds location of the easement is unimportant to that purpose; instead, proximity to the Gulf is the critical determinant of its utility and thus its location.”).

<sup>201</sup> *Severance v. Patterson*, 370 S.W.3d at 754 (Lehrmann, J. dissenting) (“The servitude's boundary is natural and dynamic, responding to the ever-changing course of a navigable waterway.”)

The facts and result of *Severance* also show how beachfront landowners' interests in the adjacent ocean are often prioritized over the similar interests of the community at large. Justice Lehrmann in her dissent, for example, emphasized that the failure to recognize the rolling easement doctrine meant that access easements non-littoral property owners would be compromised.<sup>202</sup> This, in turn, would result in a decrease in property and rental values because a prime motive for purchasing or renting a home near the shore is to access the ocean.<sup>203</sup> And Justice Guzman noted that Texas "has long recognized the need for a balance between public and private use of one of the state's most valuable resources . . . ."<sup>204</sup> This balance was upset by the court's decision that the limited access the easement provided for could be hampered in the event of an avulsion.<sup>205</sup>

The inherent conflict between public and private coastal land use has also hampered New Jersey's efforts to secure and maintain easements on coastal property. It has done so in two ways. First, as mentioned, the state has had significant difficulty obtaining easements for beach protection in the first place.<sup>206</sup> And, second, even when it does obtain an easement to protect nearby beaches, the state has been subject to costly litigation and judgments when such efforts interfere with beachfront landowners' property.<sup>207</sup> Advancing rolling easements, whether through a transactional or legislative/regulatory mode, then, will require a "reasoned balance" between a private owner's land interests and the public's right to shoreline protection and access.<sup>208</sup>

---

<sup>202</sup> *Severance*, 370 S.W.3d at 755 (Lehrmann, J. dissenting).

<sup>203</sup> *Id.* (Lehrmann, J. dissenting).

<sup>204</sup> *Id.* at 744 (Guzman, J. dissenting).

<sup>205</sup> *Id.* ("A public-use easement like that at issue here does not cede exclusive use of the land to the public, but instead leaves the rights of the property owner, with the exception of the right to exclude the public from access to the beach around the house.")

<sup>206</sup> *See, supra*, Part I.

<sup>207</sup> *See infra*, p. 29.

<sup>208</sup> *Severance*, 370 S.W.3d at 733 (Medina, J. dissenting).

Although, given the steady march of the seas, New Jersey could theoretically ensure a cost-effective inland migration of the shoreline by simply prohibiting beachfront landowners from armoring their properties from the sea.<sup>209</sup> That decision would rest soundly within its coastal zoning authority.<sup>210</sup> And the state could then itself refrain from armoring the shore. The result would be a de facto rolling easement program, in which nature could run its course.<sup>211</sup> The sea would move inland and no one would be permitted to stop it. Individuals seeking to purchase or build a home or business near the shore would do so with the awareness of the risk they take by such actions. Properties could be condemned by the state as the ocean proceeds inland and landowners could be *then* be duly compensated the little value left in their properties.<sup>212</sup>

A solution to forego all attempts to stop the shore is, for quite obvious reasons, politically unfeasible, especially in New Jersey. For one, the Jersey Shore is extremely densely populated and therefore a decision to prohibit all beach preservation efforts could adversely affect the lives and safety of hundreds of thousands of people.<sup>213</sup> Additionally, the shore provides an outstanding economic boon to the state. In 2008, for example, the Jersey Shore earned more than \$23 billion in tourism revenue.<sup>214</sup> Finally, the Jersey Shore is so intertwined with and essential to the culture and identity of New Jerseyans that preventing any and all shoreline

---

<sup>209</sup> See TITUS, *supra* note 48, at 89.

<sup>210</sup> See Coastal Area Facility and Review Act, N.J. STAT. ANN. § 13:19-5 (West 2013) (describing permit requirements for shoreline construction projects).

<sup>211</sup> See Titus, *supra* note 48, at 41–48.

<sup>212</sup> See *id.* at 152.

<sup>213</sup> PSUTY & OFIARA, *supra* note 46, at 1; Andrew Romano, *America's Coastal Denial*, THE DAILY BEAST, at 1 (Mar. 25, 2013 4:45 AM), <http://www.thedailybeast.com/newsweek/2013/03/25/the-day-climate-change-ruined-our-lives.html>.

<sup>214</sup> Romano, *supra* note 213, at 1.

armoring and then condemning properties as the shoreline encroaches is, whatever its more abstract merits, an admittedly outlandish suggestion.<sup>215</sup>

But the proposition is worth addressing for this reason: once New Jersey *does* act to preserve the shore it often needs to get permission from, or pay, private landowners to do so.<sup>216</sup> The government's frustration with noncooperation reached a particularly high point in March 2013, when Governor Christie threatened to publicly name the individual landowners, who might "think their view of the Atlantic Ocean is more important than the lives and property of their neighbors."<sup>217</sup> The infamously brash governor, it seemed, had taken a page from the playbook of Long Beach Mayor Michael Mancini.<sup>218</sup>

And Governor Christie's frustration, in part, likely rose from the paradox inherent in the conflict: aren't beachfront owners particularly benefited from dune preservation efforts that they should wholeheartedly assign the state its requested easement and not expect compensation? The New Jersey Appellate Division recently answered "no" to that question in *Borough of Harvey Cedars v. Karan*,<sup>219</sup> a case that Governor Christie's remark above directly alludes to.

---

<sup>215</sup> See e.g., Molly Hennessey-Fiske & Scott Gold, *Where the Shore Used to Be: Many of New Jersey's Beachfront Attractions May Never Be the Same After Sandy*, L.A. TIMES, Nov. 4, 2012, at 1, available at <http://articles.latimes.com/2012/nov/04/nation/la-na-jersey-shore-20121104> ("It wasn't unusual for generations of a family to head to the same stretch of beach, for children to play in the same neon-lighted arcades that once entertained their grandparents. Interrupting that tradition [after Hurricane Sandy], local residents said, would be the greatest loss of all."); Wayne Parry, *Will Jersey Shore Ever Be the Same?*, CHICAGO DAILY HERALD, Nov. 4, 2012, at 6, available at <http://www.dailyherald.com/article/20121103/business/711039887/?interstitial=1> (describing the Jersey Shore as an American icon).

<sup>216</sup> See Romano, *supra* note 213 (chronicling the State's difficulty in getting shoreline easements in post-Sandy New Jersey); *supra* Part I.

<sup>217</sup> Jenna Portnoy, *Christie Threatens to Call Out Those who Resist Dunes*, THE STAR LEDGER (Newark, N.J.), Mar. 27, 2013, at 22, available at [http://www.nj.com/politics/index.ssf/2013/03/christie\\_to\\_personally\\_call\\_ou.html#incart\\_river\\_default](http://www.nj.com/politics/index.ssf/2013/03/christie_to_personally_call_ou.html#incart_river_default).

<sup>218</sup> See *supra* Part I.

<sup>219</sup> 40 A. 3d 75 (N.J. Super. Ct. App. Div. 2012). *cert. granted*, *Borough of Harvey Cedars v. Karan*, 45 A. 3d 983 (2012).

1. *Borough of Harvey Cedars v. Karan*

In 1973, Harvey and Phyllis Karan built their dream house in the Borough of Harvey Cedars on Long Beach Island.<sup>220</sup> The beachfront home had a “glass wall facing the ocean, oceanfront decks, and sweeping views of the beach, shoreline, and ocean.”<sup>221</sup> A twenty-two-foot high dune constructed by the Army Corps of Engineers in order to ensure public access and enjoyment of the nearby beach eventually obstructed those views, however.<sup>222</sup> And so the Karans sued, seeking compensation for the diminution in the value of their property as a result of the obstruction of their ocean view.<sup>223</sup> But the State argued that because the dunes significantly protected the house from potential storm damage, compensation was not warranted.<sup>224</sup>

At a pre-trial hearing, an Army Corps of Engineers expert testified that, without the project, the Karans’ property had a fifty-six percent chance of being entirely destroyed in the next thirty years.<sup>225</sup> The trial court nonetheless ruled that such a benefit was only a “general benefit” the Karans enjoyed from the project, ancillary to the Army Corp. of Engineer’s aim of ensuring comprehensive public access and enjoyment of the entire island’s beaches.<sup>226</sup> Under New Jersey law, such are “general” benefits, enjoyed by all landowners in the area of the improvement, and cannot be used to reduce the compensation owed to landowner’s as a result of a taking.<sup>227</sup> Evidence of the benefit of the dune project to the Karans’ property was therefore

---

<sup>220</sup> *Id.* at 80.

<sup>221</sup> *Id.*

<sup>222</sup> *Id.* at 77, 79.

<sup>223</sup> *Id.* at 77.

<sup>224</sup> *Id.* at 77.

<sup>225</sup> *Borough of Harvey Cedars*, 40 A. 3d at 79.

<sup>226</sup> *Id.*

<sup>227</sup> *Id.* at 81.

excluded at trial.<sup>228</sup> The jury subsequently awarded the Karans \$375,000 to compensate for their lost ocean view.<sup>229</sup>

The Appellate Division affirmed the judgment because they agreed with the court below that the Karans received a “general” rather than a “special” benefit from the construction of the dune that obstructed their view.<sup>230</sup> The court held that “a special benefit is a benefit particular to the property that is the subject of the condemnation and not the type of benefit that was the object of the project [i.e., general benefits].”<sup>231</sup> Because the protection of the house was a natural result of the overall preservation objective of the project, the Karans gained no special benefit.<sup>232</sup> This was so even if, by virtue of the house’s location, it received more immediate protection from coastal flooding because of the dune’s construction.<sup>233</sup> The court noted that the existence of a special benefit “is a matter of kind rather than degree.”<sup>234</sup> As such, the benefit of the dune project was simply enjoyed by the Karans in a greater degree than the surrounding area and could not be factored into the compensation owed by the State as a result of the taking.<sup>235</sup>

*Harvey Cedars* is currently under review by the Supreme Court of New Jersey.<sup>236</sup> Whatever its result, it provide an excellent illustration of the concept of “moral hazard.” A moral hazard exists when socially undesirable behavior is encouraged by an expectation upon the person committing such behavior that it will go unpunished and, perhaps, even rewarded.<sup>237</sup> For example, the damage award in *Harvey Cedars* was based on the diminution of the overall value

---

<sup>228</sup> *Id.* at 79.

<sup>229</sup> *Id.*

<sup>230</sup> *Id.*

<sup>231</sup> *Borough of Harvey Cedars*, 40 A. 3d at 79.

<sup>232</sup> *Id.*

<sup>233</sup> *Id.* at 81.

<sup>234</sup> *Id.* at 82.

<sup>235</sup> *Id.*

<sup>236</sup> *Id.* at 83.

<sup>237</sup> A. Dan Tarlock, *United States Flood Control Policy: The Incomplete Transition from the Illusion of Total Protection to Risk Management*, 23 DUKE ENV'T'L L. & POL'Y F. 151, 166 (2012).

of the Karans' home, which, at the time of trial, was indisputably \$1.9 million.<sup>238</sup> But how could a house be so valuable that, as one expert testified, had a fifty-six percent chance of being destroyed within thirty years if no dunes were built to protect it?<sup>239</sup> There are two answers to that question.

The first is that the risk that no dunes would be built must be rather low, otherwise prospective homeowners would be hesitant to pay \$1.9 million for home that would either (a) be destroyed in 30 years or (b) require expensive, and out-of-pocket, dune replenishment.<sup>240</sup> So the paradox inherent in cases like *Harvey Cedars* is this: if the government did not build any beach dunes and the Karans' home was either drastically reduced in value or completely destroyed, the Karans would not be owed a penny. When the government *does* build and replenish beachfront dunes, however, it owes the Karans money for the decrease in the inflated value of their home, even though that value is inflated, in large part, because of the virtually guaranteed protective presence of those dunes in the first place.<sup>241</sup>

The second reason why homes like the Karans' are so high despite their perilous locations is the existence of federal flood insurance. Generally, private insurers are hesitant to insure catastrophic flood damage because of the high underwriting costs.<sup>242</sup> In response, the

---

<sup>238</sup> Experts on both sides agreed that \$1.9 million was a proper valuation. *Borough of Harvey Cedars*, 40 A. 3d at 80.

<sup>239</sup> *Id.* at 79.

<sup>240</sup> See Romano, *supra* note 213, at 5 (describing wealthy Long Beach Island landowner who spent in excess of \$100,000 on his own "bulletproof" dunes).

<sup>241</sup> A counter to this argument is that the general population all receive increased home values by the existence of the dunes. Why, then, should the Karans have to receive a reduced increase in their home value merely because of the unfortunate (in these circumstance, at least) placement of their home? See *L.A. Cnty. Metro. Transp. Auth. v. Cont'l Dev. Corp.*, 941 P.2d 809, 823 (Ca. 1997) (Kennard, J. concurring and dissenting) ("Limiting offsets only to special benefits more equitably distributes among the entire community the benefits and burdens of the project: the landowner is not forced to pay for the general benefits that others receive without charge. . ."); *but see id.* at 823 ("The law has no mechanism by which to ensure an absolutely fair distribution of costs and benefits across the entire community. We must instead search for the rule of greatest relative fairness, or least unfairness.").

<sup>242</sup> Daniel A. Farber, *Basic Compensation for Victims of Climate Change*, 155 U. Pa. L. Rev. 1605, 1630 (2007).

United States created the National Federal Flood Insurance Program (NFIP).<sup>243</sup> Today, this program is one of the United States' greatest domestic expenses.<sup>244</sup> From 1978 to 2011, the government paid out roughly \$24 billion in flood insurance claims.<sup>245</sup> Unsurprisingly, the NFIP is now in billion of dollars of debt.<sup>246</sup> Some have called for an end to the program, stating that beach owners who decide to live in harm's way should bear the cost of doing so, rather than taxpayers.<sup>247</sup> But, like it or not, the program still exists and provides incentives and security for homeowners like the Karans, to build near the shore, however perilous and costly those actions might be to the public at large.<sup>248</sup>

Thus, *Harvey Cedars* illustrates the costs legislatures might face in implementing rolling easements. New Jersey, however, could reduce the burden of such compensation by changing the ways in which juries are permitted to calculate it. Indeed, one solution might be to statutorily repudiate the special benefits doctrine altogether.

i. Repudiating the Special Benefits Doctrine

By repudiating the special benefits doctrine, or changing they ways those benefits are defined, New Jersey could reduce the amount of compensation it would owe if it were to burden beach property with rolling easements. This is because juries would be permitted to offset the benefits of beach protection in evaluating compensation for takings claims. After all, if *Harvey Cedars* could show that the price of the Karans' house would have significantly diminished, that amount could be reduced from the \$375,000 cost of the blocked ocean views. The Appellate

---

<sup>243</sup> *Id.*; Judith Kildow & Jason Scorse, Op-Ed, *End Federal Flood Insurance*, The N.Y. Times, Nov. 29, 2012 at A31, available at <http://www.nytimes.com/2012/11/29/opinion/end-federal-flood-insurance.html>.

<sup>244</sup> Farber, *supra* note 242 at 1630.

<sup>245</sup> Kildow & Scorse, *supra* note 243.

<sup>246</sup> *Id.*

<sup>247</sup> *Id.*

<sup>248</sup> That said, a recent statute, the Biggerts-Waters Act, passed before Hurricane Sandy, will see substantial increases in the premiums paid for federal flood insurance. See generally Ed Beeson, *For Many the New Cost of Flood Insurance Tolls Oct. 1*, THE STAR LEDGER (NEW JERSEY), Mar. 30, 2013, at 1 (“[P]olicyholders will face 25 percent rate increases every year until their premiums reflect the full risk of flooding. . .”).

Division addressed this possibility in a footnote in *Harvey Cedars* but declined to elaborate on whether a legislature could have constitutional authority to allow for the offsetting of general benefits in a takings case.<sup>249</sup>

Nevertheless, other states, such as North Carolina and California, have allowed general benefits to be included in the calculation of compensation for takings.<sup>250</sup> And Supreme Court precedent dating back to the 19th century supports such rulings. In *Bauman v. Ross*<sup>251</sup> for example, a statute passed by Congress provided for roadways to be built in greater District of Columbia.<sup>252</sup> Article 11 of the law said that, in providing compensation for any land taken by execution of the act, the government was permitted to factor in the “antecedent” benefits received by nature of the condemnation.<sup>253</sup> Upholding the statute as constitutional, the Court noted that states vary in how they factor in benefits received from a public project in considering just compensation.<sup>254</sup> The Court, however, endorsed none of the methods, stating that the Constitution “contains no express prohibition against considering benefits in estimating the just compensation to be paid for private property taken for the public use.”<sup>255</sup>

In a 1919 case, *McCoy v. Union Elevated Railroad Company*,<sup>256</sup> an elevated railroad was constructed directly in front of a Chicago hotel, causing injury to the property by way of smoke, dirt, noise, and loss of daylight.<sup>257</sup> In accordance with prior Illinois cases, the jury at trial was instructed that, in considering damages to the plaintiff, they could not take into account any

---

<sup>249</sup> See *Borough of Harvey Cedars v. Karan*, 40 A. 3d 75, 81 n. 5 (N.J. Super. Ct. App. Div. 2012). *cert. granted*, *Borough of Harvey Cedars v. Karan*, 45 A. 3d 983 (2012).

<sup>250</sup> See N.C. Gen. Stat. § 136-112 (permitting inclusion of both general and special benefits in condemnation of land by state Department of Transportation); *L.A. Cnty. Metro. Transp. Auth. v. Cont’l Dev. Corp.*, 941 P.2d 809 (Ca. 1997) (repudiating special benefits doctrine).

<sup>251</sup> 167 U.S. 548 (1897).

<sup>252</sup> *Id.* at 549.

<sup>253</sup> *Id.* at 587.

<sup>254</sup> *Id.* at 584.

<sup>255</sup> *Id.*

<sup>256</sup> 247 U.S. 354 (1918).

<sup>257</sup> *Id.* at 355.

general benefits the hotel received from the construction.<sup>258</sup> The jury could, however, consider the special benefits that the plaintiff received from the existence of the railway itself.<sup>259</sup> And the court considered an increase in market value by virtue of the presence of the railway as a special benefit, notwithstanding the fact that other properties within the vicinity were also so enhanced.<sup>260</sup>

Thus, the jury was instructed that the appropriate measure of damages was the difference between the fair market value of the hotel with the presence of the railway and the fair market value of the hotel without it.<sup>261</sup> Because the presence of the railway had in fact added great value to the hotel by way of increased foot traffic to the surrounding area, and that increased value could be considered by the fact finders, the plaintiff was not awarded any damages.<sup>262</sup> Quoting *Bauman* extensively, the Supreme Court affirmed, saying that it was “unable to say that [plaintiff] suffers deprivation of any fundamental right when a state . . . permits consideration of actual benefits—enhancement in market value—flowing directly from a public work, although all in the neighborhood receive like advantages.”<sup>263</sup>

*McCoy* is surprisingly analogous to *Harvey Cedars*. But for the difference in state property law regarding how special benefits are defined, the result in *Harvey Cedars* could have been identical to that of *McCoy*. The jury could have been instructed to consider the difference in market value of the Karan’s house without the dune project and with the project and factored compensation accordingly. Just as the loss of daylight and increased noise could have been offset by the increase in value of the plaintiff’s hotel as a result of the increased foot traffic the

---

<sup>258</sup> *Id.* at 358.

<sup>259</sup> *Id.* at 359–62.

<sup>260</sup> *Id.* at 359.

<sup>261</sup> *McCoy*, 247 U.S. at 361–62.

<sup>262</sup> *Id.* at 355–57.

<sup>263</sup> *Id.* at 366.

railway brought, so too could the value of the Karans' lost ocean view be appropriately balanced with the significant protection that the constructed dune would provide.

To establish rolling easements in New Jersey, the state must revise how general and special benefits are defined. If fact finders could be permitted to take into account the measurable benefits of such project, the state could then burden shoreline property with rolling easements and face less drastic judgments like the one in *Harvey Cedars*. The result would be a more realistic and fair distribution of the economic burdens of shoreline protection. This method would also be more efficient than the fact-dependent means by which Texas established rolling easements through the OBA. In *Severance*, for example, Texas argued that the public's right to access the beach at issue had always existed and, therefore, Carol Severance could not exclude beachgoers from her property without violating the OBA.<sup>264</sup> In order to test this claim, the court had to delve back into Mexican law before Texas was founded.<sup>265</sup> A one-size-fits-all solution, i.e. burdening all beachfront property with the easement, would be far more efficient. But this can only be done if New Jersey alters the ways courts can calculate damages in the event of a taking of shore property.

### C. The Impact of Retreat

But still, the psychological impact of instituting new ways of thinking about shoreline property principles, including the use of an instrument like rolling easements, would undoubtedly be strong. This is because rolling easements necessarily invoke the "R" word: retreat. And, after

---

<sup>264</sup> *Severance v. Patterson*, 370 S.W.3d 705, 710 (2012); *see also* Tex. Nat. Res. Code Ann. § 61.012 (West 2011) (defining "public beach" as a beach area where the public "has retained a right by virtue of continuous right in the public since time immemorial, as recognized in law and custom.")

<sup>265</sup> *Severance*, 370 S.W.3d at 710. The court found no evidence of Texas' claim and even found facts to the contrary: in 1840 Texas had granted private title to the beach at Galveston Island without reserving access for the public. *Id.*

Sandy, New Jerseyans have expressly said that retreat is not an option.<sup>266</sup> When asked about a potential plan to purchase homes in vulnerable coastal areas, for example, Union Beach Mayor Paul Smith rejected the notion, saying not one of his residents expressed a desire to give up their homes. Smith said, “[w]e don’t want to buy people out. We want them to rebuild. If they have to build higher, they’ll build higher. We want people to stay. We don’t want them to go.”<sup>267</sup>

Experts, such as scientist Orrin Pilkey, proclaim that such a mentality is at best shortsighted and at worst madness. In an editorial in the *New York Times* shortly after Hurricane Sandy, Professor Pilkey said that “this ‘lets come back stronger and better’ attitude, though empowering, is the wrong approach to the increasing hazard of living close to the rising sea.”<sup>268</sup> Instead, Pilkey suggested smarter development of the shore and also the beginning of a retreat from the edge of the sea.<sup>269</sup>

The rolling easement doctrine might be a fitting political fix to the above viewpoints and an environmental crisis, however. The doctrine would (1) permit shoreline re-nourishment; (2) accommodate inland migration of the shoreline if environmentally or economically necessary; and (3) provide notice to current and future Jersey shore landowners that awareness of potentially uncontrollable natural forces must play a role in how they use their coastal properties. Neither repetitive, costly rebuilding nor complete shoreline retreat are likely feasible. A middle ground, therefore, that provides a means by which landowners and governments can successfully adapt to a rising sea is of profound importance.

## V. Conclusion

---

<sup>266</sup> See, e.g., Paul Mulshine, *Desert the Shore? Withdrawal is Not an Option*, THE STAR LEDGER, Feb. 5, 2013, at 15, available at [http://blog.nj.com/njv\\_paul\\_mulshine/2013/02/desert\\_the\\_jersey\\_shore\\_retrea.html](http://blog.nj.com/njv_paul_mulshine/2013/02/desert_the_jersey_shore_retrea.html).

<sup>267</sup> MaryAnn Spoto, *Governor Proposes Buying Out Flood Zones He Wants to Use Part of Federal Sandy Aid*, THE STAR LEDGER (Newark, N.J.), Feb 7, 2013, at 11, available at [http://www.nj.com/news/index.ssf/2013/02/new\\_jersey\\_considering\\_buying.html#incart\\_river\\_default](http://www.nj.com/news/index.ssf/2013/02/new_jersey_considering_buying.html#incart_river_default) (internal quotation marks omitted).

<sup>268</sup> Pilkey, *supra* note 70.

<sup>269</sup> *Id.*

No matter what measures are taken by governments to protect the shoreline, one thing is for certain: sea level rise cannot be stopped. Nonetheless, in places like the New Jersey Shore, long standing tradition and economics requires adaptive responses that will foster both preservation and retreat. And in order to institute these responses, not only will we have to change the way we think about the shore but we must also alter the ways in which courts have viewed it as well. This recognition will allow New Jersey to respond sensibly and pragmatically to the dangers of a rising sea.