

6-1-2012

## Under the Boardwalk: Defining Meaningful Access to Publicly Funded Beach Replenishment Projects

Elizabeth Kayatta

Follow this and additional works at: <https://lawdigitalcommons.bc.edu/ealr>



Part of the [Property Law and Real Estate Commons](#)

---

### Recommended Citation

Elizabeth Kayatta, *Under the Boardwalk: Defining Meaningful Access to Publicly Funded Beach Replenishment Projects*, 39 B.C. Envtl. Aff. L. Rev. 449 (2012), <https://lawdigitalcommons.bc.edu/ealr/vol39/iss2/6>

This Notes is brought to you for free and open access by the Law Journals at Digital Commons @ Boston College Law School. It has been accepted for inclusion in Boston College Environmental Affairs Law Review by an authorized editor of Digital Commons @ Boston College Law School. For more information, please contact [abraham.bauer@bc.edu](mailto:abraham.bauer@bc.edu).

# UNDER THE BOARDWALK: DEFINING MEANINGFUL ACCESS TO PUBLICLY FUNDED BEACH REPLENISHMENT PROJECTS

ELIZABETH KAYATTA\*

**Abstract:** Extending beaches seaward by adding sand through replenishment projects has become a common strategy for slowing the effects of erosion. As tons of sand are brought to the beaches, new land literally rises out of the water. Courts and state legislatures have invoked the public trust doctrine to vest title to this new land with the people, but questions remain as to how much public access must be provided to replenished beaches. New Jersey, North Carolina, and Florida are examined as three different approaches to applying the public trust doctrine and providing public access to replenished beaches.

## INTRODUCTION

It is a familiar sight along the American coast: padlocked gates, roadside tow-zones, and “No Beach Access” signs. Our beaches may be one of the country’s greatest treasures, but they are unquestionably a closely guarded jewel. Property owners and municipalities alike do everything in their power to limit beach access to those who can pay.<sup>1</sup>

Yet unbeknownst to many of the citizens who are not fortunate enough to live in beachfront homes, billions of tax dollars go toward protecting the property of those who do.<sup>2</sup> As the oceans rise and sand washes out to sea, beaches are slowly shrinking.<sup>3</sup> To ward off the encroaching ocean, states across the country have heaped over a billion cubic yards of sand onto the nation’s beaches as part of “nourishment” projects.<sup>4</sup> Supporters of these projects justify the extraordinary cost by

---

\* Executive Articles Editor, BOSTON COLLEGE ENVIRONMENTAL AFFAIRS LAW REVIEW, 2011–12.

<sup>1</sup> See Editorial, *Broadening Beach Access*, N.Y. TIMES (Dec. 10, 2006), <http://query.nytimes.com/gst/fullpage.html?res=9406EFDD1731F933A25751C1A9609C8B63>.

<sup>2</sup> See *id.*; *Beach Nourishment*, W. CAROLINA UNIV., <http://www.wcu.edu/1038.asp> (last visited May 19, 2012) [hereinafter *Nourishment Statistics*].

<sup>3</sup> See *infra* notes 20–22 and accompanying text.

<sup>4</sup> *Nourishment Statistics*, *supra* note 2.

citing the need to protect oceanfront property and the beach-dependent travel and tourism industry.<sup>5</sup>

Though the benefits to the tourism industry and beachfront property owners are great, it is difficult to see what advantage the general public gains from these “nourishment” projects. American law treats public access to beaches as part of the Public Trust Doctrine, an ancient legal principle that places certain natural resources under common ownership for use by members of the public.<sup>6</sup> Historically, this right to beach access included only the ocean and wet sand falling below the mean high water mark.<sup>7</sup> A number of state courts, however, have recognized that enjoyment of this area of the beach also depends upon access to the inland dry sand.<sup>8</sup> When beach replenishment projects use public funds to increase this dry sand area, state legislatures and courts must grapple with defining both ownership and public access rights to this newly created land.<sup>9</sup>

This Note argues that the public trust doctrine correctly applies to replenished beaches. Part I begins with a description of the mechanics of beach erosion and an overview of beach replenishment projects in the United States. In addition, it reviews examples of laws that govern projects taken to slow the loss of sediment. Most importantly, Part I introduces the foundations of the public trust doctrine as applied to beaches.<sup>10</sup> Part II looks at three different state approaches as case studies for how ownership and public access should be determined for re-

<sup>5</sup> See *Beach Nourishment: A Guide for Local Government Officials, Types of Benefits*, NOAA, <http://web.archive.org/web/20110611182930/http://www.csc.noaa.gov/beachnourishment/html/human/socio/types.htm> (last visited May 19, 2011) [hereinafter *Types of Benefits*]; see also James R. Houston, *The Economic Value of Beaches—A 2008 Update*, 76 J. AM. SHORE & BEACH PRESERVATION ASS'N 22, 23 (2008). Note that in early 2012 NOAA removed the original links to its *Beach Nourishment: A Guide for Local Government Officials* online document. The links provided here are for cached versions of the pages as they appeared when originally accessed in 2011.

<sup>6</sup> See Richard J. Lazarus, *Changing Conceptions of Property and Sovereignty in Natural Resources: Questioning the Public Trust Doctrine*, 71 IOWA L. REV. 631, 633, 649 (1986).

<sup>7</sup> See JAMES G. TITUS, EPA, COASTAL SENSITIVITY TO SEA-LEVEL RISE: A FOCUS ON THE MID-ATLANTIC REGION 119 (2009), available at [http://www.epa.gov/climatechange/effects/coastal/pdfs/CCSP\\_chapter8.pdf](http://www.epa.gov/climatechange/effects/coastal/pdfs/CCSP_chapter8.pdf).

<sup>8</sup> See *City of Daytona Beach v. Tona-Rama, Inc.*, 294 So. 2d 73, 78 (Fla. 1974) (recognizing the right of the public to enjoy the dry sand area for sunbathing and other recreational purposes); *Matthews v. Bay Head Improvement Ass'n*, 471 A.2d 355, 365 (N.J. 1984) (finding dry sand recreational uses, such as bathing, swimming, and other shore activities, fall under protection of the public trust doctrine).

<sup>9</sup> See discussion *infra* notes 123–208.

<sup>10</sup> See discussion *infra* notes 123–208.

plenished beaches.<sup>11</sup> Part III considers why the public trust doctrine correctly applies to replenished beaches and mandates that the public have meaningful access. Finally, Part III identifies the strengths and weakness of the three state approaches examined in Part II.<sup>12</sup>

## I. THE EVOLUTION OF BEACH REPLENISHMENT

### A. *Fighting Beach Erosion*

The United States has 95,000 miles of shoreline stretching along the Atlantic and Pacific Oceans, the Gulf of Mexico, and the Great Lakes.<sup>13</sup> Beaches, dunes, and barrier islands dominate much of this shoreline, particularly along the coastal plains of Atlantic and Gulf States.<sup>14</sup> In their natural state, these shorelines are constantly changing.<sup>15</sup> The shape of a beach naturally shifts as rain, wind, and waves transport sand and sediment among offshore deposits, beaches, and dunes.<sup>16</sup> In addition to seasonal variations, storms can change a beach's profile dramatically.<sup>17</sup>

Human activity also disrupts the natural sediment exchange process.<sup>18</sup> Inland, the construction of dams and dredging of navigational channels can cut off the supply of sediments reaching the coastal plain, essentially depriving the beach of its sand supply.<sup>19</sup> At the water's edge, the construction of seawalls hardens the sandy coastline with concrete and steel to protect property from waves but disrupts intertidal habitats and the natural supply of sand.<sup>20</sup> Most damaging is the development of beachfront homes, resorts, businesses, and industries, which interferes with the natural expansion and contraction of a beach's dunes system

---

<sup>11</sup> See discussion *infra* notes 123–208.

<sup>12</sup> See discussion *infra* notes 209–247.

<sup>13</sup> *Coastal Ecosystem Research*, NOAA, [http://celebrating200years.noaa.gov/transformations/coastal\\_research/](http://celebrating200years.noaa.gov/transformations/coastal_research/) (last visited May 19, 2012).

<sup>14</sup> *Beach Nourishment: A Guide for Local Government Officials*, Coastal Geology, NOAA, <http://web.archive.org/web/20110611165518/http://www.csc.noaa.gov/beachnourishment/html/geo/index.htm> (last visited May 19, 2012).

<sup>15</sup> See CASEY HEDRICK, NOAA, STATE, TERRITORY, AND COMMONWEALTH BEACH NOURISHMENT PROGRAMS: A NATIONAL OVERVIEW 1 (2000), available at <http://coastalmanagement.noaa.gov/resources/docs/finalbeach.pdf>.

<sup>16</sup> See *id.*

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

<sup>18</sup> See *id.*

<sup>19</sup> *Id.*; *Beach Nourishment: A Guide for Local Government Officials*, Technical Summary, NOAA, <http://web.archive.org/web/20110721055549/http://csc.noaa.gov/beachnourishment/html/geo/scitech.htm> (last visited May 19, 2012) [hereinafter *Technical Summary*].

<sup>20</sup> HEDRICK, *supra* note 15, at 1.

and obstructs the sediment transport cycle, leading to higher rates of erosion.<sup>21</sup>

Rising sea levels further exacerbate the problem of beach erosion.<sup>22</sup> In the United States, a one-foot rise in sea-level could cause up to one thousand feet of horizontal beach loss to erosion.<sup>23</sup> Rising sea levels also prime coastal areas for larger storm surges that can alter a beach's profile overnight.<sup>24</sup>

There are several approaches to mitigate potential beach loss due to erosion. One of the oldest methods to slow erosion is structural beach stabilization<sup>25</sup>—which uses physical barriers to protect beaches.<sup>26</sup> Some of these structures, such as seawalls and bulkheads, permanently fix the shore line, but can accelerate the erosion of the sand beneath them.<sup>27</sup> Others, such as groins and jetties, extend perpendicularly from the shore.<sup>28</sup> These perpendicular structures prevent sand from being washed down shore and disperse wave energy to slow the rate of erosion.<sup>29</sup> These structures, however, cut off the supply of sand to adjacent beaches, so the problem of erosion merely moves along the coastline.<sup>30</sup>

Another approach involves moving development projects away from the beach.<sup>31</sup> Land use controls, such as coastal construction setback programs, preserve a beach's natural sand cycle by limiting new waterfront development.<sup>32</sup> For beachfront that has already been developed, however, retreat may be the only solution to restore the sand cycle.<sup>33</sup> Using this technique, oceanfront buildings are removed and re-

<sup>21</sup> See HEDRICK, *supra* note 15, at 1; *Technical Summary*, *supra* note 19.

<sup>22</sup> JAMES G. TITUS, THE POTENTIAL EFFECTS OF GLOBAL CLIMATE CHANGE ON THE UNITED STATES, REPORT TO CONGRESS 118 (1989), available at [http://www.epa.gov/climatechange/effects/downloads/rtc\\_sealevelrise.pdf](http://www.epa.gov/climatechange/effects/downloads/rtc_sealevelrise.pdf). As climate change causes ice to melt and thermal expansion, global sea levels rise. IPCC, A REPORT OF WORKING GROUP I OF THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE: A SUMMARY FOR POLICYMAKERS 7 (2007).

<sup>23</sup> TITUS, *supra* note 22, at 122. Horizontal beach loss due to rising sea level depends on coastal topography. Estimates of beach loss range between 50–100 feet in the Northeast, 200 feet in the Carolinas, 100–1000 feet in Florida, and 200–400 feet in California. *Id.*

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

<sup>25</sup> See HEDRICK, *supra* note 15, at 2.

<sup>26</sup> See *id.*

<sup>27</sup> *Id.*

<sup>28</sup> *Beach Nourishment: A Guide for Local Government Officials, Effects of Shoreline Structures*, NOAA, <http://web.archive.org/web/20110611173247/http://www.csc.noaa.gov/beachnourishment/html/geo/shorelin.htm> (last visited May 19, 2012).

<sup>29</sup> See HEDRICK, *supra* note 15, at 2.

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

<sup>31</sup> See *id.* at 2–3, 10.

<sup>32</sup> *Id.*

<sup>33</sup> *Id.* at 3.

located, allowing nature to take its course and hopefully restore the beach.<sup>34</sup> This option has not been very popular in the United States.<sup>35</sup>

The final approach combats erosion through beach replenishment.<sup>36</sup> This technique, also termed beach nourishment, is the process of adding fill to a beach to replace sand lost due to the natural erosion process.<sup>37</sup> The fill originates in several different types of “borrow sites,” a term used to describe the origin of sand to be removed for placement onto a beach.<sup>38</sup> Offshore sources include drowned barrier islands, sand ridges, sand bars, and tidal deltas.<sup>39</sup> Some states are increasingly using dredged sediments from navigation projects to nourish beaches.<sup>40</sup> Upland sources, such as sand dune accumulations and construction-grade excavated sand, may also be used as borrow sites, though they are typically less suitable for beach replenishment.<sup>41</sup> An important step in selecting a borrow site is evaluating the suitability.<sup>42</sup> Care must be taken to choose a borrow site with sand of a suitable sediment size, mineralogy, and color to ensure a good match with the destination beach.<sup>43</sup> The grain size and composition of source sand also affects volume calculations and sand distribution projections for nourishment projects.<sup>44</sup> Ensuring a good match between source sand and a beach is of particular social and economic importance because discolored, grainy, or otherwise aesthetically unpleasing beaches are not well-received by tourists and beach-goers.<sup>45</sup>

---

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

<sup>35</sup> *Technical Summary*, *supra* note 19.

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

<sup>37</sup> *Id.*

<sup>38</sup> *Beach Nourishment: A Guide for Local Government Officials, Borrow Areas*, NOAA, <http://web.archive.org/web/20110611173325/http://www.csc.noaa.gov/beachnourishment/html/geo/borrow.htm> (last visited May 19, 2012) [hereinafter *Borrow Areas*]; *Beach Nourishment: A Guide for Local Government Officials, Glossary*, NOAA, <http://web.archive.org/web/20110611172720/http://www.csc.noaa.gov/beachnourishment/html/geo/glossary.htm> (last visited May 19, 2012).

<sup>39</sup> *Borrow Areas*, *supra* note 38; *Glossary*, *supra* note 38.

<sup>40</sup> HEDRICK, *supra* note 15, at 4.

<sup>41</sup> See *Borrow Areas*, *supra* note 38. Dune sand is typically very fine, which makes it less suitable for beach stabilization. *Id.* Excavated sand poses logistical problems; transporting the required quantity to the beach is costly and potentially damaging to roads. *Id.*

<sup>42</sup> *Beach Nourishment: A Guide for Local Government Officials, Identifying Suitable Sources*, NOAA, <http://web.archive.org/web/20110611173430/http://www.csc.noaa.gov/beachnourishment/html/geo/sand.htm> (last visited May 19, 2012).

<sup>43</sup> *Id.*

<sup>44</sup> *Id.*

<sup>45</sup> See *Borrow Areas*, *supra* note 38.

### B. Regulation and Funding of Beach Replenishment Projects

Federal, state, and local governments share oversight and funding of beach replenishment projects.<sup>46</sup> Such divided control has created an elaborate patchwork of statutes and regulations that govern replenishment projects and access to the completed beach.<sup>47</sup>

The first federal regulation of shoreline protection activities was passed in 1930 and resulted in the creation of the Beach Erosion Board within the United States Army Corps of Engineers (Corps).<sup>48</sup> The same bill also authorized the Corps to work with state governments on shore protection studies.<sup>49</sup> Over the next three decades, Congress created federal funding for beach nourishment projects and opened federal waters to sand excavation.<sup>50</sup> In 1956, Congress further expanded federal authority over shoreline protection when it passed legislation that permitted beach replenishment on “privately owned shores where substantial public benefits would result.”<sup>51</sup> The Coastal Engineering Research Board and the Coastal Engineering Research Center (CERC) replaced the Beach Erosion Board in 1963 to meet the growing demand for beach replenishment studies and projects.<sup>52</sup>

Federal interest in beach replenishment programs, however, has waned over the past two decades. The Water Resources Development Act of 1999 set federal cost-sharing limits that signaled a new movement to reduce the federal contribution to nourishment projects, placing more of the cost on the states.<sup>53</sup> Additionally, the act curtailed federal participation in nourishment projects on privately owned land without public access, public use, and public parking.<sup>54</sup> Both the Clinton and

<sup>46</sup> HEDRICK, *supra* note 15, at 9; *Beach Nourishment: A Guide for Local Government Officials, Law and Policy*, NOAA, <http://web.archive.org/web/20110611170139/http://www.csc.noaa.gov/beachnourishment/html/human/law/index.htm> (last visited May 19, 2012) [hereinafter *Law and Policy*].

<sup>47</sup> River and Harbor Act, Pub. L. No. 71-520, 46 Stat. 918 (1930); *Law and Policy, supra* note 46.

<sup>48</sup> *Beach Nourishment: A Guide for Local Government Officials, History and Evolution of Laws*, NOAA, <http://web.archive.org/web/20110611170034/http://www.csc.noaa.gov/beachnourishment/html/human/law/history.htm> (last visited May 19, 2012) [hereinafter *Evolution of Laws*]; THEODORE M. HILLYER, U.S. ARMY CORPS OF ENGINEERS, SHORELINE PROTECTION AND BEACH EROSION CONTROL STUDY: FINAL REPORT: AN ANALYSIS OF THE U.S. ARMY CORPS OF ENGINEERS SHORE PROTECTION PROGRAM, at II-4 (1996).

<sup>49</sup> HILLYER, *supra* note 48, at II-4.

<sup>50</sup> See *Evolution of Laws, supra* note 48.

<sup>51</sup> *Id.*; see Pub. L. No. 84-826, 70 Stat. 702 (1956).

<sup>52</sup> *Evolution of Laws, supra* note 48; see Pub. L. No. 88-172, 77 Stat. 304 (1963).

<sup>53</sup> *Evolution of Laws, supra* note 48; see Water Resources Development Act of 1999, 33 U.S.C. §§ 2211-2222 (2006).

<sup>54</sup> *Evolution of Laws, supra* note 48; HILLYER, *supra* note 48, at II-4.

George W. Bush administrations opposed federal funding of beach replenishment projects, arguing that the projects should be funded locally.<sup>55</sup> Despite pressure from congressional representatives of coastal states, the Obama administration has cut federal funding to beach replenishment projects.<sup>56</sup>

Many agencies jointly oversee nourishment projects. Participating federal agencies include the Corps (administering the federal shore protection program), the National Oceanic and Atmospheric Administration (NOAA) (supporting and subsidizing state coastal zone management activities), the U.S. Geological Survey (researching beach erosion and replenishment), the Federal Emergency Management Agency (coordinating disaster planning and response activities), and the Minerals Management Service of the Department of the Interior (managing continental shelf borrow sites).<sup>57</sup> At the state level, the Coastal Zone Management Act (CZMA) assists state governments in developing coastal management programs.<sup>58</sup> The CZMA also furthers a national policy of providing public access to the coasts for recreational purposes.<sup>59</sup> Though grants under the CZMA generally may not be used to fund beach replenishment projects, they may sometimes be used by states when planning nourishment projects.<sup>60</sup>

Beach replenishment projects are widespread in the United States.<sup>61</sup> As of the most recent NOAA survey in 2000, twenty-one of the thirty-three coastal states have formal beach replenishment policies in place.<sup>62</sup> Approximately 28,000 miles of American beach have been replenished with more than one billion cubic yards of sand.<sup>63</sup> These re-

---

<sup>55</sup> Deirdre Fernandes, *Leaders Urge Obama to Use Stimulus for Beach Sand*, VIRGINIAN-PILOT (Apr. 13, 2009), <http://hamptonroads.com/2009/04/leaders-urge-obama-use-stimulus-beach-sand>.

<sup>56</sup> Al Campbell, *Zero Funds in President's Budget for Beach Replenishment Projects*, CAPE MAY COUNTY HERALD (N.J.) (Mar. 28, 2012), <http://www.capemaycountyherald.com/article/government/court+house/81553-zero+funds+president%E2%80%99s+budget+beach+replenishment+projects>; Jessica Coomes, *Stimulus Leaves N.J. Beaches High and Dry*, GLOUCESTER COUNTY TIMES (N.J.) (Apr. 30, 2009), <http://www.nj.com/gloucester/index.ssf?/base/news-4/124107633515300.xml&coll=8>.

<sup>57</sup> See *Evolution of Laws*, *supra* note 48.

<sup>58</sup> *Id.*; see Coastal Zone Management Act, 16 U.S.C. § 1452 (2006).

<sup>59</sup> 16 U.S.C. § 1452(2)(E).

<sup>60</sup> *Evolution of Laws*, *supra* note 48.

<sup>61</sup> See HEDRICK, *supra* note 15, at 5.

<sup>62</sup> *Id.* at 5–6. Beach replenishment projects also occur in states without formal policies. *Id.* For example, Maryland has a state funding program for beach replenishment, but does not have an official policy for these projects on the books. *Id.* at 6.

<sup>63</sup> See *Nourishment Statistics*, *supra* note 2.

plenishment projects have totaled over \$2.6 billion.<sup>64</sup> To date, Florida has spent over \$1 billion, making it the leader in beach replenishment spending.<sup>65</sup> At over \$545 million in spending, New Jersey has spent the second most, though it has spent more per mile replenished than any other state.<sup>66</sup> At over \$197 million, North Carolina has also spent a sizeable amount on replenishment projects.<sup>67</sup>

In spite of all the money poured into these projects, replenishment is not a permanent solution.<sup>68</sup> A replenished beach must typically be renourished on a periodic basis, ranging between three to seven years.<sup>69</sup> Thus, some of the money spent on beach nourishment has likely gone to the same stretches of beach repeatedly.<sup>70</sup>

Though the cost is great, supporters of beach nourishment argue that the benefits of preserving America's beaches justify the price.<sup>71</sup> Wide beaches help protect property from storms by dissipating wave energy across the surf zone, which reduces damage to shorefront structures.<sup>72</sup> Nourished beaches also offer substantial recreational benefits and are a critical part of the travel and tourism industries.<sup>73</sup> These industries provide jobs and tax revenues to the communities in which they operate.<sup>74</sup> Supporters also argue that preserving beaches helps maintain habitats for beach flora and nesting species like sea turtles and shore birds.<sup>75</sup>

#### D. Beach Replenishment Opposition

Not all groups have welcomed beach replenishment projects with open arms.<sup>76</sup> Opponents argue that projects amount to "little more than building temporary sand dikes to protect against an advancing

---

<sup>64</sup> *Id.*

<sup>65</sup> *Id.*

<sup>66</sup> *See id.*

<sup>67</sup> *Id.*

<sup>68</sup> *See* HEDRICK, *supra* note 15, at 3.

<sup>69</sup> *Id.*

<sup>70</sup> *See id.* Cape May, New Jersey, for example, has been replenished ten times between 1962 and 1995. *Id.*

<sup>71</sup> *See Types of Benefits, supra* note 5; Houston, *supra* note 5, at 23.

<sup>72</sup> *Technical Summary, supra* note 19.

<sup>73</sup> Houston, *supra* note 5, at 23-24.

<sup>74</sup> *Types of Benefits, supra* note 5.

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

<sup>76</sup> COMM. ON BEACH NOURISHMENT AND PROT., NAT'L RESEARCH COUNCIL, BEACH NOURISHMENT AND PROTECTION, at vii (1995), [http://www.nap.edu/openbook.php?record\\_id=4984&page=R1](http://www.nap.edu/openbook.php?record_id=4984&page=R1).

sea.<sup>77</sup> Even some environmental groups are opposed to beach replenishment.<sup>78</sup> These opponents argue that replenished beaches actually erode at a faster rate than the original beaches.<sup>79</sup> Additionally, they argue that the process of both dredging and leveling out sand is destructive to animal habitats.<sup>80</sup>

These groups are also concerned with the reduced recreational benefits of replenished beaches.<sup>81</sup> The Surfers' Environmental Alliance argues that replenishment projects ruin surfable waves.<sup>82</sup> The group also claims that dredging and replenishment projects affect wave action, causing riptides and creating unsafe conditions for swimmers.<sup>83</sup> An investigation by Florida Sportsman, the nation's leading sport fishing magazine, concluded that replenishment projects give little consideration to impacts on surf angling and fishing.<sup>84</sup> At the opposite end of the spectrum, beachfront property owners oppose beach replenishment out of fear that artificial dunes created during renourishment will diminish ocean views and lower property values.<sup>85</sup>

On occasion, opponents will point out that past replenishment projects have gone awry.<sup>86</sup> For example, the 1982 replenishment of Ocean City, New Jersey cost 2.5 million dollars, yet only two and a half months passed before all the sand had washed out to sea.<sup>87</sup> In a more startling incident, a two-year beach replenishment operation starting in 2006 in Surf City, New Jersey accidentally used sand from a borrow site that contained hundreds of World War I era munitions.<sup>88</sup> City officials blamed

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

<sup>78</sup> See, e.g., Don Barber, *Beach Nourishment Basics*, BRYN MAWR C., <http://www.brynmawr.edu/geology/geomorph/beachnourishmentinfo.html> (last visited May 19, 2012); *Beach Replenishment*, SURFERS' ENVTL. ALLIANCE (June 16, 2011), <http://www.seasurfer.org/beach-replenishment.html>.

<sup>79</sup> Barber, *supra* note 78.

<sup>80</sup> See *id.*

<sup>81</sup> See Jacqueline L. Urgo, *Environmentalists: Beach Projects Are Causing Dangerous Riptides*, INQUIRER CORRESPONDENT (Phila., Pa.), (June 23, 1998), [http://articles.philly.com/1998-06-23/news/25729472\\_1\\_beach-replenishment-project-riptides-currents](http://articles.philly.com/1998-06-23/news/25729472_1_beach-replenishment-project-riptides-currents).

<sup>82</sup> Coleen Dee Berry, *Gains, and Losses, Along the Shore*, N.Y. TIMES (Mar. 6, 2009), <http://www.nytimes.com/2009/03/08/nyregion/new-jersey/08beachnj.html>.

<sup>83</sup> See Urgo, *supra* note 81.

<sup>84</sup> Terry Gibson, *Addicted to Sand Pumping*, FLA. SPORTSMAN (May 16, 2011), [http://www.floridasportsman.com/2011/05/16/confron\\_0505112/](http://www.floridasportsman.com/2011/05/16/confron_0505112/)

<sup>85</sup> *State of the Beach Report: New Jersey: Beach Fill*, SURFRIDER FOUND., [http://www.beachapedia.org/State\\_of\\_the\\_Beach/State\\_Reports/NJ/Beach\\_Fill](http://www.beachapedia.org/State_of_the_Beach/State_Reports/NJ/Beach_Fill) (last visited May 19, 2012).

<sup>86</sup> See, e.g., COMM. ON BEACH NOURISHMENT AND PROT., *supra* note 76, at vii (noting that some past projects have failed to meet public expectations); Barber, *supra* note 78 (noting that few projects last more than five years and require costly renourishment).

<sup>87</sup> HEDRICK, *supra* note 15, at 3.

<sup>88</sup> Berry, *supra* note 82.

the Corps for not screening out debris during the replenishment project, but the Corps project manager predictably denied responsibility.<sup>89</sup>

### E. *The Public Trust Justification*

With huge amounts of tax dollars going toward beach replenishment projects, one has to ask how the government justifies spending this money. Certainly, this spending can be partially explained by the need for protecting beachfront property and infrastructure<sup>90</sup> or for supporting the tourism industry.<sup>91</sup> The underlying justification goes deeper than economics, however, delving into a legal doctrine as old as the beaches themselves. The public trust doctrine is a legal principle that charges the government with protecting certain resources for public use.<sup>92</sup> The United States has traditionally treated tidal waterways and shores as resources that are protected by the doctrine, and thus owned in common by the public.<sup>93</sup>

The public trust doctrine has ancient origins in Roman law.<sup>94</sup> The concept of preserving the beach as natural resources for use by the public was first codified by the Emperor Justinian:<sup>95</sup>

[T]he following things are by natural law common to all—the air, running water, the sea, and consequently the sea-shore. No one therefore is forbidden to access the sea-shore, provided he abstains from injury to houses, monuments, and buildings generally; for these are not, like the sea itself, subject to the law of nations.<sup>96</sup>

The doctrine has grown and evolved over time. By the Middle Ages, the doctrine had spread throughout Europe, and eventually manifested itself in the common law of England, where the Crown held title to the

---

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

<sup>90</sup> See *Types of Benefits*, *supra* note 5.

<sup>91</sup> See Houston, *supra* note 5.

<sup>92</sup> See N.J. DEP'T OF ENVTL. PROT., PUBLIC ACCESS IN NEW JERSEY: THE PUBLIC TRUST DOCTRINE AND PRACTICAL STEPS TO ENHANCE PUBLIC ACCESS 13 (2006), available at [www.state.nj.us/dep//cmp/access/public\\_access\\_handbook.pdf](http://www.state.nj.us/dep//cmp/access/public_access_handbook.pdf) [hereinafter N.J. PUBLIC TRUST].

<sup>93</sup> See *id.* at 10.

<sup>94</sup> Lazarus, *supra* note 6, at 633.

<sup>95</sup> *Id.*

<sup>96</sup> J. INST. 2.1.1.

shores in trust for the public.<sup>97</sup> Access to these shores was permitted for purposes of navigation, commerce, and fishing.<sup>98</sup>

The principle spread to the United States with the colonists.<sup>99</sup> After American independence, the royal rights to beaches and shores vested in the states.<sup>100</sup> The Supreme Court first upheld the public trust doctrine responsibilities imposed upon the states in 1892.<sup>101</sup> The Court, in *Illinois Central Railroad Co. v. Illinois*, noted that a state holds title to these lands “in trust for the people of the State that they may enjoy the navigation of the waters, carry on commerce over them, and have liberty of fishing therein freed from the obstruction or interference of private parties.”<sup>102</sup>

Courts continue to draw upon the public trust doctrine in environmental litigation.<sup>103</sup> In the years since *Illinois Central*, courts have extended public beach access rights under the doctrine to go beyond navigation, fishing, and commerce.<sup>104</sup> These decisions require the government to preserve the beach for the public to use for recreational purposes, such as sunbathing and swimming.<sup>105</sup> Thus, the ancient doctrine has evolved to meet the needs of contemporary Americans.

The public trust doctrine affords beaches varying protection from state to state.<sup>106</sup> In most states, the trust includes all land seaward of the mean high water mark, while the dry beach is held as private property.<sup>107</sup> Other states include a broader swathe of beach that includes dry sand,<sup>108</sup> but some protect only the land seaward of the mean low water mark.<sup>109</sup>

---

<sup>97</sup> Lazarus, *supra* note 6, at 635.

<sup>98</sup> *Id.* at 647.

<sup>99</sup> N.J. PUBLIC TRUST, *supra* note 92, at 10.

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

<sup>101</sup> See Ill. Cent. R.R. v. Illinois, 146 U.S. 387, 452 (1892).

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

<sup>103</sup> Lazarus, *supra* note 6, at 632.

<sup>104</sup> See *Tona-Rama, Inc.*, 294 So. 2d at 76, 78 (recognizing the right of the public to enjoy the dry sand area for sunbathing and other recreational purposes); *Matthews*, 471 A.2d at 358 (finding recreational uses, such as bathing, swimming, and other shore activities fall under protection of the public trust doctrine).

<sup>105</sup> *Tona-Rama*, 294 So. 2d at 76, 78; *Matthews*, 471 A.2d at 358.

<sup>106</sup> See TRUST, *supra* note 7, at 119.

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

<sup>108</sup> *Id.* Washington, Oregon, Hawaii, and Louisiana hold both the wet and dry sand of a beach in public trust. *Id.* at 119, fig.8.4. Texas and New Jersey hold the wet beach below high water mark in public trust, however both states also require public access be given along the dry beach inland of the high water mark. *Id.*

<sup>109</sup> *Id.* Virginia, Pennsylvania, Delaware, Massachusetts, and Maine include only the beach below the mean *low* water mark. *Id.*

At common law, property lines retreated as beaches naturally eroded away.<sup>110</sup> Sand that accumulated gradually and imperceptibly over time was known as an “accretion,” and was automatically included in the adjacent property owner’s title.<sup>111</sup> Sand that accumulated suddenly and perceptibly—as during a major storm or other natural event—was known as an “avulsion,” and title to this newly created land would vest in the state.<sup>112</sup> In situations where an adjacent private property owner intentionally increased the shorefront property by creating new beach, that individual would not receive title to the land reclaimed from the sea under the common law.<sup>113</sup>

Today, a majority of states vest title to the beach created through nourishment projects to the adjacent property owner.<sup>114</sup> Administratively, such an approach is appealing because it does not require calculating the point at which new sand begins and old sand ends.<sup>115</sup> It also forecloses the possibility that a state could dump sand in front of private property to create a new publicly owned beach.<sup>116</sup> Only a minority of states consider the title to the newly created beach to vest in the state.<sup>117</sup> Some state legislatures have codified this title transfer,<sup>118</sup> while others have left it to the courts to determine.<sup>119</sup> Thus, when it comes to beach replenishment, only a few states guarantee that the public will hold title to the product of their tax dollars.

Even if a state does not hold title to the newly created beach, the public may still gain access to a replenished beach through easements obtained by the government.<sup>120</sup> In these situations, property owners grant easements in exchange for the funding they need to protect their property through beach nourishment.<sup>121</sup>

In a 2000 report released by the Office of Ocean and Coastal Resource Management, NOAA recommended that the public have access to a nourished beach when large amounts of public funds have been

---

<sup>110</sup> TITUS, *supra* note 7, at 120.

<sup>111</sup> *Stop the Beach Renourishment, Inc. v. Fla. Dep’t of Env’t. Prot.*, 130 S. Ct. 2592, 2598 (2010).

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

<sup>113</sup> TITUS, *supra* note 7, at 120.

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

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

<sup>116</sup> *See id.*

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

<sup>118</sup> *See, e.g.*, FLA. STAT. § 161.191 (2011).

<sup>119</sup> *See City of Long Branch v. Liu*, 4 A.3d 542, 545–46 (N.J. 2010).

<sup>120</sup> *See TITUS, supra* note 7, at 121.

<sup>121</sup> *See id.*

spent on a replenishment project.<sup>122</sup> Such access includes “convenient perpendicular access at well-marked access points and the provision of adequate support facilities such as parking, shuttle services, restrooms, and food services.”<sup>123</sup> Twenty-six states have adopted some sort of general beach access requirements, but only California, Connecticut, New Jersey and North Carolina have policies that explicitly address access to replenished beaches.<sup>124</sup>

## II. STATE CASE STUDIES

### A. *New Jersey’s Top-Down Mandate Approach*

The state of New Jersey has a long history with beach nourishment; shore protection efforts have been taking place in the state since the 1800s.<sup>125</sup> By the early twentieth century, New Jersey’s shore communities were serving as beachfront vacation destinations for the residents of New York and Philadelphia.<sup>126</sup> As demand for these resort communities increased, so did shorefront development.<sup>127</sup> Following a period of intense storm activity along the New Jersey coast between 1915 and 1921,<sup>128</sup> the state legislature formed an engineering advisory board to study coastal erosion.<sup>129</sup> The increased public awareness also led to the creation of the American Shore and Beach Preservation Association, a group that would successfully lobby the federal government to become involved in preventing beach erosion.<sup>130</sup>

The earliest attempts to manage erosion in New Jersey focused on structural approaches and did little to slow the rate at which beaches were disappearing.<sup>131</sup> Replenishment projects began in the 1930s using sediments dredged from bays and the ocean floor to widen beaches.<sup>132</sup>

---

<sup>122</sup> HEDRICK, *supra* note 15, at 4.

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

<sup>124</sup> *Id.* at 9–10.

<sup>125</sup> *Evolution of Laws, supra* note 48.

<sup>126</sup> N.J. DEP’T OF ENVTL. PROT., ENVIRONMENTAL TRENDS REPORT 1 (2010), <http://www.nj.gov/dep/dsr/trends2005/pdfs/beach-replenish.pdf> [hereinafter TRENDS REPORT].

<sup>127</sup> *See id.*

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

<sup>129</sup> *Evolution of Laws, supra* note 48.

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

<sup>131</sup> *See* TRENDS REPORT, *supra* note 126, at 1 (noting that groins built to slow erosion were ineffective or even counterproductive).

<sup>132</sup> *Id.* at 2.

Since then, both the quantity of sand and amount of money spent on nourishing New Jersey beaches have increased steadily.<sup>133</sup>

New Jersey has justified such expenditures as necessary to support the tourism industry.<sup>134</sup> In 2008, travel and tourism brought \$27.9 billion to the state—roughly six percent of the gross state product.<sup>135</sup> Furthermore, travel and tourism were responsible for over ten percent of total employment in the state, and generated \$7.7 billion in tax revenue.<sup>136</sup>

New Jersey courts first recognized the public trust doctrine's applicability to beaches in 1821.<sup>137</sup> In *Arnold v. Mundy*, the Supreme Court of New Jersey held that the "coasts of the sea, including both the waters and the land under the waters, for the purposes of passing and repassing, navigation, fishing, fowling, sustenance, and all other uses of the water and its products . . . are common to all the people."<sup>138</sup> Over the next century and a half, however, the New Jersey courts slowly chipped away at the breadth of the doctrine.<sup>139</sup> This trend reversed in the 1970s when the New Jersey Supreme Court expanded the state's authority to regulate beach activities under the doctrine.<sup>140</sup>

Although the doctrine originally protected fishing and fowling rights along the seashore,<sup>141</sup> the New Jersey Supreme Court recognized that such an ancient principle "should not be considered fixed or static, but should be molded and extended to meet changing conditions and needs of the people it was created to benefit."<sup>142</sup> Starting with *New Jersey Sports & Exposition Authority v. McCrane*, the court recognized that lands in public trust could be put to an increasing number of uses.<sup>143</sup> In a concurring opinion, one of the court's justices noted that in addition to

<sup>133</sup> *Id.* The exception is the decade between 1968 and 1977, when both expenditures and volume of sand decreased to pre-1948 levels. *Id.*

<sup>134</sup> *See id.* at 1.

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

<sup>136</sup> *Id.*

<sup>137</sup> *See Arnold v. Mundy*, 6 N.J.L. 1, 1821 WL 1269, at \*9 (1821).

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

<sup>139</sup> *See Leonard R. Jaffee, The Public Trust Doctrine Is Alive and Kicking in New Jersey Tidal waters: Neptune City v. Avon-by-the-Sea—A Case of Happy Atavism?* 14 NAT. RESOURCES J. 309, 309–10 (1974).

<sup>140</sup> Frank Langella, *Public Access to New York and New Jersey Beaches: Has Either State Adequately Fulfilled Its Responsibilities as Trustee Under the Public Trust Doctrine?*, 44 N.Y.L. SCH. L. REV. 179, 199 (2000).

<sup>141</sup> *Arnold*, 1821 WL 1269, at \*9.

<sup>142</sup> *Borough of Neptune City v. Borough of Avon-by-the-Sea*, 294 A.2d 47, 54 (N.J. 1972).

<sup>143</sup> *See* 292 A.2d 545, 552 (N.J. 1972) (finding a sports complex constructed over tide-lands to be a public use).

navigation and fishing, “public rights should include as well recreational uses where appropriate, such as bathing, surfing, launching small boats and walking on the land below the mean high-water line when the tide permits.”<sup>144</sup> In *Matthews v. Bay Head Improvement Ass’n*, the court went even further, holding that under the public trust doctrine access to the beach must be allowed not only for the wet sand but also for the dry sand inland of the mean high water mark.<sup>145</sup> Like the court in *McCrane*, the *Matthews* court found that the doctrine protected contemporary activities like bathing, swimming, and other shore activities.<sup>146</sup>

In recent years, the court has specifically addressed the question of how much public trust protection is to be afforded to beaches created through replenishment projects.<sup>147</sup> In *City of Long Branch v. Liu*, an adjacent property owner claimed ownership of the newly created beach that formed in front of their property as a result of a replenishment project.<sup>148</sup> The court held that such a rapid, man-made accumulation did not cause title to the formerly submerged land to shift from state to landowner.<sup>149</sup> Thus, the court ruled that the public trust doctrine required that the dry beach created by the replenishment project be held in trust for the people of New Jersey.<sup>150</sup>

New Jersey also has a set of regulations specifically addressing public access rights to replenished beaches.<sup>151</sup> These regulations require that beaches replenished using public funds must provide public access.<sup>152</sup> The vast majority of New Jersey residents support such a policy: a recent survey found that eighty-two percent of New Jersey residents support public access as a requirement for getting public beach replenishment funding.<sup>153</sup>

New Jersey previously required that towns provide bathrooms every half-mile and public access points every quarter-mile along replenished beaches.<sup>154</sup> These public access rules also mandated twenty-

---

<sup>144</sup> *Id.* at 579 (Hall, J., concurring).

<sup>145</sup> 471 A.2d 355, 365 (N.J. 1984) (“The complete pleasure of swimming must be accompanied by intermittent periods of rest and relaxation beyond the water’s edge.”).

<sup>146</sup> *See id.* at 358.

<sup>147</sup> *City of Long Branch v. Liu*, 4 A.3d 542, 545–46 (N.J. 2010).

<sup>148</sup> *Id.* at 547.

<sup>149</sup> *Id.* at 546.

<sup>150</sup> *Id.* at 545–46.

<sup>151</sup> N.J. ADMIN. CODE § 7:7E-7.11 (2008).

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

<sup>153</sup> *Poll: Improved Beaches Should Be Open to Public*, ASSOC. PRESS (Jan. 3, 2011), [http://www.northjersey.com/news/state/010311\\_Poll\\_Improved\\_beaches\\_should\\_be\\_open\\_to\\_public.html](http://www.northjersey.com/news/state/010311_Poll_Improved_beaches_should_be_open_to_public.html).

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

four-hour access to nourished beaches.<sup>155</sup> Additionally, New Jersey required any town seeking project funding from the state Shore Protection Fund to enter into an agreement providing for additional restrooms and parking near the beach.<sup>156</sup>

The New Jersey Superior Court overturned these regulations in the 2008 decision *Borough of Avalon v. New Jersey Department of Environmental Protection*.<sup>157</sup> Avalon had filed suit against the state, arguing that its own access plan provided sufficient access to the beach.<sup>158</sup> Avalon also argued that the mandated twenty-four hour beach access infringed upon its statutory powers as a municipality.<sup>159</sup> The court agreed, holding that a municipality may close beaches at night or during other times that may endanger public safety.<sup>160</sup> The court also found that the New Jersey Department of Environmental Protection (NJDEP) lacked statutory authority to make additional public parking and restrooms a condition of funding for replenishment projects.<sup>161</sup>

The New Jersey Supreme Court denied NJDEP's petition for certiorari.<sup>162</sup> In response, the department is currently considering regulations that request, rather than require, individual towns to develop their own public access plans.<sup>163</sup> Towns that do not prepare public access plans risk the loss of state funding for purchasing open spaces, lower ranking on the beach replenishment project funding list, and denial of beach and dune maintenance permits.<sup>164</sup>

---

<sup>155</sup> *See id.*

<sup>156</sup> *Borough of Avalon v. N.J. Dep't of Env'tl. Prot.*, 959 A.2d 1215, 1218 (N.J. Super. Ct. App. Div. 2008).

<sup>157</sup> *Id.* at 1227.

<sup>158</sup> *See id.* at 1218–19. Avalon's 4 miles of beach were accessible via 62 public streets, 5700 on-street public parking spaces, and 550 off-street public parking spaces, 370 of which were within a quarter-mile of the beach. *Id.* Additionally, Avalon had public restrooms at 15 different locations, though they were not located every half-mile along the oceanfront, as required by state regulations at the time. *Id.* at 1219.

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

<sup>160</sup> *Id.* at 1220.

<sup>161</sup> *Id.* at 1226.

<sup>162</sup> *Borough of Avalon v. N.J. Dep't of Env'tl. Prot.*, 970 A.2d 1049 (N.J. 2009).

<sup>163</sup> *N.J. Might Alter Its Proposed Beach Access Rules*, ASSOC. PRESS (June 2, 2011), [http://www.nj.com/news/index.ssf/2011/06/nj\\_might\\_alter\\_its\\_proposed\\_be.html](http://www.nj.com/news/index.ssf/2011/06/nj_might_alter_its_proposed_be.html). The new rules were originally expected in early 2011, but as of the publication of this Note the NJDEP has yet to adopt final regulations. Kenny Walter, *Advocates Slam DEP's Revised Beach Access Rules*, ATLANTICVILLE (N.J.), (Apr. 26, 2012), [http://atl.gmnews.com/news/2012-04-26/Front\\_Page/Advocates\\_slam\\_DEPs\\_revised\\_beach\\_access\\_rules.html](http://atl.gmnews.com/news/2012-04-26/Front_Page/Advocates_slam_DEPs_revised_beach_access_rules.html).

<sup>164</sup> Walter, *supra* note 163; *N.J. Might Alter Its Proposed Beach Access Rules*, *supra* note 163.

### B. North Carolina's "Carrot Approach"

North Carolina has undertaken beach replenishment projects since 1939.<sup>165</sup> As in New Jersey, supporters of these projects justify the cost with the benefits to the tourism industry.<sup>166</sup> North Carolina's beach tourism industry provides a vital source of income for the state.<sup>167</sup> A 2001 report by the state Legislative Research Commission estimated that coastal tourism brought in 2.9 billion dollars and supported 50,000 jobs.<sup>168</sup>

For most of North Carolina's history, state courts followed the common law approach of awarding beach accretions to littoral landowners.<sup>169</sup> In 1985, however, the legislature passed a statute that explicitly granted the state title to beaches created through publicly funded replenishment projects.<sup>170</sup> The statute thus established:

[T]itle to land in or immediately along the Atlantic Ocean raised above the mean high water mark by publicly financed projects which involve hydraulic dredging or other deposition of spoil materials or sand vests in the State . . . . All such raised lands shall remain open to the free use and enjoyment of the people of the State, consistent with the public trust rights in ocean beaches, which rights are part of the common heritage of the people of this State.<sup>171</sup>

Administrative regulations further clarify that for all replenishment projects receiving state funding or other state involvement, the entire restored portion of the beach shall be in permanent public ownership.<sup>172</sup>

The statute also requires public access to replenished beaches.<sup>173</sup> Unlike New Jersey, however, North Carolina has always left the details and enforcement to local municipalities.<sup>174</sup> For any project that re-

<sup>165</sup> 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, 1463 (2005).

<sup>166</sup> See LEG. RESEARCH COMM., COASTAL BEACH MOVEMENT, BEACH RENOURISHMENT, AND STORM MITIGATION 15 (2001), available at <http://dcm2.enr.state.nc.us/BIMP/Appendix%20H%20-%20Coastal%20Beach%20Commission%20Report.pdf> (noting there is a 386:1 return on investment for beach nourishment dollars when the economic impact of tourism is considered).

<sup>167</sup> *Id.*

<sup>168</sup> *Id.*

<sup>169</sup> See Kalo, *supra* note 165, at 1440, 1445.

<sup>170</sup> N.C. GEN. STAT. § 146-6(f) (2010); Kalo, *supra* note 165, at 1461, n.139.

<sup>171</sup> N.C. GEN. STAT. § 146-6(f).

<sup>172</sup> 15A N.C. ADMIN. CODE 7M.0202(d)(1) (2006).

<sup>173</sup> N.C. GEN. STAT. § 146-6(f).

<sup>174</sup> 15A N.C. ADMIN. CODE 7M.0202(d)(2).

ceives state funding or sponsorship for beach restoration, “[i]t shall be a local government responsibility to provide adequate parking, public access, and services for public recreational use of the restored beach.”<sup>175</sup> The North Carolina Court of Appeals upheld the delegation of beach access plans to local municipalities in *Slavin v. Town of Oak Island*.<sup>176</sup> The court held that although the statute gave title to the newly created beach to the state, a municipality is entitled to enact regulations protecting public access to a beach located within its limits.<sup>177</sup> Furthermore, the court noted that “[a] littoral property owner’s right of access to the ocean is a qualified one, and is subject to reasonable regulation.”<sup>178</sup> Accordingly, the littoral property owner’s interest in the beach was “subordinate to public trust protections.”<sup>179</sup>

In addition to the statute’s mandate for public access to replenished beaches, North Carolina offers towns a “carrot” in the form of funding.<sup>180</sup> The state’s Shorefront Access Policies offer matching grants and assistance to local authorities to develop public access plans.<sup>181</sup> Guidelines for the Shorefront Access Policies offer an expansive definition of “improvements” that facilitate public access, including “dune crossovers, piers, boardwalks, litter receptacles, parking areas, restrooms, gazebos, boat ramps, canoe/kayak launches, bicycle racks and foot showers.”<sup>182</sup> Each municipality receiving funding is expected to contribute ten to twenty-five percent of the cost of these improvements.<sup>183</sup> Furthermore, the municipality is responsible for operating and maintaining access sites in the long term.<sup>184</sup> This program has funded over 280 access sites.<sup>185</sup> Unfortunately, the program is limited to annual awards of only about one million dollars in matching grants.<sup>186</sup>

---

<sup>175</sup> *Id.*

<sup>176</sup> 584 S.E.2d 100, 101–02 (N.C. Ct. App. 2003).

<sup>177</sup> *See id.*

<sup>178</sup> *Id.* at 102 (citations omitted).

<sup>179</sup> *Id.* (quoting *Weeks v. N.C. Dep’t of Natural Res. and Cmty. Dev.*, 388 S.E.2d 228, 234 (N.C. Ct. App. 1990)).

<sup>180</sup> *See* 15A N.C. ADMIN. CODE 7M.0307 (2006).

<sup>181</sup> *See id.*

<sup>182</sup> *Id.* at 7M.0302(11).

<sup>183</sup> *Id.* at 7M.0307(e).

<sup>184</sup> *Public Beach and Waterfront Access: Grant Program for Local Governments*, N.C. DEP’T OF ENV’T AND NAT. RESOURCES, <http://www.nccoastalmanagement.net/access/grants.htm> (last modified Jan. 11, 2008).

<sup>185</sup> *Id.*

<sup>186</sup> *See id.*

### C. Florida: Fight and Forget

Florida has more miles of coastline than any other state except Alaska, and nearly as many miles of coast as the entire Atlantic seaboard.<sup>187</sup> Tourism to these many miles of beach generates an estimated fifteen billion dollars of revenue for Florida's economy through taxes, sales, and job creation.<sup>188</sup> Unfortunately, beach erosion has had a large impact on Florida.<sup>189</sup> One third to one half of all the state's beaches are "critically eroded," a designation that indicates they are "eroded to a degree such that development, recreation, wildlife, or cultural resources are threatened or lost."<sup>190</sup> Due to Florida's low elevation, population density, and infrastructure near the coast, erosion from the rising sea-level will continue to trouble the state.<sup>191</sup>

The Florida state constitution gives the state title to the lands seaward of the mean high water line, including beaches.<sup>192</sup> The state holds this area in trust for the public for navigation and other uses.<sup>193</sup> The Florida constitution also provides that the state has a responsibility "to conserve and protect its natural resources and scenic beauty."<sup>194</sup> Florida courts include the beaches as one of the natural resources that must be protected.<sup>195</sup>

The Florida state legislature enacted the Beach and Shore Preservation Act (BSPA) in 1961 to protect the state's beaches.<sup>196</sup> The Act creates a fund for the nourishment of "critically eroded shoreline," defined as "a segment of shoreline where natural processes or human

<sup>187</sup> See JANICE CHERYL BEAVER, KNOWLEDGE SERV. GRP., U.S. INTERNATIONAL BORDERS: BRIEF FACTS, at CRS-4 to -5 (2006), <http://www.fas.org/sgp/crs/misc/RS21729.pdf>. Florida has 1350 miles of coastline. *Id.* Stretching from Maine to Georgia, the Atlantic seaboard is 1585 miles long. *Id.*

<sup>188</sup> Manoj P. Shivlani et al., *Visitor Preferences for Public Beach Amenities and Beach Restoration in South Florida*, 31 COASTAL MGMT. 367, 368 (2003).

<sup>189</sup> See *id.*

<sup>190</sup> *Id.* at 368, 382 n.1.

<sup>191</sup> JAMES H. BALSILLE & JOSEPH F. DONOGHUE, FLA. GEOLOGICAL SURVEY, HIGH RESOLUTION SEA-LEVEL HISTORY FOR THE GULF OF MEXICO SINCE THE LAST GLACIAL MAXIMUM, at iii (2004), available at <http://www.gly.fsu.edu/~donoghue/pdf/balsillie-FGS-ROI-04.pdf>.

<sup>192</sup> FLA. CONST. art. X, § 11 ("The title to lands under navigable waters, within the boundaries of the state, which have not been alienated, including beaches below mean high water lines, is held by the state, by virtue of its sovereignty, in trust for all the people.").

<sup>193</sup> *Clement v. Watson*, 58 So. 25, 26 (Fla. 1912).

<sup>194</sup> FLA. CONST. art. II, § 7(a).

<sup>195</sup> *Walton County v. Stop the Beach Renourishment, Inc.*, 998 So. 2d 1102, 1110-11 (Fla. 2008).

<sup>196</sup> Beach and Shore Preservation Act, FLA. STAT. § 161 (2010); Shivlani, *supra* note 188, at 370.

activities have caused, or contributed to, erosion and recession of the beach and dune system to such a degree that upland development, recreational interests, wildlife habitat or important cultural resources are threatened or lost.”<sup>197</sup> Following a state-funded replenishment project, the BSPA mandates that “title to all lands seaward of the erosion control line shall be deemed to be vested in the state by right of its sovereignty.”<sup>198</sup> A non-profit environmental group challenged the constitutionality of the BSPA in *Save Our Beaches, Inc. v. Florida Department of Environmental Protection*.<sup>199</sup> Plaintiffs alleged that vesting title to the replenished beach in the state unconstitutionally deprived beachfront land owners of their property rights without just compensation for the property taken.<sup>200</sup> Specifically, the property owners claimed that the Act deprived them of their common law rights of access, reasonable use, and view of the water, as well as their right to accretions of sand.<sup>201</sup>

In the interim, the Florida Supreme Court, in *Walton County v. Stop the Beach Renourishment, Inc.*, held that the right of maintaining contact with the water was secondary to the core right of maintaining access to the water.<sup>202</sup> The court reasoned that “because the Act safeguards access to the water and because there is no right to maintain a constant boundary with the water’s edge, the Act, on its face, does not unconstitutionally eliminate the ancillary right to contact.”<sup>203</sup> The property owners appealed, and the U.S. Supreme Court unanimously affirmed the Florida Supreme Court’s decision in *Stop the Beach Renourishment, Inc., v. Florida Department of Environmental Protection*.<sup>204</sup> The Court held that because the state owned the submerged land adjacent to the beach, it had the right to fill that land with sand as long as it did not interfere with the rights of the public.<sup>205</sup>

In spite of this landmark decision by the Supreme Court, Florida’s statutes make only brief reference to public access following replenishment projects.<sup>206</sup> The BSPA only requires that any beachfront devel-

---

<sup>197</sup> FLA. ADMIN. CODE ANN. r. 62B-36.002(4) (2010).

<sup>198</sup> FLA. STAT. § 161.191.

<sup>199</sup> 27 So. 3d 48, 56 (Fla. Dist. Ct. App. 2006).

<sup>200</sup> *Id.*

<sup>201</sup> *Id.* at 57.

<sup>202</sup> 998 So. 2d 1102, 1119 (Fla. 2008).

<sup>203</sup> *Id.* at 1119–20.

<sup>204</sup> 130 S. Ct. 2592, 2611 (2010).

<sup>205</sup> *Id.* Justice Stevens, whose Florida property is part of the renourishment program, did not participate in the decision. Ilya Shapiro & Trevor Burrus, *Judicial Takings and Scalia’s Shifting Sands*, 35 VT. L. REV. 423, 424 (2010).

<sup>206</sup> See FLA. STAT. § 161.55(5) (2010).

opment or construction not interfere with public access unless a comparable alternative access way is provided.<sup>207</sup>

This requirement has done little to ensure public access to replenished beaches. As of 2010, Florida averages one public access site for every five miles of shoreline.<sup>208</sup> This equates to approximately one public access site for every ten thousand Florida residents, not including tourists.<sup>209</sup> A 2000 survey indicates that many Florida citizens (roughly forty-one percent) demand more beach access.<sup>210</sup>

### III. APPLYING THE PUBLIC TRUST DOCTRINE TO REPLENISHED BEACHES

Since its creation centuries ago, the public trust doctrine has governed the use of resources made exclusively by nature.<sup>211</sup> Originally, the boundaries of these resources were determined solely by weather; however, today, man has the power to alter the shoreline.<sup>212</sup> Beach replenishment projects add tons of sand to the beach, shifting the mean high water line seaward and creating new land that must either be awarded to the state or the littoral property owners.<sup>213</sup>

Invoking the public trust doctrine, New Jersey, North Carolina, and Florida have all decided to award this new land to the state.<sup>214</sup> The application of the doctrine to modern beach replenishment projects was made possible by two gradual changes—first, an expansion of the physical area protected by the doctrine, and second, an expansion of the scope of public uses for a beach.<sup>215</sup> These two contemporaneous

<sup>207</sup> *Id.*

<sup>208</sup> *State of the Beach Report: Florida: Beach Access*, SURFRIDER FOUND., [http://www.beachapedia.org/State\\_of\\_the\\_Beach/State\\_Reports/FL/Beach\\_Access](http://www.beachapedia.org/State_of_the_Beach/State_Reports/FL/Beach_Access) (last visited May 19, 2012).

<sup>209</sup> See FLA. COASTAL MGMT. PROGRAM, FLORIDA ASSESSMENT OF COASTAL TRENDS 34, tbl.2-1 (2000), <http://bcs.dep.state.fl.us/bchmngmt/reports/fact2000.pdf>. As of 2010, Florida has 1692 beach access points, and a total population of nearly 18 million. *Id.*

<sup>210</sup> *Id.* at 45. Additionally, a majority of respondents to the survey (roughly 61 percent) wanted more parking and more or better restrooms. *Id.*

<sup>211</sup> See *id.*

<sup>212</sup> See *supra* notes 61-67 and accompanying text.

<sup>213</sup> See *Stop the Beach Renourishment, Inc. v. Fla. Dep't of Env'tl. Prot.*, 130 S. Ct. 2592, 2599 (2010).

<sup>214</sup> See FLA. STAT. § 161.191 (2011); N.C. GEN. STAT. § 146-6(f) (2010); *City of Long Branch v. Liu*, 4 A.3d 542, 545-46 (N.J. 2010).

<sup>215</sup> See *City of Daytona Beach v. Tona-Rama, Inc.*, 294 So. 2d 73, 78 (Fla. 1974) (recognizing the right of the public to enjoy the dry sand area for sunbathing and other recreational purposes); *Matthews v. Bay Head Improvement Ass'n*, 471 A.2d 355, 365 (N.J. 1984) (finding that dry sand recreational uses, such as bathing, swimming, and other shore activities, fall under protection of the public trust doctrine).

changes provide a foundation for awarding title of replenished beaches to the state.<sup>216</sup>

*A. A Public Trust Doctrine Renaissance: Extending the Doctrine to Replenished Beaches*

The public trust doctrine has been a fixture in American law since the colonial era.<sup>217</sup> In general, the doctrine applies to the wet sand stretching from the mean high water mark toward the sea.<sup>218</sup> This area is sufficient to accommodate the historical uses of the beach: navigation, fishing, and fowling.<sup>219</sup>

Over the years, however, beaches have been put to a variety of new uses. By the twentieth century, beachgoers were less interested in fishing than they were in relaxing on the sand and swimming in the ocean.<sup>220</sup> If the doctrine is to survive the passage of time, it must be updated to suit the changing needs of society.<sup>221</sup>

As American courts began broadening the applicability of the public trust doctrine, the popularity of beach replenishment projects soared.<sup>222</sup> Such large-scale physical manipulations of the ocean's boundaries, however, trigger property concerns over who will own the new land.

A beach replenishment project essentially shifts one natural resource—the bed of sand beneath the water—to another—the dry, sandy beach.<sup>223</sup> When a project is complete, layers of sand cover the former boundary of land held in trust by the state, the mean high water mark.<sup>224</sup> Though it has been covered with imported dry sand, it intuitively makes sense that this boundary should still mark the extent of the land held by the state. Consequently, just as the wet sand and waters covering it are held in trust, so too should the newly created beach be held in trust for the people.

<sup>216</sup> See, e.g., *Liu*, 4 A.3d at 549 (justifying awarding title to replenished beach to the state by pointing to the doctrine's applicability to the use of dry sand beach and recreational purposes).

<sup>217</sup> N.J. PUBLIC TRUST, *supra* note 92, at 10.

<sup>218</sup> TITUS, *supra* note 7.

<sup>219</sup> See *Arnold v. Mundy*, 6 N.J.L. 1, 1821 WL 1269, at \*9 (N.J. 1821).

<sup>220</sup> See *Liu*, 4 A.3d at 549.

<sup>221</sup> See *id.*

<sup>222</sup> See, e.g., TRENDS REPORT, *supra* note 126, at 1–3 (showing New Jersey beach replenishment sand volumes and expenditures have increased steadily over past decades).

<sup>223</sup> See *Borrow Areas*, *supra* note 38; *Technical Summary*, *supra* note 19.

<sup>224</sup> *Stop the Beach Renourishment, Inc.*, 130 S. Ct. at 2599.

This delineation is the only fair solution because taxpayers across the state and country fund beach replenishment projects.<sup>225</sup> Since all share the burden of funding, it is reasonable to make a replenished beach a publicly held resource. Furthermore, members of the public not privileged enough to live in beachfront houses should be able to access this new land held by the state for their benefit. To deny meaningful access would be to rob the public of the fruits of their tax dollars.

### B. *Defining Access to Replenished Beaches Held in Trust for Public Use*

Once a state places a replenished beach in trust for the public, it must determine the scope of access. When the public trust doctrine was incorporated into the American legal system, the Supreme Court recognized that the doctrine's objectives could only be met if the public is actually free to use and enjoy the land.<sup>226</sup> The Court implicitly reasoned that public title is only meaningful if there is unfettered public access.<sup>227</sup> In *Illinois Central Railroad v. Illinois*, the U.S. Supreme Court summarized this principle by noting the need for public access to the shores to remain "free[] from the obstruction or interference of private parties."<sup>228</sup>

The concept of "access," however, has changed since the inception of the doctrine.<sup>229</sup> In the ancient world, cars and parking were irrelevant considerations. Today, more is necessary to give meaning to access.<sup>230</sup> Preventing activities for which beaches are typically used through restricted hours or remote access points deprives beachgoers of enjoying public land. Their use would be obstructed by the same private landowners who reap the benefits of a replenished beachfront.<sup>231</sup> Such restrictions would eviscerate the public trust, and only those wealthy enough to live on the beach would be able to enjoy all its advantages.

New Jersey, North Carolina, and Florida are some of the most experienced states in the nation regarding beach replenishment.<sup>232</sup> Moreover, each independently recognizes that land created during beach replenishment projects must be held in trust for the public.<sup>233</sup> Each of

---

<sup>225</sup> See Editorial, *supra* note 1.

<sup>226</sup> See *Ill. Cent. R. R. v. Illinois*, 146 U.S. 387, 452 (1892).

<sup>227</sup> See *id.*

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

<sup>229</sup> *Liu*, 4 A.3d at 549.

<sup>230</sup> See *id.*

<sup>231</sup> See *Ill. Cent. R.R.*, 146 U.S. at 452.

<sup>232</sup> See *Nourishment Statistics*, *supra* note 2. Florida, New Jersey, and North Carolina have respectively the first, second, and fourth highest expenditures on beach replenishment. *Id.*

<sup>233</sup> See FLA. STAT. § 161.191 (2011); N.C. GEN. STAT. § 146-6(f) (2010); *Liu*, 4 A.3d at 545-46.

these states, however, has developed different rules governing public access to replenished beaches.<sup>234</sup>

Each state approach offers a varying degree of public access to replenished beaches.<sup>235</sup> As the problem of beach erosion continues to grow<sup>236</sup> and states increasingly fund replenishment projects with less federal assistance,<sup>237</sup> the need for a comprehensive, practical solution for providing public beach access increases.

With the only replenishment policy explicitly approved by the Supreme Court, Florida arguably has the strongest support for holding title to replenished beaches in trust for the public.<sup>238</sup> Florida's hands-off approach, however, shows that simply placing a replenished beach in trust for the public is insufficient. Since the state fought to win *Stop the Beach Renourishment*, it has largely ignored the question of access.<sup>239</sup> Because Florida failed to define the scope of access to replenished beaches, the public still clamors for increased and improved access to the shores.<sup>240</sup> Florida's approach demonstrates that the public needs more than title to enjoy a replenished beach.

In contrast, New Jersey's excessive requirements for public access were struck down by the courts.<sup>241</sup> Though favored by the people,<sup>242</sup> local municipalities resisted the state's unfunded mandate for twenty-four hour access and additional restrooms and parking.<sup>243</sup> The failure to accommodate local interests illustrates the need for more flexible rules that can be tailored to each town's needs.<sup>244</sup> The newly proposed rules give local municipalities control over designing public access plans, but punish towns that do not comply.<sup>245</sup>

North Carolina takes the opposite approach by incentivizing public access to beaches.<sup>246</sup> Offering a carrot instead of a stick, the state

<sup>234</sup> See FLA. STAT. § 161.191 (2011); N.C. GEN. STAT. § 146-6(f) (2010); *Liu*, 4 A.3d at 545-46.

<sup>235</sup> See *supra* notes 125-216 and accompanying text.

<sup>236</sup> See TITUS, *supra* note 22, at 118.

<sup>237</sup> See *supra* notes 46-75 and accompanying text.

<sup>238</sup> See *Stop the Beach Renourishment, Inc.*, 130 S. Ct. at 2611.

<sup>239</sup> See *id.*; HEDRICK, *supra* note 15, at 9-10. Only four states in the country (California, Connecticut, New Jersey, and North Carolina) have explicit policies requiring public access to replenished beaches. HEDRICK, *supra* note 15, at 9-10.

<sup>240</sup> See FLA. COASTAL MGMT. PROGRAM, *supra* note 209.

<sup>241</sup> See *Borough of Avalon v. N.J. Dep't of Envtl. Prot.*, 959 A.2d 1215, 1227 (N.J. Super. Ct. App. Div. 2008).

<sup>242</sup> *Poll*, *supra* note 153.

<sup>243</sup> *Borough of Avalon*, 959 A.2d at 1218.

<sup>244</sup> See *id.* at 1227.

<sup>245</sup> *N.J. Might Alter Its Proposed Beach Access Rules*, *supra*, note 163.

<sup>246</sup> See *supra* notes 165-186 and accompanying text.

provides municipalities with matching grants to improve access to beaches.<sup>247</sup> These grants, however, are insufficient due to their size.<sup>248</sup> It is unlikely that the state can incentivize meaningful public access with such a meager budget. Additionally, North Carolina's grant program is not specifically tailored to replenished beaches.<sup>249</sup> While a general beach access grant program may indirectly improve access to replenished beaches, it does not ensure that the public will have access to the sand for which their tax dollars paid.

### CONCLUSION

Beaches play a vital role in the economies of coastal states.<sup>250</sup> As erosion and rising sea levels increasingly threaten these precious resources,<sup>251</sup> states will likely continue to replenish beaches to slow the loss of sand. Since states often pay for nourishment projects with public funds, they need to do more to ensure public access to replenished beaches.

Each of the approaches taken by New Jersey, North Carolina, and Florida represents a step in the right direction, but more is needed. Florida's failure to codify comprehensive requirements for public access shows that court decisions alone will not ensure widespread access to replenished beaches. On the other hand, New Jersey's struggle to regulate beach access suggests that greater incentives are needed for towns to comply with regulations. North Carolina provides such incentives, but on too small a scale to effectuate public access to all replenished beaches.

As more and more sand is dumped into replenishment projects across the United States, it is time for states across the country to take notice of the successes and failures of New Jersey, North Carolina, and Florida's beach access approaches. Though the public trust doctrine may give title to replenished beaches to the people, states must ensure that the public has meaningful access. Only then can the public trust doctrine's full potential be realized in modern times.

---

<sup>247</sup> See *Public Beach and Waterfront Access: Grant Program for Local Governments*, *supra* note 184.

<sup>248</sup> See *id.*

<sup>249</sup> See *id.* Grants are intended to improve access to the state's beaches and waterways. *Id.*

<sup>250</sup> See LEG. RESEARCH COMM., *supra* note 166, at 15; Shivlani, *supra* note 186, at 368; TRENDS REPORT, *supra* note 126, at 1.

<sup>251</sup> See TITUS, *supra* note 22, at 118.

