

A R T I C L E S

# The National Marine Sanctuary System: The Once and Future Promise of Comprehensive Ocean Governance

by Jason Patlis, Donald Baur,  
Tom Lindley, Alan Murphy, and  
Priscilla Hampton

Jason Patlis is President and CEO of the National Marine Sanctuary Foundation. Donald Baur, Priscilla Hampton, Tom Lindley, and Alan Murphy are attorneys with the Environment, Energy, and Resources practice at Perkins Coie LLP in the Washington, D.C., Portland, Oregon, and San Francisco, California, offices.

---

*Summary*

---

Despite repeated recommendations for improved ocean governance, little has happened legislatively to update federal ocean protection. But administratively, NOAA has advanced a number of rulemakings to expand the size of existing national marine sanctuaries, and has finalized a rulemaking to allow the consideration of new designations of national marine sanctuaries. This Article analyzes the legal underpinnings of the centerpiece of the National Marine Sanctuaries Act and compares it to other federal and state legal authorities that govern ocean ecosystems and resources. The Article concludes that the new regulation creates an open-sourced, grassroots approach to identifying special marine places that are important to local communities nationwide.

---

Since the enactment of the Oceans Act of 2000,<sup>1</sup> and notwithstanding the many subsequent recommendations of various blue ribbon and presidentially appointed commissions, the last 15 years have seen little legislative progress in accomplishing the widely recognized need to improve how the nation governs its ocean, coastal, and Great Lakes resources. The inability to enact legislation, which has barred significant advances in ocean governance, is not unique to this issue, and to be sure, there are exceptions to this broad statement. These include the reauthorization of the Magnuson-Stevens Fishery Conservation and Management Act (FCMA)<sup>2</sup> in 2007, the recent ratification of four international fisheries treaties, and individual legislative efforts to tackle specific issues such as harmful algal blooms and marine debris.

Nevertheless, dozens of bills introduced in the U.S. House of Representatives and the U.S. Senate to reform ocean governance have failed to make it into law. Major international treaties, with the United Nations Convention on the Law of the Sea at the top of the list,<sup>3</sup> fail to be ratified. Emergency supplemental appropriations bills passed in response to coastal storms or hurricanes have provided funds for response and reconstruction, but very little for restoration and reform.

Notwithstanding the inability of the U.S. Congress to pass comprehensive ocean policy reform, there has been significant progress through executive and administrative action. Many important initiatives have been taken to recognize, and make recommendations to achieve, comprehensive improvement in the way the nation manages coastal and marine ecosystems. The William Clinton Administration hosted the first National Ocean Conference in 1998, in conjunction with the United Nations-declared International Year of the Ocean.<sup>4</sup> Two ocean commissions have released detailed and compelling reports and recommen-

---

*Author's Note:* This Article is based upon an independent work product completed by Perkins Coie LLP on a pro bono request by the National Marine Sanctuary Foundation (NMSF). The authors acknowledge and greatly appreciate the research and writing contributions of Perkins Coie attorneys Paul Smyth, Alix Bromer, and Marcy Hupp, as well as Perkins Coie alumni Steve Higgs and Emily Merolli. The authors would also like to thank the staff at NMSF and at the National Oceanic and Atmospheric Administration's Office of National Marine Sanctuaries for reviewing and providing technical edits on this Article.

1. Oceans Act of 2000, Pub. L. No. 106-256, 114 Stat. 644 (2000).
2. See Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006, Pub. L. No. 109-479, 120 Stat. 3575 (2007).
3. United Nations Convention on the Law of the Sea, Dec. 10, 1982, 1833 U.N.T.S. 397.
4. See NATIONAL OCEAN CONFERENCE: OCEANS OF COMMERCE, OCEANS OF LIFE (1998) (official conference publication); G.A. Res. 49/131, U.N. GAOR, Supp. No. 49, at 152, U.N. Doc. A/RES/49/131 (Dec. 19, 1994) (declaring 1998 "International Year of the Ocean").

dations: the U.S. Commission on Ocean Policy, mandated by Congress; and the Pew Oceans Commission, funded by the Pew Charitable Trusts.<sup>5</sup> Two national ocean policies under two different Administrations have sought to coordinate ocean governance within the federal family: the U.S. Ocean Action Plan by the George W. Bush Administration; and the National Ocean Policy by the Barack Obama Administration.<sup>6</sup> Using the authority of the Antiquities Act,<sup>7</sup> President Bush established three marine national monuments, including the world's largest marine protected area (MPA) at the time. Using the same authority, President Obama recently announced an expansion of one of those national monuments to establish once again, within the U.S. Exclusive Economic Zone, the world's largest MPA.

Within these administrative achievements, one aspect of ocean governance has witnessed slow but steady progress, but has generally gone unnoticed. The National Oceanic and Atmospheric Administration (NOAA) Office of National Marine Sanctuaries has advanced a number of rulemakings to expand the size of existing national marine sanctuaries, and has finalized a rulemaking to allow, for the first time in two decades, the consideration of new designations of national marine sanctuaries.<sup>8</sup> In addition, Sen. Carl Levin (D. Mich.) announced last June that he is introducing a bill to spur the establishment of new national marine sanctuaries in the Great Lakes. These actions may change the entire landscape—or seascape, more appropriately—of ocean governance over the coming decades.

This Article analyzes the legal underpinnings of the centerpiece of the National Marine Sanctuaries Act (NMSA),<sup>9</sup> and compares the NMSA to other federal and state legal authorities that govern ocean ecosystems and resources. The analysis begins, in Part I, with a discussion of the current threats facing the ocean, and why protections are so important to ensure that ocean resources are managed sustainably. This part further discusses the merits of protecting these resources through area-based management schemes, such as MPAs. Part II describes the NMSA and

assesses the law's strengths and weaknesses. Part III then examines other domestic legal mechanisms for preserving marine ecosystems, including federal authorities, state laws, and the common law of torts. While the Article does not constitute an exhaustive analysis of laws governing the marine environment, it does look at the most important domestic laws today.<sup>10</sup>

In comparing the NMSA to other existing laws in the United States, Part IV argues that the NMSA deserves renewed attention as a unique and powerful ocean governance tool. Part V envisions the dawn of a new era in ocean governance in light of NOAA's recently promulgated rule and the opportunity it presents to expand the national marine sanctuary system.

## I. Importance of Area-Based, Ecosystem-Based Management

America's ocean covers almost 4.5 million square miles, an area 23% larger than the nation's landmass. Its rich bounty has integrally shaped our nation and the planet. That bounty, however, is being degraded and depleted. Once considered too vast to be impacted by human activity, the ocean now faces a myriad of local and global threats due to human activities. Fish stocks, directly or indirectly, are exploited to the point of depletion. Coastal and marine habitat is sacrificed for development. Land-based pollution and runoff cause uninhabitable dead zones and harmful algal blooms.<sup>11</sup> A changing climate is poised to wreak havoc on the marine environment, with rising temperatures, rising sea levels, and rising acidity levels.<sup>12</sup> While this Article focuses on one law in particular, the NMSA, it is important to first consider the background and importance of area-based management of marine resources.

5. U.S. COMM'N ON OCEAN POLICY, AN OCEAN BLUEPRINT FOR THE 21ST CENTURY (Final Report) (2004), available at [http://govinfo.library.unt.edu/oceancommission/documents/full\\_color\\_rpt/welcome.html](http://govinfo.library.unt.edu/oceancommission/documents/full_color_rpt/welcome.html); PEW OCEANS COMM'N, AMERICA'S LIVING OCEANS: CHARTING A COURSE FOR SEA CHANGE (2003), available at [http://www.pewtrusts.org/our\\_work\\_report\\_detail.aspx?id=30009](http://www.pewtrusts.org/our_work_report_detail.aspx?id=30009).

6. Exec. Order No. 13547, §2, 75 Fed. Reg. 43023, 43023 (July 19, 2010) (Obama Administration's National Ocean Policy); WHITE HOUSE COUNCIL ON ENVTL. QUALITY, U.S. OCEAN ACTION PLAN (2004) (Bush Administration).

7. Antiquities Act, 16 U.S.C. §§431-443.

8. Re-Establishing the Sanctuary Nomination Process, 79 Fed. Reg. 33851 et seq. (June 13, 2014).

9. National Marine Sanctuaries Act (NMSA), 16 U.S.C. §§1431-1445c-1, 1433(a)(2).

10. While various international laws and treaties also are relevant to ocean protection, international law is beyond the scope of this Article. Similarly, although federal and state pollution laws such as the Clean Water Act (CWA), 33 U.S.C. §§1251-1387, ELR STAT. FWPCA §§101-607, and Clean Air Act (CAA), 42 U.S.C. §§7401-7671q, ELR STAT. CAA §§101-618, serve to protect the ocean environment, the Article is not intended to include a comprehensive analysis of pollution laws.

11. More than 20,000 acres of sensitive marine habitat disappear each year as a result of coastal development, pollution and nutrient runoff, and other human activities. PEW OCEANS COMM'N, AMERICA'S LIVING OCEANS, *supra* note 5, at vi.

12. See Kevin E. Trenberth et al., *Observations: Surface and Atmospheric Climate Change*, in CLIMATE CHANGE 2007: THE PHYSICAL SCIENCE BASIS, CONTRIBUTION OF WORKING GROUP I TO THE FOURTH ASSESSMENT REPORT OF THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE 237 (S. Solomon et al. eds., 2007). See also Nathaniel L. Bindoff et al., *Observations: Oceanic Climate Change and Sea Level*, in CLIMATE CHANGE 2007, *supra*, at 387. Between 1961 and 2003, global ocean temperatures rose by 0.10°C, and sea levels increased by an average of 1.8 millimeters per year. *Id.* Even slight changes in the marine environment have profound impacts on marine life. VICTOR S. KENNEDY ET AL., COASTAL AND MARINE ECOSYSTEMS & GLOBAL CLIMATE CHANGE: POTENTIAL EFFECTS ON U.S. RESOURCES 7 (2002).

## A. Understanding the Nomenclature

MPAs are important management tools for protecting and conserving marine resources. Within the United States, Executive Order No. 13158 provides the working definition of an MPA as “any area of the marine environment that has been reserved by Federal, State, territorial, tribal, or local laws or regulations to provide lasting protection for part or all of the natural and cultural resources therein.”<sup>13</sup> A more descriptive definition of an MPA is:

[A] discrete geographic area that has been designated to enhance the conservation of marine and coastal resources and is managed by an integrated plan that includes [area]-wide restrictions on some activities such as oil and gas extraction and higher levels of protection on delimited zones, designated as fishery and ecological reserves within the MPA.<sup>14</sup>

Marine reserves typically are a subset or isolated area of an MPA in which some or all resources are protected from extraction.<sup>15</sup> Marine sanctuaries, another type of MPA, protect areas of special conservation, recreational, ecological, historical, scientific, cultural, aesthetic, or other significance.<sup>16</sup> Generally, regulations under the NMSA allow a wide range of consumptive and nonconsumptive uses within the boundaries of a national marine sanctuary, and protective measures frequently depend on a cooperative relationship with resource managers in multiple jurisdictions.<sup>17</sup> The NMSA is discussed in detail in Part II, below.

## B. Appreciating the Purposes

By definition, MPAs, marine reserves, and marine sanctuaries are ecosystem-based management tools. Ecosystem-based management emphasizes the protection of functions and key processes within a system and focuses on the range of activities impacting a particular area.<sup>18</sup> Ecosystem-based management acknowledges the relationship between air, land, and sea and recognizes the interactions between

many different species, including humans.<sup>19</sup> As management tools, MPAs provide benefits that serve important scientific, economic, and cultural purposes. Defining the purposes of a potential MPA determines the appropriate level of restrictions or regulations.<sup>20</sup>

### I. Conservation of Biodiversity and Habitat

A central purpose of MPAs is to conserve biodiversity and protect the habitat of marine species, particularly stressed, threatened, and endangered species. Ecosystem-based management of a marine area promotes the recovery of overexploited species.<sup>21</sup> The impact can be measured almost immediately. A study of marine reserves found that they achieve greater population density and species diversity within as little as one year after being designated for protection.<sup>22</sup> Promoting biodiversity and critical habitat is crucial to protecting the health of marine ecosystems, and “[h]ealthy ecosystems are . . . more resilient to all perturbations, including climate-induced changes.”<sup>23</sup>

### 2. Fisheries Management

MPAs often play an important role in managing fisheries and fishing activities. Despite the plethora of laws and regulations governing commercial and recreational fishing, many fish populations continue to decline, and rebuilding efforts continue to struggle.<sup>24</sup> Overexploitation threatens not only ecosystem health; successful fishery management is also critical to the health of commercial fishing, a multi-billion dollar industry.<sup>25</sup>

MPAs can protect critical stages of a species’ life and reduce secondary impacts of fishing. Prohibiting fishing in known nursing grounds reduces the mortality of juveniles and increases the mature biomass of the adult population.<sup>26</sup> Larger fish and a healthier population within a reserve may also increase the health of the fish population outside the reserve.<sup>27</sup> MPAs that protect fish from overexploitation and enhance fish stock populations promote the health of the entire ecosystem. Managing fishing efforts in a spatial area

13. Exec. Order No. 13158, 3 C.F.R. 273, 274, 65 Fed. Reg. 34909, 34909 (May 26, 2000), *reprinted in* 16 U.S.C. §1431. Similarly, the International Union for Conservation of Nature (IUCN) defines an MPA as “[a]ny area of intertidal or subtidal terrain, together with its overlying water and associated flora, fauna, historical and cultural features, which has been reserved by law or other effective means to protect part or all of the enclosed environment.” WORLD COMM’N ON PROTECTED AREAS OF IUCN—THE WORLD CONSERVATION UNION, GUIDELINES FOR MARINE PROTECTED AREAS, xviii (Graeme Kelleher ed., 1999) [hereinafter GUIDELINES FOR MARINE PROTECTED AREAS] (internal quotation marks and citation omitted).

14. COMM. ON THE EVALUATION, DESIGN & MONITORING OF MARINE RESERVES & PROTECTED AREAS IN THE U.S., NAT’L RESEARCH COUNCIL, MARINE PROTECTED AREAS: TOOLS FOR SUSTAINING OCEAN ECOSYSTEMS 12 (2001) [hereinafter TOOLS FOR SUSTAINING OCEAN ECOSYSTEMS].

15. *Id.* Marine reserves that prohibit all resource extraction are sometimes called ecological reserves. HAROLD F. UPTON & EUGENE H. BUCK, CONG. RESEARCH SERV., RL32154, MARINE PROTECTED AREAS: AN OVERVIEW 3 (2010).

16. *See* NMSA, 16 U.S.C. §1433(a)(2).

17. TOOLS FOR SUSTAINING OCEAN ECOSYSTEMS, *supra* note 14, at 156-57.

18. SCIENTIFIC CONSENSUS STATEMENT OF MARINE ECOSYSTEM-BASED MANAGEMENT 1 (2005), *available at* <http://doc.nprb.org/web/BSIERP/EBM%20scientific%20statement.pdf>.

19. *See id.*; *see also* GUIDELINES FOR MARINE PROTECTED AREAS, *supra* note 13, at xviii (“One thing the definition of MPAs does not say. It does not state that an MPA should keep people out.”).

20. TOOLS FOR SUSTAINING OCEAN ECOSYSTEMS, *supra* note 14, at 12.

21. *Id.* at 175.

22. Kim Diana Connolly et al., *Marine Protected Areas*, in OCEAN AND COASTAL LAW AND POLICY 535, 537 (Donald C. Baur et al. eds., 2008).

23. AMERICA’S LIVING OCEANS, *supra* note 5, at 87.

24. Although most commercially important fisheries in North America are regulated by quotas or license limitations, limited entry, or other restrictions, failure to effectively regulate fishing has resulted in overexploitation. TOOLS FOR SUSTAINING OCEAN ECOSYSTEMS, *supra* note 14, at 31.

25. In 2011, the total value of American commercial fisheries was over \$3 billion. Christophe A.G. Tulou et al., *Climate Change and the Marine Environment*, in OCEAN AND COASTAL LAW AND POLICY, *supra* note 22, at 572.

26. TOOLS FOR SUSTAINING OCEAN ECOSYSTEMS, *supra* note 14, at 22. In marine reserves around the world, average fish biomass doubled within five years of establishing the reserve, and the larger fish within the reserves produced more eggs than fish outside the reserves. AMERICA’S LIVING OCEANS, *supra* note 5, at 32.

27. TOOLS FOR SUSTAINING OCEAN ECOSYSTEMS, *supra* note 14, at 75-76.

reduces the physical impact of fishing nets and equipment, reduces wasteful bycatch of marine mammal and fish species, and helps restore the natural food chain of the ecosystem.<sup>28</sup> MPAs, as part of a broader coastal zone regulatory scheme, can contribute to a successful marine resource management system that preserves ecosystem health and sustainable fishing.<sup>29</sup>

### 3. Scientific Knowledge and Outreach

Designating and regulating marine reserves provides an opportunity to collect baseline data that will help our understanding of ecosystem impacts, fish population dynamics, and natural ecosystem variability. In particular, marine reserves can provide baseline data to study the effectiveness of rehabilitation projects at disturbed and stressed sites.<sup>30</sup> Additionally, MPAs provide unique opportunities for the public to learn about marine ecosystems and can be education destinations for a wide variety of user groups.<sup>31</sup>

### 4. Recreational Activities, Tourism, and Cultural Heritage

Coastal tourism accounts for 85% of the U.S. tourism industry.<sup>32</sup> Given the huge numbers of visitors to the nation's coastal areas each year, the contribution of tourists to coastal development, demands on infrastructure, and pollution is not surprising. But coastal tourism depends on the quality of the coastal environment for swimming, surfing, bird watching, recreational fishing, whale watching, diving, and snorkeling. MPAs provide a management framework for ensuring a sustainable balance between the tourists enjoying the resources and the resources themselves, and can serve as a means to promote and market the destination.

MPAs also protect cultural sites, including shipwrecks, archeological sites, and areas of special significance to Native American tribes.<sup>33</sup> The first national marine sanctuary was established to protect the remains of the *USS Monitor*, a Civil War ironclad sunk off the coast of North Carolina.<sup>34</sup> MPAs serve as underwater museums, providing a means to preserve human history.

### C. Contrasts With Protected Areas on Land

In the United States, the protection of special places on land is an integral thread in the fabric of the nation. The first national park was established in 1872 under President Ulysses S. Grant.<sup>35</sup> The first national wildlife refuge

was established in 1903 by President Theodore Roosevelt.<sup>36</sup> The National Park System was created in 1916 under President Woodrow Wilson.<sup>37</sup> The very concept of public lands and the establishment of national parks has been hailed as America's "best idea."<sup>38</sup> Today, the nation enjoys a rich tapestry of public lands consisting of 401 diverse units administered by the National Park Service (NPS) (composed of national parks, monuments, battlefields, and nearly 20 other designations), 560 national wildlife refuges, 155 national forests, and more than 750 wilderness areas.<sup>39</sup>

Marine areas present a contrast. Despite the existing and growing threat to the nation's marine resources and habitats and the advantages of area-based management detailed above, similar protective actions have not been widely applied to American marine areas. Less than 1% of these areas are protected.<sup>40</sup> As discussed in the next part, the number of national marine sanctuaries remains fixed at 13, with the last one designated under the NMSA in 2000.

## II. Overview of the NMSA

Originally enacted as Title III of the Marine Protection, Research, and Sanctuaries Act of 1972,<sup>41</sup> the NMSA sets aside ocean and Great Lakes areas for permanent protection and long-term management as national marine sanctuaries. The NMSA takes a comprehensive approach to ocean management, seeking both to protect marine resources and to provide for multiple uses. Today, there are 13 sanctuaries established under the NMSA and located across the country, on the East Coast, the Gulf Coast, and the Pacific Coast and in the Great Lakes, Hawaii, and American Samoa.<sup>42</sup>

*vation, Conflict, and Centennial Values*, 33 WM. & MARY ENVTL. L. & POL'Y REV. 851, 921 n.6 (2009).

36. Exec. Order of Mar. 14, 1903 (unnumbered).

37. National Park System Organic Act of 1916, ch. 408, 39 Stat. 535 (1916) (codified at 16 U.S.C. §1).

38. See, e.g., THE NATIONAL PARKS: AMERICA'S BEST IDEA (PBS 2009) (Ken Burns, director); Wallace Stegner, *The Best Idea We Ever Had: An Overview*, WILDERNESS, Spring 1983, at 4.

39. See CAROL HARDY VINCENT, CONG. RESEARCH SERV., RS 20158, NATIONAL PARK SYSTEM: ESTABLISHING NEW UNITS 1-2 (2013) (national parks and monuments); U.S. FISH & WILDLIFE SERV., ANNUAL REPORT OF LANDS UNDER CONTROL OF THE U.S. FISH AND WILDLIFE SERVICE 6 (2013) (national wildlife refuges); U.S. DEP'T OF AGRIC., LAND AREAS OF THE NATIONAL FOREST SERVICE, FS-383, at 1 (2013) (national forests); KATIE HOOVER, CONG. RESEARCH SERV., RL 31442, WILDERNESS: OVERVIEW AND STATISTICS 3 (2014) (congressionally designated wilderness areas).

40. AMERICA'S LIVING OCEANS, *supra* note 5, at 31.

41. Pub. L. No. 92-532, §§301-304, 86 Stat. 1052, 1061-63 (1972).

42. Nat'l Oceanic & Atmospheric Admin. (NOAA), National Marine Sanctuaries, <http://sanctuaries.noaa.gov/visit/welcome.html> (last visited May 2, 2014). Under a distinct process under the Antiquities Act, discussed below in the Article, marine national monuments also have been established since 2000. One such monument is co-managed by the U.S. Fish and Wildlife Service (FWS), NOAA, and the state of Hawaii. See Proclamation No. 8031 (June 15, 2006) (establishing Northwestern Hawaiian Islands Marine National Monument). NOAA considers it a site managed as part of the national marine sanctuary system even though it is not established or designated as a national marine sanctuary pursuant to the NMSA. See, e.g., NOAA, National Marine Sanctuaries, About Your Sanctuaries, <http://sanctuaries.noaa.gov/about/welcome.html> (last visited May 1, 2014).

28. AMERICA'S LIVING OCEANS, *supra* note 5, at 40-41.

29. TOOLS FOR SUSTAINING OCEAN ECOSYSTEMS, *supra* note 14, at 40.

30. *Id.* at 27-28, 49.

31. *Id.* at 28; UPTON & BUCK, *supra* note 15, at 8.

32. AMERICA'S LIVING OCEANS, *supra* note 5, at 49.

33. *Id.*

34. UPTON & BUCK, *supra* note 15, at 8.

35. Yellowstone Park Act, ch. 24, 17 Stat. 32 (1872) (codified as amended at 16 U.S.C. §21); see Denise E. Antolini, *National Park Law in the U.S.: Conser-*

### A. Purposes of National Marine Sanctuaries

Congress enacted the NMSA in response to significant environmental failures at the time. Public support coalesced after a series of events unfolded in the late 1960s and early 1970s: a major oil spill blackened the coast of Santa Barbara, California, in 1969; other environmental disasters occurred; popular marine recreation areas experienced degradation; and a federal study revealed the toll of ocean dumping.<sup>43</sup> Congress intended that the NMSA would provide a comprehensive solution to the problem of ocean degradation.<sup>44</sup> In the words of one commentator, members of Congress said “they were creating an important program likely to ensure balanced planning for a wide range of uses on a broad geographic scale—in effect, a program to provide for comprehensive multi-use management of the oceans.”<sup>45</sup> Indeed, nearly every member of Congress who stated a position referred to the problem’s geographic scope and the solution’s grand scale.<sup>46</sup>

Given the NMSA’s grand scale, Congress emphasized that the legislation was intended to allow for multiple uses in the ocean.<sup>47</sup> Rather than prohibiting all uses in designated sanctuaries, Congress aimed to fashion a system that would permit and manage compatible uses.<sup>48</sup> In sum, then, Congress intended through the NMSA to create a comprehensive management system for the entire marine environment that balanced preservation and human activities. The primary goal of the NMSA is to protect submerged natural and cultural resources in the ocean and the Great Lakes.<sup>49</sup> Similarly, the mission of the national marine sanctuary system, as defined in law and as established by the NMSA’s implementing regulations, is “to identify, designate, and manage areas of the marine environment of special national, and in some cases international, significance due to their conservation, recreational, ecological, historical, research, educational, or aesthetic qualities.”<sup>50</sup> Setting up the multi-use approach in the law itself, the NMSA identifies the following purposes and objectives<sup>51</sup>:

- Permanently protect nationally significant areas of the marine environment by designating them national marine sanctuaries;

- Manage sanctuaries as ecosystems to maintain and enhance their natural biodiversity, historical and cultural heritage, and other unique qualities;
- Support, promote, and coordinate scientific research and monitoring in sanctuaries;
- Facilitate all lawful public and private sanctuary uses “to the extent compatible with the primary objective of resource protection”<sup>52</sup>;
- Enhance public awareness, understanding, and stewardship of the ocean and the Great Lakes; and
- Support permanent preservation of sanctuaries to benefit current and future generations.

The only explicit caveat in the purposes of the NMSA applies to public and private uses of sanctuary resources. That caveat is neither minor nor narrow. It defines the fundamental nature of the NMSA, providing that its “primary objective” is resource protection.<sup>53</sup> However, commentators have questioned whether resource protection has assumed the priority it deserves.<sup>54</sup> Barriers to the primacy of resource protection include the statutory context in which the relevant caveat appears, the multiple purposes and activities authorized and prescribed in the statute, and the very nature of the NMSA, as discussed below, to drive a broad, balanced approach allowing multiple uses.<sup>55</sup>

### B. Sanctuary Designations

There are two paths by which a national marine sanctuary may be designated. First, as provided in the NMSA, the Secretary of Commerce may take such action for “any discrete area of the marine environment” if, among other factors, the area has “special national significance due to (A) its conservation, recreational, ecological, historical, scientific, cultural, archaeological, educational, or esthetic qualities; (B) the communities of living marine resources it harbors; or (C) its resource or human-use values.”<sup>56</sup> As we outline below, the NMSA and its implementing regulations set out several steps that NOAA must follow to advance the designation process.

The second possibility is for Congress simply to pass an act to designate a sanctuary, outside the process defined in the NMSA. Out of a total of 15 sanctuary designations that underlie the 13 existing sanctuaries, Congress has established seven sanctuaries through stand-alone statutes, typically when it tired of waiting for NOAA and presidential administrations to take action.<sup>57</sup> As an example,

52. 16 U.S.C. §1431(b)(6).

53. *Id.*

54. See Chandler & Gillelan, *supra* note 43, at 10560-62.

55. *Id.*

56. 16 U.S.C. §1433(a).

57. See Owen, *supra* note 43, at 722, 730-38; NOAA, National Marine Sanctuaries, About Your Sanctuaries, <http://sanctuaries.noaa.gov/about/welcome.html> (last visited May 1, 2014). Although there have been 15 sanctuary designations, there are only 13 national marine sanctuaries today because Florida Keys National Marine Sanctuary subsumed two other sanctuaries in 1990.

43. Donald C. Baur et al., *Putting “Protection” Into Marine Protected Areas*, 28 VT. L. REV. 497, 510 (2004); Dave Owen, *The Disappointing History of the National Marine Sanctuaries Act*, 11 N.Y.U. ENVTL. L.J. 711, 714-15 (2003); see also William J. Chandler & Hannah Gillelan, *The History and Evolution of the National Marine Sanctuaries Act*, 34 ELR 10505, 10515-20 (June 2004).

44. Owen, *supra* note 43, at 716; see also 16 U.S.C. §1431(a)(3) (congressional finding that then-current laws could not always “provide a coordinated and comprehensive approach to the conservation and management of special areas of the marine environment”).

45. Owen, *supra* note 43, at 716.

46. *Id.* at 716-17.

47. *Id.* at 717-18; Baur et al., *supra* note 43, at 509-10.

48. Baur et al., *supra* note 43, at 509-10.

49. See 16 U.S.C. §1431(b)(6) (noting the NMSA’s “primary objective of resource protection”); see generally NMSA, 16 U.S.C. §§1431-1445c-1.

50. 15 C.F.R. §922.2(a).

51. See 16 U.S.C. §1431(a)(4), (b); 15 C.F.R. §922.2(b).

Congress created Stellwagen Bank National Marine Sanctuary in 1992 after expressing concern over a slow-moving designation process, with at least one member of Congress complaining that President George H.W. Bush's Administration was delaying designation because it was hesitant to prohibit sand and gravel mining in the area.<sup>58</sup>

The standard designation process laid out in the NMSA and its regulations is lengthy and entails exceptional stakeholder involvement. Throughout the process, the Secretary must consult with congressional committees, several federal agencies, state and local governments that may be affected by the proposed designation, officials of any Regional Fishery Management Council that may be affected, and other interested parties.<sup>59</sup> Under a recently adopted rule, NOAA has indicated it is accepting from the public nominations of sites for possible designation as sanctuaries.<sup>60</sup> NOAA will evaluate all such nominations and maintain a publicly available inventory of those nominated sites that it determines are eligible for sanctuary designation.<sup>61</sup>

Once NOAA advances an eligible nominated site for designation, public notice of the proposed designation and regulations, and related documentation, must be provided.<sup>62</sup> For all proposed sanctuary designations, NOAA must prepare a draft environmental impact statement under the National Environmental Policy Act (NEPA),<sup>63</sup> a resource assessment, a draft management plan, and maps depicting the proposed sanctuary's boundaries.<sup>64</sup> In addition to the public review process required for an environmental impact statement, at least one public hearing must be held in the coastal area or areas that will be most affected by the proposed designation, to receive comments from interested parties.<sup>65</sup>

The appropriate House and Senate committees may hold hearings on the proposed sanctuary designation.<sup>66</sup> During a 45-day review period, either congressional committee may issue a report on a designation or any of its terms, and the Secretary must consider any such report before designating territory as a sanctuary.<sup>67</sup> Additionally, if any part of a proposed sanctuary lies within state waters, the governor of the affected state may declare the designation or any of its terms unacceptable and without effect as applied to state waters.<sup>68</sup>

Progress in designating sanctuaries has been halting. Only two were designated in the 1970s, totaling 101 square

miles.<sup>69</sup> Neither designation "resembled the type of broad-based planning described in early congressional rhetoric," and both sanctuaries were too small to accommodate a wide range of uses.<sup>70</sup> Under President Jimmy Carter, NOAA designated four more sanctuaries, two of which were much larger. Only one new sanctuary was designated during the Ronald Reagan Administration, but designations rebounded by the early 1990s once political winds shifted. After several designations during this period, however, another sanctuary was not designated until 2000.<sup>71</sup> About that time, sanctuary designation was described as "sporadic and geographically piecemeal, dependent upon the whims of Congress and the executive."<sup>72</sup>

No sanctuaries have been designated under the NMSA since 2000, in large part because Congress decided that same year to bar NOAA from making future designations until the agency first determined it had sufficient resources to manage existing sanctuaries and inventory them.<sup>73</sup> Congress' action has had the practical effect of placing a moratorium on sanctuary designations. Some commentators allege that this "moratorium" evinces a lack of congressional commitment to the NMSA and "throws a pall of uncertainty over the program."<sup>74</sup>

Given the roadblocks to new designations, NOAA has undertaken several efforts to administratively expand the boundaries of existing sites. Fagatele Bay National Marine Sanctuary was expanded in 2012 to become the largest national marine sanctuary within the system, from less than one square mile to 13,581 square miles.<sup>75</sup> With widespread public support and bipartisan political backing, NOAA recently announced the expansion of Thunder Bay National Marine Sanctuary, which increases the area of the sanctuary almost tenfold.<sup>76</sup> NOAA currently is proposing to expand by 2,775 square miles two existing national marine sanctuaries off the northern California coast, an action that would more than double the sanctuaries' size.<sup>77</sup>

69. Owen, *supra* note 43, at 722-24.

70. *Id.* at 724.

71. *Id.* at 722, 725-30, 738-39.

72. *Id.* at 756.

73. 16 U.S.C. §1434(f)(1), added by the National Marine Sanctuaries Amendments Act of 2000, Pub. L. No. 106-513, §6(f), 114 Stat. 2381, 2385 (2000); *see also* NOAA, National Marine Sanctuaries, About Your Sanctuaries, <http://sanctuaries.noaa.gov/about/designations.html> (last visited May 2, 2014).

74. Chandler & Gillelan, *supra* note 43, at 10560.

75. Expansion of Fagatele Bay National Marine Sanctuary, Regulatory Changes, and Sanctuary Name Change, 77 Fed. Reg. 43942 (July 26, 2012); NOAA, National Marine Sanctuary of American Samoa, About Your Sanctuary, <http://americansamoa.noaa.gov/about/welcome.html> (last visited May 1, 2014); *see also* NOAA, National Marine Sanctuary of American Samoa: Management Plan Review, <http://americansamoa.noaa.gov/management/reports.html> (last visited May 2, 2014).

76. Boundary Expansion of Thunder Bay National Marine Sanctuary, 79 Fed. Reg. 52960 (Sept. 5, 2014); *see also* Michigan's Lake Huron "Shipwreck Alley" to Be Huge Freshwater Sanctuary, GUARDIAN, Sept. 5, 2014, at <http://www.theguardian.com/world/2014/sep/05/michigan-lake-huron-shipwreck-alley-marine-sanctuary-thunder-bay-expanded>.

77. Proposed Expansion and Regulatory Revision of Gulf of the Farallones and Cordell Bank National Marine Sanctuaries, 79 Fed. Reg. 20982 (Apr. 14, 2014); *see also* Press Release, NOAA's Office of National Marine Sanctuaries, NOAA Seeks Public Comment on Expanding Gulf of the Farallones and Cordell Bank National Marine Sanctuaries Off Northern California

58. National Marine Sanctuaries Program Amendments Act of 1992, Pub. L. No. 102-587, §2202, 106 Stat. 5039, 5048; *see* Owen, *supra* note 43, at 732-33, 735-36.

59. 16 U.S.C. §1433(b)(2).

60. Re-Establishing the Sanctuary Nomination Process, 79 Fed. Reg. 33851 et seq. (June 13, 2014).

61. *Id.* at 33860.

62. 16 U.S.C. §1434(a)(1).

63. National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. §§4321-4370f, ELR STAT. NEPA §2-209.

64. 16 U.S.C. §1434(a)(2) (citing NEPA)).

65. *Id.* §1434(a)(3).

66. *Id.* §1434(a)(6).

67. *Id.*

68. *Id.* §1434(b)(1).

These expansions have been conducted through the same intensive public process that characterizes the program (as discussed elsewhere in this part): with engagement and support of sanctuary advisory councils, with review and revision of sanctuary management plans, with preparation of environmental impact statements, with opportunity for public comment through the *Federal Register*, and with numerous public hearings. Additional efforts to reinvigorate the national marine sanctuary system as a whole are currently underway, as discussed in Part IV of this Article.

### C. Prohibitions and Permitted Uses

Overall, protection of ocean resources under the NMSA has been called “at times creative and innovative” but generally “uneven,” given the relatively small amount of marine territory preserved and the inconsistency of prohibitions under the statute.<sup>78</sup> Although the NMSA expressly contemplates multiple uses in national marine sanctuaries, general prohibitions relating to harm, loss, and taking of sanctuary resources are included in the statute.<sup>79</sup> These prohibitions are consistent with the statute’s primary purpose of resource protection.

The NMSA also creates a framework for every sanctuary to promulgate its own set of regulations, in addition to the generally applicable regulations. Unless prohibited by sanctuary-specific regulations or other authority, all activities such as fishing, boating, diving, research, and education may be conducted in sanctuaries.<sup>80</sup> Each sanctuary-specific set of regulations is designed to preserve and manage the specific area individually, a recognition of each sanctuary’s unique ecosystem and operation under its own designation document.<sup>81</sup> While certain regulations are applied across several sanctuaries, other regulations are crafted with a sanctuary’s particular resources in mind.<sup>82</sup> Examples of these regulations have been summarized as follows:

[M]any of the sanctuary-specific regulations prohibit activities that alter the seabed or are related to developing oil, gas, or minerals. Other common regulations prohibit the removal or injury of historical resources, or the taking of any marine mammal, sea turtle, or seabird. Less common regulations may prohibit activities such as operating personal watercraft or vessels carrying cargo. Some sanctuary-specific regulations prohibit activities such as attracting white sharks, diving of any type, coming within one hundred yards of a humpback whale, or removing, injuring, or possessing coral or live rock.<sup>83</sup>

(Dec. 20, 2012), available at <http://sanctuaries.noaa.gov/news/press/2012/pr122012.html>.

78. Owen, *supra* note 43, at 746-47, 756.

79. 16 U.S.C. §1436. It is unlawful to “destroy, cause the loss of, or injure any sanctuary resource managed under law or regulations for that sanctuary.” *Id.* §1436(1). Nor may an individual “possess, sell, offer for sale, purchase, import, export, deliver, carry, transport, or ship by any means any sanctuary resource taken in violation of this section.” *Id.* §1436(2).

80. 15 C.F.R. §922.42.

81. *Id.* §922.40; Connolly et al., *supra* note 22, at 542.

82. Connolly et al., *supra* note 22, at 542.

83. *Id.* (footnotes omitted) (citing all relevant regulatory sections).

The U.S. Court of Appeals for the District of Columbia (D.C.) Circuit had occasion to consider restrictions on “motorized personal watercraft” in Monterey Bay National Marine Sanctuary, off the central California coast.<sup>84</sup> Within the sanctuary, the challenged regulation limited to four designated zones and access routes the operation of motorized personalized watercraft, defined to include jet skis, wet bikes, surf jets, miniature speed boats, air boats, and hovercraft.<sup>85</sup> The administrative record before NOAA and the court was “full of evidence” that these watercraft “interfered with the public’s recreational safety and enjoyment of the Sanctuary and posed a serious threat to the Sanctuary’s flora and fauna.”<sup>86</sup> The court upheld the regulation, ruling that NOAA did not act arbitrarily by restricting motorized watercraft without also regulating other types of vessels in Monterey Bay National Marine Sanctuary.<sup>87</sup>

Under the NMSA’s implementing regulations, NOAA has the authority to issue national marine sanctuary permits that authorize activities otherwise prohibited by sanctuary-specific regulations.<sup>88</sup> To issue such a permit, NOAA must find that the activity will accomplish one of several objectives listed for each sanctuary.<sup>89</sup> NOAA has discretion in deciding whether to issue a national marine sanctuary permit, though the regulations list several factors the agency must consider in making this determination.<sup>90</sup> Appropriate terms and conditions may be imposed on permits.<sup>91</sup>

In addition to national marine sanctuary permits, the NMSA authorizes the issuance of special use permits for certain activities in a sanctuary. NOAA may issue a special use permit if found necessary either “to establish conditions of access to and use of any sanctuary resource; or to promote public use and understanding of a sanctuary resource.”<sup>92</sup> Special use permits may authorize activities in sanctuaries only for a five-year period, unless renewed.<sup>93</sup> Moreover, permits may authorize only an activity that is “compatible with the purposes for which the sanctuary is designated and with protection of sanctuary resources.”<sup>94</sup> Permitted activities must be conducted so as not to “destroy,

84. *Personal Watercraft Indus. Ass’n v. Dep’t of Commerce*, 48 F.3d 540, 542, 25 ELR 20681 (D.C. Cir. 1995).

85. *Id.* (citing 15 C.F.R. §§944.3, 944.5(a)(8) (1992)).

86. *Id.* at 545.

87. *Id.* at 541.

88. 15 C.F.R. §922.48(a).

89. As one example, to receive a permit in Cordell Bank National Marine Sanctuary, an otherwise-prohibited activity must (1) further research or monitoring related to the sanctuary, (2) further the sanctuary’s educational value, (3) further certain salvage or recovery operations in or near the sanctuary, or (4) assist in managing the sanctuary. *Id.* §922.113(b); *see also id.* §922.153(c) (listing permit issuance criteria for Olympic Coast National Marine Sanctuary, among them promoting or enhancing certain objectives for one of several American Indian tribes adjacent to the sanctuary).

90. *See, e.g., id.* §922.113(b), (c) (relevant factors for Cordell Bank National Marine Sanctuary); *id.* §922.123(c) (same for Flower Garden Banks National Marine Sanctuary).

91. *Id.* §922.48(d).

92. 16 U.S.C. §1441(a)(1)-(2).

93. *Id.* §1441(c)(2).

94. *Id.* §1441(c)(1).

cause the loss of, or injure sanctuary resources.<sup>95</sup> Finally, the regulations provide that activities that otherwise would be prohibited in a sanctuary are allowed, provided certain conditions apply, if such activities are authorized by a valid lease, permit, license, approval, or other authorization issued before or after a sanctuary is designated.<sup>96</sup>

Violators of the NMSA are subject to criminal and civil penalties. Certain offenses can receive a criminal punishment of, in most cases, a fine, up to 6 months' imprisonment, or both.<sup>97</sup> Civil penalties can reach \$100,000 per violation per day for continuing violations, while individuals who destroy, cause the loss of, or injure any sanctuary resource are civilly liable for the resulting response costs and damages, with interest.<sup>98</sup>

#### D. Sanctuary Management

NOAA's Office of National Marine Sanctuaries manages each sanctuary pursuant to a sanctuary-specific management plan.<sup>99</sup> NOAA has established advisory councils for every national marine sanctuary to make recommendations about sanctuary management. Advisory councils are composed of stakeholders and may include federal and state employees with relevant expertise; Regional Fishery Management Council members; representatives of local user groups, conservation groups, and other organizations; and other interested individuals.<sup>100</sup>

The national marine sanctuary system is replete with examples of adaptive, collaborative management measures that have been developed by NOAA with stakeholders, and which have been met with broad compliance by users and with strong public support. For example, Olympic Coast National Marine Sanctuary worked with the U.S. Coast Guard and the International Maritime Organization to declare much of the sanctuary as an Area to Be Avoided.<sup>101</sup> Of the approximately 4,000 vessels that each year pass through the sanctuary, there is a 97-98% compliance rate with the voluntary measures.<sup>102</sup> As another example, Stellwagen Bank National Marine Sanctuary also collaborated with the Coast Guard and the International Maritime Organization to alter the Boston Traffic Separation Scheme and amend the shipping lanes to avoid endangered

whales and reduce ship strikes.<sup>103</sup> Florida Keys and Channel Islands National Marine Sanctuaries each worked closely with federal and state partners to develop a nested system of zoning rules and requirements to allow for appropriate uses in different areas of the sanctuary.<sup>104</sup> Finally, through innovative arrangements, Florida Keys National Marine Sanctuary is jointly managed with the state of Florida under a co-trustee arrangement, while Hawaiian Islands Humpback Whale National Marine Sanctuary is co-managed with the state of Hawaii.<sup>105</sup>

The complexity of sanctuary management can be underscored with one figure: There are more than 23 different zoning definitions within the regulations governing national marine sanctuaries.<sup>106</sup> NOAA's management of national marine sanctuaries has been reviewed critically and consistently over many decades by outside entities, including the U.S. Government Accountability Office (GAO),<sup>107</sup> the Congressional Research Service,<sup>108</sup> the National Research Council of the National Academy of Sciences,<sup>109</sup> the National Academy of Public Administration,<sup>110</sup> the Inspector General of the U.S. Department of Commerce,<sup>111</sup> and various commissions and task forces.<sup>112</sup> Taken as a whole, these external reviews have concluded that sanctuaries are fundamentally well-conceived, cover gaps in other federal

95. *Id.* §1441(c)(3).

96. 15 C.F.R. §§922.47, 922.49.

97. 16 U.S.C. §1437(c).

98. *Id.* §§1437(d)(1), 1443(a)(1), (c).

99. 15 C.F.R. §922.30(a); *see also* NOAA, National Marine Sanctuaries, Frequently Asked Questions, <http://sanctuaries.noaa.gov/about/faqs/welcome.html#3> (last visited May 2, 2014).

100. 16 U.S.C. §1445a(b).

101. GEORGE GALASSO, OLYMPIC COAST NATIONAL MARINE SANCTUARY AREA TO BE AVOIDED (ATBA) EDUCATION AND MONITORING PROGRAM 5-7 (2000), *available at* <http://sanctuaries.noaa.gov/science/conservation/pdfs/atbafinal.pdf>.

102. NOAA, VESSEL TRANSITS THROUGH OLYMPIC COAST NATIONAL MARINE SANCTUARY AND AREA TO BE AVOIDED (ATBA)—2013 ESTIMATED COMPLIANCE 3 (2014), *available at* [http://olympiccoast.noaa.gov/protect/incidentresponse/2013\\_ais.pdf](http://olympiccoast.noaa.gov/protect/incidentresponse/2013_ais.pdf); NOAA, VESSEL TRANSITS THROUGH OLYMPIC COAST NATIONAL MARINE SANCTUARY AND AREA TO BE AVOIDED (ATBA)—2012 ESTIMATED COMPLIANCE 3-4 (2013), *available at* [http://olympiccoast.noaa.gov/protect/incidentresponse/2012\\_ais.pdf](http://olympiccoast.noaa.gov/protect/incidentresponse/2012_ais.pdf).

103. Philip A. McGillivray et al., *Enhancing AIS to Improve Whale-Ship Collision Avoidance and Maritime Security*, OCEANS 2009, MTS/IEEE BILOXI—MARINE TECH. FOR OUR FUTURE: GLOBAL & LOCAL CHALLENGES 1, 2 (2009), *available at* <http://www.dtic.mil/dtic/tr/fulltext/u2/a527578.pdf>.

104. *See* Baur et al., *supra* note 43, at 563-64; Kenneth R. Weiss, *Federal Fishing Ban Casts Wider Net*, L.A. TIMES, Aug. 9, 2007, at B7; NOAA, National Marine Protected Areas Center: Florida Keys National Marine Sanctuary, <http://marineprotectedareas.noaa.gov/aboutmpas/casestudies/floridakeys/> (last visited May 6, 2014).

105. NOAA, Florida Keys National Marine Sanctuary Management, <http://floridakeys.noaa.gov/management/welcome.html?s=management> (last visited May 6, 2014); NOAA, Hawaiian Islands Humpback Whale National Marine Sanctuary, Welcome, <http://hawaiihumpbackwhale.noaa.gov/> (last visited May 2, 2014).

106. Among defined zones are: areas of special biological significance; no-vessel operation areas; preexisting dredged material disposal zones; ecological reserves; limited harvest zones; no-harvest zones; jade collection zones; no-activity zones; military zones; overflight prohibition zones; recreational zones; and wildlife management areas. *See* 15 C.F.R. pt. 922.

107. U.S. GOV'T ACCOUNTABILITY OFFICE (GAO), MARINE SANCTUARIES PROGRAM OFFERS ENVIRONMENTAL PROTECTION AND BENEFITS OTHER LAWS DO NOT (Report by the Comptroller General of the United States) (1981), *available at* <http://www.gao.gov/products/CEd-81-37>.

108. Congressional Research Service study delivered Dec. 5, 1979, and Jan. 22, 1980 (original unavailable) (quoted in GAO, MARINE SANCTUARIES PROGRAM, *supra* note 107, at 20-21).

109. TOOLS FOR SUSTAINING OCEAN ECOSYSTEMS, *supra* note 14; NAT'L RESEARCH COUNCIL, STRIKING A BALANCE: IMPROVING STEWARDSHIP OF MARINE AREAS (1997).

110. *See* JAMES MURLEY & F. STEVENS REDBURN, READY TO PERFORM? PLANNING AND MANAGEMENT AT THE NATIONAL MARINE SANCTUARY PROGRAM (2006), *available at* <http://sanctuaries.noaa.gov/news/pdfs/napareport.pdf>; *see also* NAT'L ACADEMY OF PUB. ADMIN., PROTECTING OUR NATIONAL MARINE SANCTUARIES (2000), *available at* <http://sanctuaries.noaa.gov/management/pdfs/NAPARpt.pdf>.

111. U.S. DEP'T OF COMMERCE, OFFICE OF INSPECTOR GEN., NATIONAL MARINE SANCTUARY PROGRAM PROTECTS CERTAIN RESOURCES, BUT FURTHER ACTIONS COULD INCREASE PROTECTION (2008), *available at* <http://www.oig.doc.gov/OIGPublications/IPE-18591.pdf>.

112. *See, e.g.*, U.S. COMM'N ON OCEAN POLICY, *supra* note 5; CTR. FOR NATURAL AREAS, AN ASSESSMENT OF THE NEED FOR A NATIONAL MARINE SANCTUARIES PROGRAM (1977), *available at* <http://www.gpo.gov/fdsys/pkg/CZIC-qh91-75-u6-a8-1977/pdf/CZIC-qh91-75-u6-a8-1977.pdf>.

laws, and are making progress toward long-term protection of marine ecosystems.

Consider the conclusions reached by a few of these reviews. In two reports completed last decade, the National Academy of Public Administration called the national marine sanctuary system “fundamentally well conceived” and “unique” for its ability to address the full array of ocean governance issues.<sup>113</sup> According to the academy, the system has enjoyed “a good measure of success” in managing natural resources within sanctuaries,<sup>114</sup> and “is building a strong performance-based management system.”<sup>115</sup> The title of an earlier report by the GAO succinctly offered its main conclusion: “Marine Sanctuaries Program Offers Environmental Protection and Benefits Other Laws Do Not.”<sup>116</sup> In 2008, the Inspector General of the Department of Commerce found that, while certain improvements were warranted, the national marine sanctuary program was “generally making progress towards long-term protection of marine ecosystems and cultural resources.”<sup>117</sup> The Inspector General wrote: “The program effectively complements other federal, state, and local resource protection efforts by offering benefits other laws or regulations do not.”<sup>118</sup> All told, the overarching observation in reviews of the national marine sanctuary system has been that the system is a constructive and important tool in ocean governance, and that it is generally well-managed and effectively implemented by NOAA.

### E. Analysis: Strengths and Shortcomings

Unique among federal statutes that govern the marine environment, the NMSA provides for comprehensive, ecosystem-based management. The statutory process of sanctuary designation permits the creation of MPAs, which, as discussed, are characterized by integrated management and a focus on the marine system as opposed to an individual resource or species. This approach has several important benefits, as previously identified, including more robust protection of marine biodiversity, habitat, and fisheries.

NMSA regulations, including those applicable across all sanctuaries and to individual sanctuaries, serve to protect and manage marine resources within each designated area. Simple designation of an area as a national marine sanctuary does not guarantee extensive protections, but sanctuary-specific regulations can provide for them. The preceding section discussed sanctuary-specific regulations that prohibit extractive activities, the taking of certain animals, impacts on historical resources, and other human activities that could harm the marine ecosystem. Such regulations, to prohibit extractive and non-extractive activities alike, “provide a good deal of protection” to ocean

resources where the regulations apply.<sup>119</sup> Off the California coast, for instance, the NMSA has succeeded in limiting oil and gas drilling.<sup>120</sup>

Given the comprehensive framework of the NMSA, it deliberately balances multiple uses.<sup>121</sup> By authorizing and managing compatible uses of the ocean, the NMSA helps harmonize marine preservation, and human use and enjoyment. Sanctuaries can allow for commercial activity like fishing, for recreational activities that depend on an intact natural environment, and for long-term preservation.

This comprehensive, balanced approach is coupled with the single most powerful and important aspect of the NMSA: its provisions for strong stakeholder and community engagement. The statute includes extensive opportunities for public participation, from the time a site is first proposed for designation as a sanctuary through a sanctuary’s ongoing management as a protected area. The NMSA’s commitment to participation is evidenced by its provision for advisory committees of stakeholders to make recommendations on sanctuary designation and management.<sup>122</sup> More generally, the sanctuary program is set up to engage citizens in the NMSA’s mission. States and communities can take a sense of ownership in their local marine environment through the program.<sup>123</sup> Sanctuaries become living laboratories, classrooms, and playgrounds, as the NMSA makes marine areas accessible for research centers, educational institutions, and other entities. The public involvement aspect of the NMSA is a major strength of the program, as it facilitates long-term buy-in by affected parties and local communities.

For violators of sanctuary protections, the NMSA provides for both civil and criminal penalties. This represents another strength of the statute, as it enables the Secretary of Commerce to assess a civil penalty or request the initiation of a civil action against alleged violators without necessarily instituting criminal proceedings, which likely would have a lower priority relative to, say, violent crimes committed on land.<sup>124</sup> Additionally, NOAA takes into account whether a violation occurred in a sanctuary when assessing penalties under other statutes,<sup>125</sup> including the Endangered Species Act (ESA)<sup>126</sup> and the Marine Mammal Protection Act (MMPA),<sup>127</sup> both discussed in detail later in the Article.

In spite of its strengths, the NMSA, as currently drafted and implemented, also has several weaknesses. It has been politically challenging at times for NOAA to establish

119. Baur et al., *supra* note 43, at 521; *see also* Owen, *supra* note 43, at 745.

120. Owen, *supra* note 43, at 745.

121. *Id.* at 717-18; Baur et al., *supra* note 43, at 509-10 (describing Congress’ intention to enable multiple-use management in marine sanctuaries).

122. 16 U.S.C. §1445a(a).

123. Owen, *supra* note 43, at 746.

124. *See* 16 U.S.C. §§1437(d)(1), 1443(c)(1).

125. *See* NOAA, OFFICE OF THE GENERAL COUNSEL—ENFORCEMENT AND LITIGATION, POLICY FOR THE ASSESSMENT OF CIVIL ADMINISTRATIVE PENALTIES AND PERMIT SANCTIONS, at 7-8 (Mar. 16, 2011), *available at* [http://www.gc.noaa.gov/documents/031611\\_penalty\\_policy.pdf](http://www.gc.noaa.gov/documents/031611_penalty_policy.pdf).

126. Endangered Species Act (ESA), 16 U.S.C. §§1531-1544, ELR STAT. ESA §§2-18.

127. Marine Mammal Protection Act (MMPA), 16 U.S.C. §§1361-1421h, ELR STAT. MMPA §§2-410.

113. *See* MURLEY & REDBURN, *supra* note 110, at vii; NAT’L ACADEMY OF PUB. ADMIN., *supra* note 110, at 1, 10, 45.

114. NAT’L ACADEMY OF PUB. ADMIN., *supra* note 110, at 11.

115. MURLEY & REDBURN, *supra* note 110, at vii.

116. GAO, MARINE SANCTUARIES PROGRAM, *supra* note 107.

117. U.S. DEP’T OF COMMERCE, *supra* note 111, at ii.

118. *Id.*

sanctuaries. Reserving significant natural resources can inspire intense opposition in certain instances where there is a conflict with preexisting commercial activities. In the face of such opposition, it can prove difficult for an administrative agency, particularly one of NOAA's relatively small size, to advance sanctuary designations without broader support from Congress and the president.

As discussed above, Congress has imposed tough requirements on NOAA before the agency can designate further sanctuaries. Consequently, no new sanctuaries have been designated under the NMSA in the last 14 years. Although it remains to be seen whether the congressional requirements will continue to function as a de facto moratorium, we are aware of no evidence that NOAA intends or is able to make the requisite findings to reinstate designations. The NMSA does not include a private right-of-action that would allow the public to force the designation of sanctuaries. Such a right is common in other environmental laws, such as the ESA, and can empower private citizens to force agency action to protect the environment.<sup>128</sup>

Once sanctuaries are designated, the NMSA's provision for multiple use complicates the preservation of intact ocean ecosystems. Extractive activities like commercial fishing can undermine the biodiversity and integrity of MPAs.<sup>129</sup> Some critics argue that attempts to balance preservation with active uses of sanctuaries have "made it extremely difficult to establish use-specific zones" for low-intensity activities like preservation, thus hindering the NMSA's purpose of preserving marine resources.<sup>130</sup> Accordingly, this critique goes, even though the intent of the NMSA was to preserve ocean ecosystems, the statute lacks a "singular focus on preservation" and, therefore, does not adequately accomplish this goal.<sup>131</sup> Because the national marine sanctuary system operates on a principle of multiuse authorization, it is beneficial—when Congress is involved in designating a sanctuary established to protect certain natural resources—for Congress to provide greater direction to NOAA on the specific resource values to be protected.

Finally, while not a fault with the NMSA per se, NOAA has been chronically underfunded in fulfilling the vision and mission of the NMSA. The NMSA does not guarantee that NOAA will receive increased funding after designating additional sanctuaries, and, indeed, Congress has not routinely made such allocations.<sup>132</sup> In 2000, Congress essentially acknowledged NOAA's financial challenges in managing the sanctuaries when Congress prohibited new designations until NOAA determines it has adequate resources to manage and inventory existing sanctuaries.<sup>133</sup>

128. Owen, *supra* note 43, at 752-53 (citing as examples the ESA, *see* 16 U.S.C. §1540(g); the CWA, *supra* note 10, *see* 33 U.S.C. §1365; and the CAA, *supra* note 10, *see* 42 U.S.C. §7604(a)).

129. Chandler & Gillelan, *supra* note 43, at 10559.

130. *Id.* at 10508.

131. *Id.* at 10560 (emphasis omitted).

132. *See* Owen, *supra* note 43, at 723-57 (noting, throughout a history and analysis of the NMSA, the inadequate funding Congress has allocated to implement the legislation).

133. *See* 16 U.S.C. §1434(f).

### III. Other Legal Mechanisms for Preserving Marine Ecosystems

#### A. Federal Law

In addition to the NMSA, several other federal legal authorities play a role in preserving marine ecosystems. However, as this Part indicates, each has significant shortcomings relative to the NMSA.

#### I. Presidential Orders and Policies

##### a. Executive Order No. 13158

In May 2000, President Clinton promulgated Executive Order No. 13158, one of several initiatives to advance ocean exploration, research, and conservation.<sup>134</sup> The Executive Order was intended to spur action on MPAs, with §3 providing that relevant federal agencies take "appropriate actions to enhance or expand protection of existing MPAs and establish or recommend, as appropriate, new MPAs,"<sup>135</sup> and §4 specifically calling on the Department of Commerce and the U.S. Department of the Interior (DOI) to develop a "National System" of MPAs.<sup>136</sup>

The Executive Order was also intended to drive federal agencies to adopt better protections for MPAs. Section 5 of the Executive Order requires each federal agency to identify its actions that "affect the natural or cultural resources that are protected by an MPA."<sup>137</sup> It further directs such agencies, "to the maximum extent practicable," to "avoid harm to the natural and cultural resources that are protected by an MPA."<sup>138</sup>

##### b. U.S. Ocean Action Plan

In 2001, President George W. Bush announced the Administration's retention of Executive Order No. 13158, as well as the appointment of the Marine Protection Area Advisory Committee to fulfill the directive to seek the expert advice and recommendations of various stakeholders.<sup>139</sup> Then in December 2004, the Bush Administration released its U.S. Ocean Action Plan,<sup>140</sup> designed to respond to the findings of the U.S. Commission on Ocean Policy, which highlighted serious problems facing

134. 65 Fed. Reg. 34909 (May 26, 2000), *reprinted in* 16 U.S.C. §1431.

135. *Id.* at 34909. Executive Order No. 13158 provides the working definition of an MPA within the United States.

136. *Id.* at 34910. The Secretaries of Commerce and the Interior were charged to: establish an MPA Federal Advisory Committee to provide nonfederal recommendations; establish a website for information on MPAs; publish and maintain a national inventory of MPAs; establish a Marine Protected Area Center to provide science, tools, and strategies to assess the effectiveness of existing and future MPAs and develop the framework for a national system of such areas; and consult with government and nongovernment stakeholders.

137. *Id.* at 34911.

138. *Id.*

139. Notice of Request for Nominations, 66 Fed. Reg. 42204 (Aug. 10, 2001).

140. WHITE HOUSE COUNCIL ON ENVTL. QUALITY, *supra* note 6; *see also* Exec. Order No. 13336, 69 Fed. Reg. 76591 (Dec. 21, 2004).

the nation's marine environment and offered a strategy for promoting multiple uses and balancing competing stakeholder interests in our nation's ocean, coasts, and Great Lakes.<sup>141</sup> The plan envisioned both immediate and long-term actions dedicated to an ecosystem-based approach to resource management, including the dedication of national leadership on ocean policy, improvement of fisheries management, and enhancement of research on ocean science and technology.<sup>142</sup>

The plan and its subsequent implementation by the Bush Administration made significant progress toward protecting the nation's ocean, coasts, and Great Lakes. Notably, one stated objective of the plan was to protect the Northwestern Hawaiian Islands coral reefs. Following President Clinton's Executive Order establishing the Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve,<sup>143</sup> and a further multi-year development process involving a variety of stakeholders and interests, President Bush used his authority under the Antiquities Act to designate as a national monument the world's largest marine conservation area off the coast of the Northwestern Hawaiian Islands on June 15, 2006.<sup>144</sup> In 2007, the president signed the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act to significantly strengthen a number of key fisheries management provisions.<sup>145</sup> Additionally, through a collaborative process involving more than 60 public and private partners, 10,000 acres of tidal wetlands were restored in an area of the Laguna Atascosa National Wildlife Refuge in Texas known as the Bahia Grande.<sup>146</sup> Of the 88 goals established under the U.S. Ocean Action Plan, nearly all were accomplished by 2007.<sup>147</sup>

### c. National Ocean Policy

The Obama Administration in 2010 released a National Ocean Policy, which aims to "protect, maintain and restore the health and biological diversity of ocean, coastal, and Great Lakes ecosystems and resources"<sup>148</sup> as well as "support sustainable, safe, secure, and productive access to, and uses of the ocean, our coasts, and the Great Lakes."<sup>149</sup> The policy reflects recommendations made by the Interagency

Ocean Policy Task Force that include shifting away from use-based laws and toward ecosystem-based management of marine resources,<sup>150</sup> as well as increasing stakeholder involvement to ensure that ocean management considers the needs of those affected by new policies.<sup>151</sup>

The policy created the National Ocean Council, which in April 2013 released the National Ocean Policy Implementation Plan.<sup>152</sup> The plan describes specific actions that aim to implement the policy's goals. To address "coastal and ocean resilience," the plan includes specific milestones designed to reduce adverse conditions, prepare for change, and recover and sustain ocean health.<sup>153</sup> The plan's appendix sets forth detailed action items and includes assignments for federal agency implementation and target dates for completion.<sup>154</sup> The Obama Administration is moving forward to establish regional planning bodies as provided in the plan.<sup>155</sup>

### d. Analysis: Shortcomings of Presidential Orders and Policies

Executive orders and presidential policies provide an ideal mechanism for articulating an ecosystem-based approach to conservation.<sup>156</sup> However, presidential orders and policies, by definition, are weak due to their lack of enforceability. For example, a private party cannot sue the federal government based on an executive order. Executive Order No. 13518 explicitly acknowledges this limitation by stating that it does not create any "right or benefit, substantive or procedural, enforceable in law or equity by a party against the United States, its agencies, its officers, or any person."<sup>157</sup> Executive orders and presidential policies generally rely on existing authorities and procedures, and available funding, and these limitations invariably undermine their aspirational vision.

## 2. Use-Based Authorities

### a. Outer Continental Shelf Lands Act

The Outer Continental Shelf Lands Act (OCSLA)<sup>158</sup> is the foundation of U.S. ocean energy law. The OCSLA establishes federal jurisdiction of the subsoil and seabed

141. U.S. Comm'n on Ocean Policy, Press Statement: Chairman of U.S. Commission on Ocean Policy Commends President Bush on Initial Step Toward a National Ocean Policy (Dec. 17, 2004), *available at* [http://govinfo.library.unt.edu/oceancommission/newsnotices/dec17\\_04.html](http://govinfo.library.unt.edu/oceancommission/newsnotices/dec17_04.html).

142. WHITE HOUSE COUNCIL ON ENVTL. QUALITY, *supra* note 6, at 4-5.

143. Exec. Order No. 13178, 65 Fed. Reg. 76903 (Dec. 4, 2000).

144. Proclamation No. 8031, 71 Fed. Reg. 36443 (June 15, 2006).

145. Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006, Pub. L. No. 109-479, 120 Stat. 3575 (2007).

146. See NOAA, Press Release: NOAA Awards \$200,000 to Ocean Trust for Major Texas Estuary Restoration (Sept. 5, 2003), *available at* <http://www.publicaffairs.noaa.gov/releases/2003/sep03/noaa03r945.html>; see also INTERAGENCY COMMITTEE ON OCEAN SCIENCE AND RESOURCE MANAGEMENT INTEGRATION, FEDERAL OCEAN AND COASTAL ACTIVITIES REPORT TO THE U.S. CONGRESS FOR CY 2006 AND 2007, at 9 (Jan. 2008).

147. U.S. DOI, Press Release: Secretary Kempthorne Highlights Progress to Achieve Goals of U.S. Ocean Action Plan (Jan. 25, 2007), *available at* [http://www.doi.gov/news/archive/07\\_News\\_Releases/070126.html](http://www.doi.gov/news/archive/07_News_Releases/070126.html).

148. Exec. Order No. 13547, §2, 75 Fed. Reg. 43023, 43023 (July 19, 2010).

149. *Id.* at 43024.

150. WHITE HOUSE COUNCIL ON ENVTL. QUALITY, FINAL RECOMMENDATIONS OF THE INTERAGENCY OCEAN POLICY TASK FORCE 2 (2010).

151. *Id.* at 7.

152. NATIONAL OCEAN COUNCIL, NATIONAL OCEAN POLICY IMPLEMENTATION PLAN (2013).

153. *Id.* at 14-18.

154. NATIONAL OCEAN COUNCIL, NATIONAL OCEAN POLICY IMPLEMENTATION PLAN APPENDIX (2013).

155. See Video: CHOW [Capitol Hill Ocean Week] 2014 Opening Keynote: John Podesta—The White House (June 15, 2014), <https://www.youtube.com/watch?v=BCsEWez50XE&feature=youtu.be> (remarks by John Podesta).

156. See Patrick A. Parenteau et al., *Legal Authorities for Ecosystem-Based Management in U.S. Coastal and Ocean Areas*, in OCEAN AND COASTAL LAW AND POLICY, *supra* note 22, at 597, 628.

157. Exec. Order No. 13158, 65 Fed. Reg. at 34911.

158. Outer Continental Shelf Lands Act (OCSLA), 43 U.S.C. §§1331-1356a.

of the Outer Continental Shelf seaward of state territorial waters.<sup>159</sup> Within this vast area, the OCSLA gives the Secretary of the Interior the authority to grant leases for the development of energy resources within the Outer Continental Shelf.<sup>160</sup>

The goal of the OCSLA is well-explained by its policy statement: “the outer Continental Shelf is a vital national resource reserve held by the Federal Government for the public, which should be made available for expeditious and orderly development, subject to environmental safeguards, in a manner which is consistent with the maintenance of competition and other national needs.”<sup>161</sup> In 2011, DOI restructured the administration of the OCSLA. Today, the Bureau of Ocean Energy Management manages the development of the nation’s offshore resources,<sup>162</sup> while the Bureau of Safety and Environmental Enforcement enforces safety and environmental regulations.<sup>163</sup>

Under the OCSLA, the Secretary must prepare and maintain an oil and gas leasing program with a schedule of proposed lease sales indicating the size, timing, and location of leasing activity that the Secretary “determines will best meet national energy needs for the five-year period following its approval or reapproval.”<sup>164</sup> Under the program, management of the Outer Continental Shelf “shall be conducted in a manner which considers economic, social, and environmental values of the renewable and nonrenewable resources” contained there “and the potential impact of oil and gas exploration on other resource values of the [Outer Continental Shelf] and the marine, coastal, and human environments.”<sup>165</sup> No lease may be issued “unless it is for an area included in the approved leasing program and unless it contains provisions consistent with the approved leasing program.”<sup>166</sup>

The OCSLA aims to protect marine ecosystems in at least two ways. The first concerns one of the primary purposes of the law: to find and use domestic oil and gas on submerged public lands. Developing domestic resources on the Outer Continental Shelf minimizes reliance on foreign oil and, in turn, may reduce the travel distances and attendant risks (for example, oil spills) associated with transporting oil in supertankers between countries.<sup>167</sup>

Second, the OCSLA includes provisions expressly designed to protect marine resources. For instance, the OCSLA requires the Secretary to “select the timing and location of leasing, to the maximum extent practicable, so as to obtain a proper balance between the potential for

environmental damage, the potential for the discovery of oil and gas, and the potential for adverse impact on the coastal zone.”<sup>168</sup> In striking this “balance,” the Secretary must consider “environmental sensitivity and marine productivity” of areas when determining whether such areas will be open for development.<sup>169</sup> In addition, the president can withdraw areas of the Outer Continental Shelf from leasing to protect such areas from development.<sup>170</sup> Where activities threaten the marine, coastal, or human environment or threaten damage to fish and other aquatic life, the Secretary can suspend or temporarily prohibit operations pursuant to a lease or cancel a lease,<sup>171</sup> powers that can create de facto MPAs from oil and gas activities.<sup>172</sup>

### b. Magnuson-Stevens FCMA

The FCMA<sup>173</sup> is the most significant federal fishery management law. The FCMA establishes a fishery conservation zone within 200 nautical miles of U.S. shores and a set of rules to manage fishing activities.<sup>174</sup> Two institutions primarily implement the law: the National Marine Fisheries Service (NMFS) and eight Regional Fishery Management Councils. The NMFS regulates certain highly migratory species,<sup>175</sup> and the eight councils manage fisheries within their respective jurisdictions, which vary in geographic size.<sup>176</sup>

Under the FCMA, councils decide which fisheries need “conservation and management.”<sup>177</sup> For these fisheries, the councils must develop a fishery management plan that establishes “conservation and management measures . . . necessary and appropriate . . . to prevent overfishing and rebuild overfished stocks, and to protect, restore, and promote the long-term health and stability of the fishery.”<sup>178</sup> Fishery management plans must also “assess and specify the present and probable future condition of, and the maximum sustainable yield and optimum yield from, the fishery.”<sup>179</sup>

159. 43 U.S.C. §1333(a)(1)-(2)(A); see also Connolly et al. *supra* note 22, at 546-47; Milo C. Mason, *Offshore Energy Development*, in OCEAN AND COASTAL LAW AND POLICY, *supra* note 22, at 409 (providing a detailed review of the OCSLA).

160. 43 U.S.C. §1334(a); see also Connolly et al., *supra* note 22, at 547.

161. 43 U.S.C. §1332(3).

162. Bureau of Ocean Energy Mgmt., The Reorganization of the Former MMS, <http://www.boem.gov/About-BOEM/Reorganization/Reorganization.aspx> (last visited May 8, 2014).

163. *Id.*

164. 43 U.S.C. §1344(a).

165. *Id.* §1344(a)(1).

166. *Id.* §1344(d)(3).

167. Mason, *supra* note 157, at 433-34.

168. 43 U.S.C. §1344(a)(3).

169. *Id.* §1344(a)(2)(G).

170. *Id.* §1341(a).

171. *Id.* §1334(a)(1)(B), (a)(2)(A)(i).

172. Connolly et al., *supra* note 22, at 547.

173. Magnuson-Stevens FCMA, 16 U.S.C. §§1801-1884.

174. See generally Josh Eagle, *Domestic Fishery Management*, in OCEAN AND COASTAL LAW AND POLICY, *supra* note 22, at 275, 276; see also *id.* at 275-93 (providing a detailed review of the FCMA).

175. 16 U.S.C. §§1852(a)(3), 1854(g).

176. Eagle, *supra* note 174, at 277-78.

177. 16 U.S.C. §1852(h)(1).

178. *Id.* §1853(a)(1).

179. *Id.* §1853(a)(3). Each fishery management plan must also be consistent with 10 national standards for fishery conservation and management. *Id.* §1851; Eagle, *supra* note 174, at 280. For instance, councils are to achieve optimum yield from each fishery, use “[c]onservation and management measures . . . based upon the best scientific information available,” and manage an individual stock of fish as a unit through its range. 16 U.S.C. §1851(a)(2)-(a)(3). There are also standards that address political and social concerns, including one that prohibits conservation and management measures from discriminating between residents of different states and another that requires such measures, to the extent practicable, to promote safety at sea. *Id.* §1851(a)(4), (a)(10).

The FCMA features mechanisms to rebuild, protect, and conserve marine ecosystems. In U.S. waters, councils must rebuild overfished fisheries in “as short as possible” a period of time and, in general, must do so within 10 years.<sup>180</sup> To further rebuild and protect fisheries, a council’s fishery management plan may create MPAs, designating “zones where, and periods when, fishing shall be limited, or shall not be permitted, or shall be permitted only by specified types of fishing vessels or with specified types and quantities of fishing gear.”<sup>181</sup>

Councils must “describe and identify essential fish habitat for the fishery,”<sup>182</sup> which includes “those waters and substrate necessary to fish for spawning, breeding, feeding or growth to maturity.”<sup>183</sup> Councils must “minimize to the extent practicable adverse effects on such habitat caused by fishing, and identify other actions to encourage the conservation and enhancement of such habitat.”<sup>184</sup> Designations of essential fish habitat can have broad conservation impacts beyond the fishing industry because federal agencies must consult with the Secretary of Commerce with respect to actions authorized, funded, or undertaken by the agency that may adversely affect essential fish habitat.<sup>185</sup> If the Secretary determines that an action would adversely affect such habitat, the agency proposing the action must employ recommended conservation measures.<sup>186</sup>

### c. Analysis: Shortcomings of Use-Based Authorities

Notwithstanding the marine protection authorities under the OCSLA and the FCMA, these laws do not provide for comprehensive management of ocean ecosystems. While decisions under the OCSLA can create de facto protected areas from development on the Outer Continental Shelf, the OCSLA is designed to develop resources on the Outer

Continental Shelf and is not intended to provide for the kind of comprehensive, multisector protection needed to protect whole ecosystems intact and in perpetuity. Similarly, the FCMA includes important marine protection and conservation mechanisms, but the law is meant to sustain and rebuild fisheries rather than broader ecosystems.<sup>187</sup>

Because these use-based authorities center on the management of marine resources for consumptive use, they do not provide a clear mandate to the agencies that administer them to set aside nationally significant marine areas to protect the range of values that can be protected under the NMSA.<sup>188</sup> Further, the narrow use-based focus of the OCSLA and the FCMA shapes the manner in which industry and other stakeholders engage in and seek to influence policy decisions under these laws. Under the OCSLA, stakeholders focus on how best to exploit or prevent the use of energy resources on the Outer Continental Shelf. Under the FCMA, stakeholders focus on managing and recovering fish stocks. By contrast, through the extensive stakeholder engagement to designate sanctuaries under the NMSA, the public can orient its input toward ensuring comprehensive, ecosystem-based management of marine areas in perpetuity.

## 3. Coastal-Focused Authorities

### a. Coastal Zone Management Act

Congress enacted the Coastal Zone Management Act (CZMA)<sup>189</sup> in 1972, in recognition of the “piecemeal development of coastal ecosystems without an overall strategy for comprehensive coastal management.”<sup>190</sup> Section 303 of the CZMA declares as the national policy to “preserve, protect, develop, and where possible, to restore or enhance, the resources of the Nation’s coastal zone for this and succeeding generations.”<sup>191</sup> “Coastal zone” is defined as:

the coastal waters (including the lands therein and thereunder) and the adjacent shorelands (including the waters therein and thereunder), strongly influenced by each other and in proximity to the shorelines of the several coastal states, [which] includes islands, transitional and intertidal areas, salt marshes, wetlands, and beaches.<sup>192</sup>

The CZMA recognizes that coastal management must take place at a more local level than the federal government, given that land use controls often are adminis-

180. 16 U.S.C. §1854(e)(4)(A)(i), (ii).

181. *Id.* §1853(b)(2). Connolly et al., *supra* note 22, at 543 (describing council use of marine reserves). For instance, the December 2011 Pacific Coast Groundfish Fishery Management Plan set aside time and area closures from fishing and noted that “most either are practically permanent (portions of the [Groundfish Conservation Areas]) or are intended to be permanent (habitat closed areas and the trawl footprint closure). These time/area closures offer lasting protection and may be considered MPA.” PAC. FISHERY MGMT. COUNCIL, PACIFIC COAST GROUND FISH FISHERY MANAGEMENT PLAN 87 (2011), available at [http://www.pcouncil.org/wp-content/uploads/GF\\_FMP\\_FINAL\\_Dec2011.pdf](http://www.pcouncil.org/wp-content/uploads/GF_FMP_FINAL_Dec2011.pdf). See also NOAA Southeast Fishery Bulletin, FB09-004 (Jan 13, 2009), available at [http://sero.nmfs.noaa.gov/fishery\\_bulletins/bulletin\\_archives/2009/documents/pdfs/fb09-004\\_fr\\_for\\_amend14\\_sng.pdf](http://sero.nmfs.noaa.gov/fishery_bulletins/bulletin_archives/2009/documents/pdfs/fb09-004_fr_for_amend14_sng.pdf) (summarizing final rule to implement Amendment 14 to the South Atlantic Snapper Grouper Fishery Management Plan to restrict fishing by establishing eight MPAs ranging from North Carolina to Florida).

182. 16 U.S.C. §1853(a)(7).

183. *Id.* §1802(10).

184. *Id.* §1853(a)(7).

185. *Id.* §1855(b)(2).

186. *Id.* §1855(b)(4)(A). The FCMA also includes provisions to protect global fish stocks by prohibiting the importation of fish, fish products, and sports fishing equipment from any nation identified by the Secretary as having nationals engaged in illegal, unregulated, or unreported fishing beyond the exclusive economic zone of any nation. *Id.* §1826a(b); David K. Schorr, *Trade in Fish and Fisheries Products*, in OCEAN AND COASTAL LAW AND POLICY, *supra* note 22, at 333, 355.

187. As reflected in a recent NMFS report, fisheries yield and recovery are properly the focus of the agency administering the law, as opposed to other federal programs that protect valued ocean places. NAT’L MARINE FISHERIES SERV., 2011 REPORT TO CONGRESS, STATUS OF STOCKS: REPORT ON THE STATUS OF U.S. FISHERIES FOR 2011, Forward & Executive Summary (2012).

188. Such values include “conservation, recreational, ecological, historical, scientific, cultural, archaeological, educational, or esthetic qualities; . . . the communities of living marine resources [the area] harbors; or . . . its resource or human-use values.” 16 U.S.C. §1433(a).

189. Coastal Zone Management Act (CZMA), 16 U.S.C. §§1451-1464.

190. See 1 PATRICIA E. SALKIN, AMERICAN LAW OF ZONING §3:3 (5th ed. 2012) (internal quotation marks and citation omitted).

191. 16 U.S.C. §1452(1).

192. *Id.* §1453(1).

tered by municipalities.<sup>193</sup> Thus, although the CZMA is administered by the Department of Commerce, the actual implementation of approved management plans under the CZMA takes place at the state level. The states can achieve the CZMA's objectives, and receive the benefits provided by the statute, but are still free to choose the mix of land and water uses in their programs.

The CZMA aims to achieve its goal by encouraging state responsibility for coastal zones through "management programs" to meet numerous objectives, including the protection of natural resources, improvement of coastal water quality, and management of coastal development. Under the CZMA, coastal states may submit management plans for approval by the Department of Commerce. To be approved, a state program must define the boundaries of the state coastal zone, identify how the state will exert control over land and water uses, describe the organizational structure to implement the program, identify which activities are permissible within the zone, and designate legal authorities for decisionmaking and administration of the program.<sup>194</sup> In addition, the state must coordinate its program with local, areawide, and interstate plans and establish a mechanism to ensure continuing consultation between the state agency administering the plan and local and regional agencies.<sup>195</sup> The CZMA provides federal funding to states during both the planning and implementation stages of management plans. If approved, the state management plan is eligible for federal funding to assist in the implementation of the management's objectives.

The CZMA also includes funding opportunities through the coastal resource improvement program. Under the program, states can obtain federal dollars to preserve or restore specific areas because of their conservation, recreational, ecological, or aesthetic values, redevelop urban waterfronts or ports, provide public access to beaches or other areas of significance, or develop a coordinated process to regulate aquaculture facilities.<sup>196</sup> Section 309 also makes federal grants available to coastal states to fund programs that support "coastal zone enhancement objectives." These objectives include the protection, restoration, or enhancement of the coastal wetlands, planning for the use of ocean resources, as well as the assessment of coastal growth and development.<sup>197</sup>

In addition to federal funding, the CZMA's main incentive to states lies in §307, known as the "federal consistency provision."<sup>198</sup> Federal actions affecting a state's coastal uses or resources must be consistent "to the maximum extent practicable" with the state coastal management program.<sup>199</sup> This provision affords the participating states a significant amount of control and the opportunity

to exercise autonomy to craft and enforce their coastal management plans.<sup>200</sup>

The federal consistency provision reaches private coastal development projects that require federal permits and licenses. Before a federal authority may grant a permit or license affecting the coastal resource, the applicant must certify that the proposed activity will be conducted in a manner consistent with the management program.<sup>201</sup> If a state objects, the federal agency is precluded from moving forward unless, on administrative appeal, the Department of Commerce finds the proposed activity is consistent with the CZMA's objectives or if national security requires the project to proceed. Projects often affected by this provision include grants from the Department of Housing and Urban Development, as well as federal highway funds and permits from the U.S. Department of Transportation.

The CZMA also established the National Estuarine Research Reserve System (NERRS).<sup>202</sup> Estuaries are defined as the parts of a river, stream, or other body of water having unimpaired connection with the open sea, where the sea water is measurably diluted with fresh waters derived from land drainage.<sup>203</sup> The NERRS is a network of individual reserves that are dedicated to long-term estuarine research.<sup>204</sup> For an estuarine area to be designated as part of the system, the nominating coastal state must have laws in place that provide long-term protection to ensure a stable research environment. The CZMA authorizes federal funding for designated reserves, including the delegation of federal grants for use in managing the reserve and conducting education, research, or monitoring activities.<sup>205</sup> The statute, therefore, is an incentive for coastal states to enact laws dedicated to protecting estuarine areas.<sup>206</sup> Currently, there are 28 national reserves.<sup>207</sup>

The 1990 Coastal Zone Reauthorization Amendments expanded the federal consistency provision in §307 to include federal activities "within or outside the coastal zone."<sup>208</sup> Congress expanded the scope of this provision in direct response to the U.S. Supreme Court's decision in *Secretary of the Interior v. California*.<sup>209</sup> In that case, the Court held that DOI's sale of Outer Continental Shelf oil and gas leases did not constitute activity "directly affect-

193. SALKIN, *supra* note 190, §3:3.

194. 16 U.S.C. §1455(d).

195. *Id.* §1455(d)(3).

196. *Id.* §1455a.

197. *Id.* §1456b.

198. *Id.* §1456.

199. *Id.* §1456(c)(2).

200. The consistency requirement works both ways: Section 307(d) requires that state or local applications for federal assistance be consistent with the enforceable policies of the coastal state's management program. The statute does provide an exception for projects necessary in the interest of national security. 16 U.S.C. §1456(d).

201. Detailed regulations regarding the certification process are at 15 C.F.R. §§930.30-930.100.

202. 16 U.S.C. §1461. Regulations applicable to the NERRS are at 15 C.F.R. §921.

203. 15 C.F.R. §921.2(e).

204. 16 U.S.C. §1461(b).

205. *Id.* §1461(e).

206. Connolly et al., *supra* note 22, at 545.

207. NOAA, Ocean and Coastal Resource Management, The National Estuarine Research Reserve System, <http://coastalmanagement.noaa.gov/programs/nerr.html> (last visited Oct. 10, 2013).

208. 16 U.S.C. §1456(c)(1)(A) (emphasis added) (as amended by Pub. L. No. 101-508, §6208(a) (1990)).

209. *Secretary of the Interior v. California*, 464 U.S. 312, 14 ELR 20129 (1984).

ing” California’s coastal zone and that a consistency review was not required.

Thirty-four of the 35 coastal and Great Lakes states (and territories) now operate under approved CZMA programs.<sup>210</sup>

## b. Clean Water Act

The Clean Water Act (CWA)<sup>211</sup> provides four notable mechanisms for protecting marine resources: §320 (the National Estuary Program), §403 (Ocean Discharge Criteria), §404 (Permits for Dredged or Fill Material), and §303(d) (Water Quality Standards and Implementation Plans).

### i. National Estuary Program

Estuaries are highly productive habitats that sustain a wide variety of animal and plant life, yet they are used extensively for recreation, shipping, and industry. The National Estuary Program (NEP) was established in 1987 as part of amendments to the CWA. Section 320 of the CWA establishes a “place-based” program to protect and restore the water quality of estuaries of national significance. An estuary is defined statutorily as “all or part of the mouth of a river or stream or other body of water having unimpaired natural connection with open sea and within which the sea water is measurably diluted with fresh water derived from land drainage.”<sup>212</sup> To date, there are 28 estuaries that have been designated as estuaries of national significance under the NEP.

A state governor may nominate an estuary to the NEP. If accepted, the U.S. Environmental Protection Agency (EPA) holds a management conference to assess the estuary’s condition and begin work on a management plan.<sup>213</sup> The membership of the management conference must include a broad cross-section of stakeholders, including representatives of all states located in the estuarine zone, affected local governments, industry, and the general public.<sup>214</sup> The management conference’s main work product is its Comprehensive Conservation and Management Plan, which includes recommendations and proposed solutions for the highest priority problems identified by the conference. EPA provides financial support for the efforts of the management conference and the implementation of the management plan.<sup>215</sup>

The NEP emphasizes public participation and uses a consensus-building approach and collaborative decision-making process to identify problems and develop recommendations to solve the challenges facing each estuary. This approach has been praised by some commentators,

who note that the networks in NEP areas incorporate more levels of government, integrate more experts into the policy discussion, nurture stronger interpersonal ties between stakeholders, and create greater faith in the procedural fairness of local policy than other comparable estuaries.<sup>216</sup> For example, EPA reports that NEP’s membership benefits from the informal exchange of information and best practice regarding common estuarine environmental problems, such as alteration of natural hydrologic flows, aquatic nuisance species, and habitat loss and degradation.<sup>217</sup>

### ii. Ocean Discharge Criteria

Section 402 of the CWA requires permits for discharges of pollutants into the territorial seas, contiguous zone, and ocean. The permits are administered by EPA through the national pollutant discharge elimination system (NPDES). Section 403 subjects point source discharges to the territorial seas, contiguous zone, and ocean to certain regulatory requirements in addition to those requirements applicable to typical discharges.<sup>218</sup> The purpose of §403 is to ensure that no unreasonable degradation of the marine environment occurs as a result of the discharge. Under §403, EPA may not issue §402 permits unless it determines that the discharge will not result in “unreasonable degradation” of the marine environment.<sup>219</sup> The ocean discharge regulations, originally promulgated in 1980, specify for the permitting authority the factors that must be considered when evaluating the impact of a discharge to the marine environment.<sup>220</sup>

According to EPA, more than 300 facilities are subject to §403’s requirements under individual permits. In addition, approximately 2,500 oil and gas exploration and production platforms must comply with §403.<sup>221</sup>

To protect the quality of “beaches, coasts, and the marine environment from pollution,” §4(f) of Executive Order No. 13158 directed EPA to “expeditiously propose new science-based regulations, as necessary, to ensure appropriate levels of protection for the marine environment.”<sup>222</sup> EPA interpreted the Executive Order to require revisions to its

210. NOAA, NATIONAL COASTAL ZONE MANAGEMENT PROGRAM (2012), *available at* <http://coastalmanagement.noaa.gov/resources/docs/czmfactsheet.pdf>.

211. 33 U.S.C. §§1251-1387, ELR Stat. FWPCA §§101-607.

212. 33 U.S.C. §§1254(n)(4), 1330(k).

213. *Id.* §1330(a)(2).

214. *Id.* §1330(c).

215. *Id.* §1330(f), (g).

216. Mark Schneider et al., *Building Consensual Institutions: Networks and the National Estuary Program*, 47 AM. J. POL’Y SCI. 143 (2003).

217. U.S. EPA, Water: Estuaries and Coastal Watersheds, Challenges and Approaches, <http://water.epa.gov/type/oceb/nep/challenges.cfm> (last visited May 8, 2014).

218. 33 U.S.C. §1343(c).

219. 40 C.F.R. §125.123.

220. *Id.* §125.122. The factors are: (1) quantities, composition, and potential bioaccumulation or persistence of pollutants to be discharged; (2) potential transport of the pollutants by biological, physical, or chemical processes; (3) composition and vulnerability of potentially exposed biological communities; (4) importance of the receiving water area to the surrounding biological community; (5) existence of special aquatic sites; (6) potential direct or indirect impacts on human health; (7) existing or potential recreational and commercial fishing; (8) any applicable requirements of an approved Coastal Zone Management Plan; (9) such other factors relating to the effects of the discharge as may be appropriate; and (10) marine water quality criteria. *Id.*

221. U.S. EPA, Clean Water Act Section 403, A Framework for Ecological Risk Assessment, <http://water.epa.gov/aboutow/owow/programs/403.cfm> (last visited May 8, 2014).

222. Exec. Order No. 13158, 65 Fed. Reg. at 34911.

§403 ocean discharge criteria,<sup>223</sup> and in 2000, published a proposed rule.<sup>224</sup> In January 2001, however, President Bush issued a Regulatory Review Plan that withdrew the proposed rule.<sup>225</sup> Yet, as laws and policy evolve further to protect marine resources, the ocean discharge criteria may prove a valuable mechanism to develop discharge criteria for ocean waters.<sup>226</sup>

### iii. Permits for Dredged or Fill Material

The CWA also regulates discharges of pollutants into coastal wetlands.<sup>227</sup> Wetlands are important to the marine ecosystem for a multitude of reasons, including their ability to trap and filter pollutants, create floodwater retention and storage, and provide a habitat for various types of species.<sup>228</sup> Section 404 of the CWA, entitled Permits for Dredged or Fill Material, requires permits for certain water resource development projects affecting coastal wetlands, for example, the addition of fill material that has the effect of changing the elevation of a water body.<sup>229</sup> The day-to-day administration of the permitting process is managed by the U.S. Army Corps of Engineers.

The §404 permitting program is centrally premised on the concept of mitigation, which includes “three key steps: avoidance, minimization, and compensation.”<sup>230</sup> Avoidance requires searching for an alternative to the discharge to wetlands. Then, the permit applicant must take steps to minimize unavoidable impacts. Compensation is undertaken only if the impacts of the proposed activity cannot be minimized and avoided. This concept is reiterated in the applicable regulations, commonly called the §404(b)(1) Guidelines.<sup>231</sup> Failure to meet mitigation requirements can result in enforcement.<sup>232</sup>

### iv. Water Quality Standards and Implementation Plans

Section 303(d) requires states, territories, and authorized tribes to develop lists of “impaired waters,” which are so

polluted that they cannot meet established water quality standards.<sup>233</sup> After a water is designated “impaired,” the appropriate jurisdiction (often the state) must develop total maximum daily loads (TMDLs) that calculate the maximum amount of a pollutant that a water body can receive and still meet water quality standards.<sup>234</sup>

### c. Coastal Barrier Resources Act

Coastal barriers—the succession of long, narrow islands, spits, and bay barriers generally located parallel to the mainland coast—are unique land forms that function as buffers, protecting the mainland against the destructive forces of hurricanes and other coastal storms.<sup>235</sup> In addition, coastal barriers protect habitat for migratory birds and other wildlife. Coastal barriers, which are predominantly distributed along the Atlantic and Gulf Coasts, can also be found in areas surrounding the Great Lakes, the Virgin Islands, and Puerto Rico.

Development on coastal barriers can lead to several problems, including the loss of environmentally sensitive ecosystems, interference with natural processes, and increases in storm damage to coastal areas (flooding, hurricane winds, land degradation, and erosion and property damage).<sup>236</sup> The construction of beachfront homes, for example, disrupts the ecosystem by “strait-jacketing” the naturally mobile landforms, with the detrimental effect of inhibiting the barrier’s ability to adapt and recover from storms and rising sea levels.<sup>237</sup> Development of these coastal areas persists, despite these threats, with 53% of the U.S. population living in coastal areas with coastal barriers.<sup>238</sup>

The Coastal Barrier Resources Act (CBRA)<sup>239</sup> was enacted in 1982 to protect undeveloped coastal barriers from development. The CBRA’s stated purposes are to minimize the loss of human life, decrease wasteful expenditures of federal funds, and prevent damage to fish, wildlife, and other natural resources.<sup>240</sup> The CBRA’s central provision restricts future federal expenditures and financial assistance within the John H. Chafee Coastal Barrier Resources System that have the effect of encouraging coastal barrier development.<sup>241</sup> Federal assistance includes loans, grants, guaranties, payments, rebates, subsidies, or any other form of direct or indirect assistance.<sup>242</sup> The CBRA defined the Coastal Barrier Resources System to

223. See Ocean Discharge Criteria: Revisions to Ocean Discharge Criteria Regulations; Notice of Public Meetings, 65 Fed. Reg. 42936-01, 42937 (proposed July 12, 2000, to be codified at 40 C.F.R. pt. 125).

224. Ocean Discharge Criteria, 65 Fed. Reg. at 42937.

225. Memorandum for the Heads and Acting Heads of Executive Departments and Agencies, 66 Fed. Reg. 7702-01, 7702 (Jan. 24, 2001).

226. Kathryn Mengerink & Andrea A. Treece, *The Clean Ocean Act*, ENVTL. F. Jan.-Feb. 2012, at 28.

227. Wetlands are defined as: “those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances, do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas.” 33 C.F.R. §328.3.

228. Connolly et al., *supra* note 22, at 87.

229. *Id.* at 97.

230. *Id.* at 106.

231. 40 C.F.R. §230.1(c) states that “dredged or fill material should not be discharged into the aquatic ecosystem, unless it can be demonstrated that such a discharge will not have an unacceptable adverse impact either individually or in combination with known and/or probable impacts of other activities affecting the ecosystems of concern.”

232. 33 U.S.C. §1344(s). The U.S. Army Corps of Engineers tends to take the lead role in enforcement. See Connolly et al., *supra* note 22, at 142 n.464.

233. 33 U.S.C. §1313(d).

234. *Id.*

235. U.S. GAO, GAO-07-356, COASTAL BARRIER RESOURCES SYSTEM: STATUS OF DEVELOPMENT THAT HAS OCCURRED AND FINANCIAL ASSISTANCE PROVIDED BY FEDERAL AGENCIES 6 (2007).

236. U.S. DEP’T OF HOUS. & URBAN DEV., COASTAL BARRIER RESOURCES ACT OF 1982 (AS AMENDED): GUIDELINES FOR COMPLIANCE (2008), available at [http://portal.hud.gov/hudportal/documents/huddoc?id=DOC\\_12983.pdf](http://portal.hud.gov/hudportal/documents/huddoc?id=DOC_12983.pdf).

237. Elise Jones, *The Coastal Barrier Resources Act: A Common Cents Approach to Coastal Protection*, 21 ENVTL. L. 1015, 1022 (1991).

238. U.S. GAO, COASTAL BARRIER RESOURCES SYSTEM, *supra* note 235, at 7.

239. Coastal Barrier Resources Act (CBRA), 16 U.S.C. §§3501-3510.

240. 16 U.S.C. §3501(b).

241. *Id.* §3504.

242. *Id.* §3502(3).

include 585 “units” of undeveloped coastal land, as well as nearly 1.3 million acres of associated aquatic habitats.

The most significant funding restriction is the ban on federal flood insurance policies issued under the National Flood Insurance Act of 1968 for any new construction or substantially improved property.<sup>243</sup> Although the Secretary of the Interior is responsible for consulting with other agencies that propose spending funds within the Coastal Barrier Resources System, recommending modifications to unit boundaries, and maintaining maps for the Coastal Barrier Resources System, the prohibitions on federal spending apply to all federal agencies.

The CBRA contains certain exceptions to the general prohibition, including funding for essential emergency operations, maintaining and replacing existing publicly owned infrastructure, energy development, and land use related to national security.<sup>244</sup> In addition, the CBRA does not impede the issuance of certain federal permits, such as EPA-issued permits regulating the discharge of wastes into navigable waters. Finally, the statute does not prohibit development within the Coastal Barrier Resources System by property owners intent on developing their own lands without federal financial assistance.

The CBRA has been revised several times. Reauthorizations in 2000 and 2005 instructed the U.S. Fish and Wildlife Service (FWS or the Service) to complete a Digital Mapping Pilot Project to improve original Coastal Barrier Resources System maps, which the Service admits were outdated, difficult to use, and frequently challenged via the CBRA’s property determination process.<sup>245</sup>

The unique approach employed by the CBRA has several advantages that a more traditional approach to resource protection lacks. It combines environmental protection and cost savings, and promotes state and local land use programs by reducing the development pressure that could undermine local efforts to protect coastal areas. The statute also avoids legal complications that can affect other federal efforts to protect the environment. Specifically, because the denial of federal subsidies is not an actual asset of the property, the subsidies are not viewed as a right and thus avoid challenges as a taking under the Fifth Amendment.<sup>246</sup>

According to a 2007 GAO report, most of the Coastal Barrier Resources System remains undeveloped. Only about 3% of units covered by the CBRA experienced significant development. Despite that, the report concludes that the CBRA did not play the primary role in restricting development. Rather, additional factors are primarily responsible, including: (1) the lack of developable land; (2) the lack of accessibility to the unit; (3) state laws discouraging development within coastal areas; and (4) own-

ership of land by groups motivated to preserve the natural state of the land (such as the National Audubon Society).<sup>247</sup> This does not mean the CBRA is without influence. It can be viewed as an additional safeguard against coastal development, working in concert, in particular, with state laws that discourage development and with private ownership of coastal land by conservation groups.

#### d. Analysis: Shortcomings of Coastal-Focused Authorities

The efforts outlined above make significant strides to protect marine life in coastal regions, but they are not without limitations. By definition, the federal statutes discussed above fall short of the NMSA, due to their focus. While the NMSA provides for comprehensive, ecosystem-based management of designated sanctuaries, these authorities provide for coastal protections only. Some federal authorities are even more tailored, such as CWA §404 permits, which address only discharges associated with dredge and fill activities. The NMSA’s goals of integrated management and attention to the entire marine system allow for broad-based protections of marine biodiversity, habitat, and fisheries.

There are additional shortcomings associated with coastal-focused protections. For example, participation under the CZMA is voluntary, and states can withdraw at will. The diversity of management programs and the latitude afforded by the statute to the implementing state makes it difficult to measure performance and determine overall effectiveness. Certain sections of the CWA protections are weak on enforcement and remain undeveloped. For example, despite the benefits of the NEP’s approach, §320’s provisions lack teeth. Namely, the Comprehensive Conservation and Management Plan is not an enforceable regulation.<sup>248</sup> Nevertheless, management plans can serve as a catalyst for changing local laws and regulations that affect estuarine protection.<sup>249</sup>

Finally, the CBRA does not provide comprehensive oversight of the various federal agencies covered by the statute’s prohibition. DOI is available for consultation and will issue a written opinion as to the applicability of exemptions or whether the proposed project is consistent with the statute’s purposes. But an agency can seek guidance and ignore the recommendations.<sup>250</sup>

The CBRA’s effectiveness will improve once better maps are in place. For example, the 2007 GAO report found that four federal agencies provided prohibited financial assistance to property owners in Coastal Barrier Resources System units.<sup>251</sup> The assistance took various forms, including flood insurance policies, home loan guarantees, disaster loans, and assistance payments. While the amount of

243. Other prohibitions include the construction or purchase of roads, airports, boat landings, or other facilities on or leading to a unit, as well as any project to stabilize inlets, shorelines, or inshore areas for the purpose of encouraging development. *Id.* §3504.

244. *Id.* §3505.

245. Additional descriptions of the revised statutes can be found at <http://www.fws.gov/CBRA/Act/Legislation.html>.

246. JULIAN CONRAD JUERGENSEMEYER & THOMAS E. ROBERTS, *LAND USE PLANNING AND DEVELOPMENT REGULATION LAW* §11:9 (3d ed. 2012).

247. U.S. GAO, *COASTAL BARRIER RESOURCES SYSTEM*, *supra* note 235, at 10.

248. Matthew W. Bowden, *An Overview of the National Estuary Program*, NAT. RESOURCES & ENV’T, Fall 1996, at 35, 37.

249. *Id.*

250. Jones, *supra* note 237, at 1037-38.

251. Mengerink & Treece, *supra* note 226, at 16.

prohibited funds dispersed was not significant, the GAO report recommended that agencies be provided with more accurate maps, as well as better self-regulate their disbursement of financial assistance.

#### 4. Federal Land-Based Authorities

Federal land-based authorities provide an opportunity to protect, maintain, and restore the nation's ocean resources so that they are capable of delivering ecosystem services—for example, clean beaches, healthy seafood, abundant wildlife—through the protection of spatially defined MPAs. This part examines the various federal land-based conservation statutes that have been used and have the potential to be used to provide spatial protection for sensitive or important protected marine areas.

##### a. National Park Service Organic Act

The National Park System administered under the National Park Service Organic Act<sup>252</sup> has evolved to represent the natural, scenic, cultural, and historic heritage of the United States. Section 1 of the National Park Service Organic Act states that the purpose of the park system is to “conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.”<sup>253</sup> This directive makes clear that resource protection is the primary goal for units of the park system. Nonetheless, Congress has authorized consumptive use of park system resources through site-specific legislation.<sup>254</sup>

Thirty-nine park system units include coastal or marine waters, or are located adjacent to such areas.<sup>255</sup> Yet, other important marine areas worthy of resource protection may not meet the elements Congress considers to determine whether territory is worthy of national park designation. Moreover, the Act's stringent preservation mandate may not be compatible with the needs of marine resource users and consumers, although exceptions to this mandate can be legislated.

##### b. National Wildlife Refuge System Administration Act and National Wildlife Refuge Improvement Act

The National Wildlife Refuge System Administration Act of 1966<sup>256</sup> provides a uniform set of management principles that govern the National Wildlife Refuge System. The law authorizes the Secretary of the Interior by regu-

lation to “permit the use of any area within the System for any purpose, including but not limited to hunting, fishing, public recreation and accommodations, and access whenever he determines that such uses are compatible with the major purposes for which such areas were established.”<sup>257</sup> The National Wildlife Refuge Improvement Act of 1997<sup>258</sup> provides further guidance regarding management of the refuge system. The Improvement Act establishes a process for determining compatible uses of refuges<sup>259</sup> and adopted an overall mission of the refuge system to conserve fish, wildlife, plants, and their habitats.<sup>260</sup> In this regard, the Improvement Act corresponds to the Park Service Organic Act.

National wildlife refuges may be established by an act of Congress or presidential<sup>261</sup> or secretarial order,<sup>262</sup> donation from private parties, or transfer from other agencies.<sup>263</sup> The purposes of a refuge unit to which the compatibility test applies are determined by the enabling authority for the unit. Typically, this is the federal statute creating the refuge system unit, but it can come from presidential proclamation, secretarial order, or another source depending upon the origin of the unit.

The FWS administers the compatibility test flexibly. The Service allows a wide range of secondary uses, from recreational to commercial. Approximately 140 national wildlife refuges are located in marine and coastal areas.<sup>264</sup>

##### c. Wilderness Act

Wilderness areas established under the Wilderness Act<sup>265</sup> are generally 5,000 or more acres and comprise lands largely in their natural state. Section 2(c) of the Wilderness Act defines wilderness as areas “where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain.”<sup>266</sup> Four federal agencies administer the National Wilderness Preservation System: the Bureau of Land Management (BLM), the FWS, the U.S. Forest Service, and the NPS. Wilderness is designated by Congress based upon the recommendation of the land-managing agency, as transmitted through the president to Congress.<sup>267</sup> To date, Congress has created ocean wilderness areas only as part of upland wilderness designations.<sup>268</sup>

252. 16 U.S.C. §1 and scattered sections throughout Title 16 of the *U.S. Code*.  
253. *Id.* §1.

254. *See, e.g., id.* §459a-1 (expressly authorizing commercial fishing within the Cape Hatteras National Seashore).

255. UPTON & BUCK, *supra* note 15, at 21.

256. National Wildlife Refuge System Administration Act, 16 U.S.C. §§668dd-668ee.

257. 16 U.S.C. §668dd(d)(1)(A).

258. National Wildlife Refuge Improvement Act, Pub. L. No. 105-57, 111 Stat. 1252 (1997) (amending 16 U.S.C. §§668dd-668ee).

259. *Id.* §668dd(a)(3)(A)-(D).

260. *Id.* §668dd(a)(2).

261. *Id.* §431 (Antiquities Act) (discussed below).

262. *See, e.g.,* 16 U.S.C. §§715d, 1533(b)(2) (authorizing the Secretary to create refuges).

263. *See, e.g., id.* §§668dd(a)(6), 1534(a)(2).

264. UPTON & BUCK, *supra* note 15, at 25.

265. Wilderness Act, 16 U.S.C. §§1131-1136.

266. *Id.* §1131(c).

267. *See, e.g., id.* §1132(b).

268. *E.g.,* Aleutian Islands Wilderness Area established in §702(1) of the Alaska National Interest Lands Conservation Act, Pub. L. No. 96-487, §702(1), 94 Stat. 2371 (1980); and Florida Keys Wilderness Area established in §1(b) of the Act of Jan. 3, 1975, Pub. L. No. 93-632, §1(b), 88 Stat. 2153 (1975).

The land manager for most federal submerged lands offshore is the Secretary of the Interior, who, as discussed above, has delegated management authority to the Bureau of Ocean Energy Management under the OCSLA.<sup>269</sup> The OCSLA contains no provisions for the Bureau of Ocean Energy Management to recommend submerged lands for wilderness designation. While Congress can directly designate lands as wilderness, wilderness is the most restrictive category of federal lands. Absent compelling resource protection needs, Congress is unlikely to favor a wilderness designation where management flexibility is desired.

#### d. Antiquities Act

The Antiquities Act<sup>270</sup> authorizes the president to proclaim as national monuments historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest on the lands owned or controlled by the federal government. The Antiquities Act differs from the foregoing statutes because it delegates congressional authority to the president to set aside national monuments.<sup>271</sup> The ability of the president to act alone and without any required process to take protective action is the Act's most significant feature. There are precedents for the Act being used to preserve marine resources. Through presidential proclamation in 2000, President Clinton designated the California Coastal National Monument<sup>272</sup>; in 2006 and 2007, President Bush designated the Papahānaumokuākea Marine National Monument (Northwestern Hawaiian Islands Marine National Monument)<sup>273</sup>; in 2009, President Bush designated the Marianas Trench, Pacific Remote Islands, and Rose Atoll Marine National Monuments<sup>274</sup>; and in 2014, President Obama expanded the Pacific Remote Islands Marine National Monument to create the world's largest MPA at more than 490,000 square miles.<sup>275</sup>

The Antiquities Act does not itself specify the federal agency that will manage any national monument created under its authority. Although the Park Service Organic Act authorizes the NPS to manage national monuments, other than those under the jurisdiction of the Secretary of the Army,<sup>276</sup> it has not been construed to require management by the NPS. Thus, the president typically may choose which agency will administer a new national monument. Even though national monuments may be managed by the Secretary of Commerce through NOAA, they are not expressly included in the national marine sanctuary system

and do not fall within the scope of the protections that the NMSA provides.<sup>277</sup>

#### e. Analysis: Shortcomings of Federal Land-Based Authorities

Each of these land-based statutes has limitations that make them less useful than the NMSA in protecting marine areas. Indeed, Congress specifically recognized in the NMSA that the nation's historical protection of special areas of the public domain has been directed almost exclusively to land areas above the high watermark.<sup>278</sup> Thus, while marine areas have been included in designations under these land-based statutes, the vast majority of marine areas within such designations were included because of their connection to significant upland resources.

The chief difficulty with using the National Park Service Organic Act to designate MPAs is its stringent preservation mandate. The mandate may not be compatible with the needs of marine resource users and consumers, although exceptions to the mandate can be legislated. In contrast, despite the NMSA's primary goal of preservation, national marine sanctuaries allow for various compatible uses, including fishing, boating, diving, and other forms of human activity. Unlike national parks, which generally apply significant restrictions on human activities, the NMSA facilitates lawful public and private sanctuary uses that are compatible with resource protection. The availability of this multiple-use approach engages the public and reinforces the scientific, cultural, and historic value of marine sanctuaries.

Moreover, national parks are typically established by congressional action, although some park units, such as national monuments, have been established by presidential proclamation under the Antiquities Act. In contrast, absent the current congressional moratorium, the Secretary of Commerce, in addition to Congress, can create a national marine sanctuary. This introduces greater flexibility into the designation process.

Similar to the National Park Service Organic Act, the National Wildlife Refuge Improvement Act creates a preservation mandate that may not be compatible with the needs of marine resource users and consumers. Wildlife refuges can only allow uses that are compatible with the major purposes for which such areas were established. In contrast, the NMSA facilitates lawful public and private sanctuary uses that are compatible with resource protection.

Wilderness is the most restrictive category of federal lands. Only Congress can designate lands as wilderness. Absent compelling resource protection needs, Congress is unlikely to use the wilderness designation for a resource where management flexibility is desired.

269. See 43 U.S.C. §1331(b).

270. Antiquities Act, 16 U.S.C. §§431-443.

271. *Id.* §431.

272. Proclamation No. 7264 (Jan. 11, 2000) (Pres. Clinton); Proclamation No. 9089 (Mar. 11, 2014) (Pres. Obama).

273. Proclamation No. 8031 (June 15, 2006) (Pres. G.W. Bush); Amendment of Mar. 2, 2007 (Pres. G.W. Bush).

274. Proclamation Nos. 8335-8337 (Jan. 6, 2009) (Pres. G.W. Bush).

275. Proclamation No. 9173, 79 Fed. Reg. 58645 (Sept. 29, 2014) (Pacific Remote Islands Marine National Monument Expansion); Juliet Eilperin, *Obama to Create World's Largest Protected Marine Reserve in Pacific Ocean*, WASH. POST, Sept. 25, 2014.

276. 16 U.S.C. §1.

277. Including national monuments in the national marine sanctuary program through reauthorization of the NMSA (or another mechanism) would provide opportunity for more uniform and consistent management of all four current marine national monuments and any future monuments for which NOAA has a management role.

278. 16 U.S.C. §1431(a)(1).

Despite the NMSA's primary goal of preservation, national marine sanctuaries allow for various compatible uses, including fishing, boating, diving, and other forms of human activity. Moreover, the NMSA facilitates lawful public and private sanctuary uses that are compatible with resource protection.

Given the recent use of national monuments for establishing MPAs, a more-detailed comparison of national marine sanctuaries and marine national monuments is provided below.

## 5. Species-Based Authorities

### a. ESA

In enacting the ESA,<sup>279</sup> Congress found that “various species of fish, wildlife, and plants in the United States have been rendered extinct as a consequence of economic growth and development untempered by adequate concern and conservation.”<sup>280</sup> The purposes of the ESA are to “provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions” for conservation of threatened and endangered species.<sup>281</sup>

For a species to receive ESA protections, it must first be listed as threatened or endangered. Listing and delisting decisions may be initiated either by the FWS or NOAA's National Marine Fisheries Service, which jointly administer the ESA, or by nonfederal parties submitting petitions.<sup>282</sup> Once a species is listed as threatened or endangered, the Services are required to designate critical habitat, defined as the specific geographic areas that contain the physical and biological features essential to the species' conservation and that may require special management or protection.<sup>283</sup>

The goal of the ESA is to achieve not only species conservation, but also species recovery, that is, bringing the listed species back to the point where ESA protections are no longer required.<sup>284</sup> There are five primary mechanisms in the ESA that facilitate this goal. First, listed species are protected against “take” within the United States, its territorial sea, and upon the high seas.<sup>285</sup> Second, the Services

are required to develop and implement recovery plans for listed species unless they determine that a plan will not promote the conservation of the species.<sup>286</sup> Third, §6 of the ESA authorizes the Services to enter into cooperative agreements with states to establish “adequate and active” programs for the conservation of listed species and to fund such programs.<sup>287</sup> Fourth, under ESA §7(a)(1), federal agencies are directed by broad mandate to carry out programs for the conservation of threatened and endangered species.<sup>288</sup>

Finally, §7(a)(2) requires that all federal agencies consult with the Services to ensure that “any action authorized, funded, or carried out” by a federal agency “is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification” of critical habitat.<sup>289</sup> This §7 consultation process sets the ESA apart from all other wildlife conservation laws. Federal permitting of traditional and renewable offshore energy development; regulation of maritime commerce, ship speeds, and siting of shipping lanes; issuance of fishing permits; issuance of incidental harassment authorizations under the MMPA (discussed immediately below); and military use of sonar and other defense-related testing activities have all undergone §7 consultations that have resulted in protections for listed species and designations of critical habitats.

In the marine environment, the ESA can drive meaningful protections for species, including fish, marine mammals, corals, and sea grasses. For example, to protect listed species of sea turtles, the National Marine Fisheries Service promulgated regulations to require the use of turtle-excluder devices in shrimp-trawl and other bottom-trawl fishing nets.<sup>290</sup> These regulations have been one of the causes of strong increases in turtle populations.

### b. MMPA

Congress enacted the MMPA<sup>291</sup> to protect marine mammal species from the threats related to human activity and to reverse continuing population declines of many marine mammal species.<sup>292</sup> Congress also saw the need for increased research and conservation of marine mammals, recognizing the special role that marine mam-

279. See *supra* note 126.

280. 16 U.S.C. §1531(a)(1).

281. *Id.* §1531(b).

282. *Id.* §1533(a)-(c). Listing decisions must be made based on the best available science and subject to specific statutory deadlines, and in accordance with five criteria: (1) the presence or threatened destruction, modification, or curtailment of the species' habitat or range; (2) overutilization of the species for commercial, recreational, scientific, or educational purposes; (3) disease or predation; (4) the inadequacy of existing regulatory mechanisms; or (5) other natural or man-made factors affecting the species' continued existence. *Id.* §1533(a).

283. *Id.* §1532(5).

284. See *id.* §§1531(c), 1533(f).

285. *Id.* §1538(a). “Take” is defined as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such

conduct,” including significant habitat destruction that actually kills or injures an endangered species. *Id.* §1532(19); 50 C.F.R. §17.3; see also *Babbitt v. Sweet Home Chapter of Cmty. for a Great Or.*, 515 U.S. 687, 25 ELR 21194 (1995).

286. 16 U.S.C. §1533(f). These plans provide specific criteria and conditions that species populations must meet to be deemed “recovered” for purposes of delisting. The plans are developed by “recovery teams” and subject to public review and comment.

287. *Id.* §1535(c). In the past five years, NMFS has completed §6 cooperative agreements with all coastal states, including the Pacific Coast states that are home to most listed marine species.

288. *Id.* §1536(a)(1).

289. *Id.* §1536(a)(2).

290. 50 C.F.R. §§223.206, 223.207.

291. See *supra* note 127.

292. *Id.* §1361(1)-(2).

mals held in maintaining the health and stability of the marine ecosystem.<sup>293</sup>

Like the ESA, the MMPA generally prohibits the “take” of marine mammals, defined as to “harass, hunt, capture, or kill” any marine mammal, or attempt the same.<sup>294</sup> At the core of the MMPA is the moratorium on taking set forth in §101(a), which establishes a general ban on the taking and importation of marine mammals throughout areas subject to U.S. jurisdiction and by any person, vessel, or conveyance subject to the jurisdiction of the United States on the high seas.<sup>295</sup> NMFS regulations also prohibit feeding or attempting to feed marine mammals in the wild.<sup>296</sup> Exemptions from the prohibition on take are authorized in certain situations identified in the regulations.<sup>297</sup>

A number of MMPA provisions emphasize habitat and ecosystem protection, including the §2 findings and declaration of policy.<sup>298</sup> Direct protections can be provided pursuant to the §2 objective that the Services “maintain the health and stability of the marine ecosystem.”<sup>299</sup> Additionally, the statute’s “take” prohibition further provides the Services with the regulatory authority to implement the protections of the MMPA in a way that results in de facto marine habitat protection. The Services may issue permits for the incidental take of marine mammals related to commercial fishing, which includes the authority to implement time and area closures or gear modifications necessary to reduce take to near zero.<sup>300</sup>

### c. National Invasive Species Act

Ballast water discharged from ships is a pathway for the introduction and spread of “aquatic invasive species.” Ballast water is water held in tanks or cargo holds of ships to provide stability and maneuverability.<sup>301</sup> Attention first focused on aquatic invasive species following the arrival of zebra mussels, via ballast water discharge, in the Great Lakes in the late 1980s, an episode that inflicted significant damage on city water supplies and electric utilities.<sup>302</sup> More recently, the rapid spread of lionfish populations through

out the Gulf of Mexico, Caribbean, and Southeast Atlantic threaten native ecosystems and fish populations.<sup>303</sup>

The first federal effort to address the spread of aquatic nuisance species from ballast water resulted in the Non-indigenous Aquatic Nuisance Prevention and Control Act (NANPCA) of 1990.<sup>304</sup> The NANPCA’s jurisdiction was limited; it required ballast exchange for ships entering the Great Lakes and the Hudson River Watershed.<sup>305</sup> It also created the Aquatic Nuisance Species Task Force to conduct studies and report to Congress regarding the optimal locations for ballast water exchange<sup>306</sup> and the need for controls for vessels entering U.S. waters other than the Great Lakes.<sup>307</sup>

In 1996, the National Invasive Species Act (NISA) amended the NANPCA and created a national ballast management program expanding on the Great Lakes program.<sup>308</sup> The NISA requires the Secretary of Homeland Security to “ensure to the maximum extent practicable that aquatic nuisance species are not discharged into waters of the United States from vessels.”<sup>309</sup> The statute initially implemented the program on a voluntary basis, but in 2004, the Coast Guard issued regulations making the program mandatory.<sup>310</sup> Under the NISA, all ships entering U.S. waters must conduct ballast exchange or implement an alternative measure approved by the Coast Guard.<sup>311</sup>

The NISA requires the Secretary of Homeland Security to periodically evaluate and revise its ballast waste management regulations based on the best available scientific information. In 2012, the Coast Guard finalized regulations instituting a new standard for the concentration of living organisms that can be discharged in ballast water.<sup>312</sup> The standard sets numerical limits that the Coast Guard found were supported by reports from the National Academy of Sciences and EPA’s Science Advisory Board.<sup>313</sup>

### d. NPDES Vessel General Permit

EPA also regulates ballast water discharged from ships. The NPDES, authorized by the CWA, requires permits for point sources that discharge pollutants into waters of

293. *Id.* §1361(3)-(4), (6).

294. *Id.* §§1362(13), 1372(a). The definition of “take” has been expanded by U.S. Fish and Wildlife Service regulations to mean:

to harass, hunt, capture, collect, or kill, or attempt to harass, hunt, capture, collect, or kill any marine mammal, including, without limitation, any of the following: The collection of dead animals or parts thereof; the restraint or detention of a marine mammal, no matter how temporary; tagging a marine mammal; or the negligent or intentional operation of an aircraft or vessel, or the doing of any other negligent or intentional act which results in the disturbing or molesting of a marine mammal.

50 C.F.R. §18.3.

295. 16 U.S.C. §§1371(a), 1372(a).

296. 50 C.F.R. §216.3.

297. *See* 16 U.S.C. §1371(a)-(d).

298. *See id.* §1361(2), (5)(B), (6).

299. *Id.* §1361(6).

300. *Id.* §1387.

301. EUGENE H. BUCK, CONG. RESEARCH SERV., RL 32344, BALLAST WATER MANAGEMENT TO COMBAT INVASIVE SPECIES 2 (2010).

302. *Id.* at 1.

303. National Centers for Coastal Ocean Science, Lionfish, <http://coastalscience.noaa.gov/research/pollution/invasive/lionfish> (last visited Apr. 29, 2014).

304. 16 U.S.C. §§4701-4741.

305. *Id.* §4711.

306. Ballast water exchange requires ships on their way to the next port to release the lower-salinity coastal water they brought aboard in their last port and replace it with higher-salinity open ocean water. It is designed to reduce the number of potentially invasive species in ballast tanks and replace them with organisms that are less likely to survive in the lower-salinity waters of the ship’s next port. *See* BUCK, *supra* note 301, at 2.

307. *Id.* at 3.

308. 16 U.S.C. §4711.

309. *Id.* §4711(c)(2)(A).

310. Mandatory Ballast Water Management Program for U.S. Waters, 69 Fed. Reg. 44952-01 (July 28, 2004) (codified at 33 C.F.R. pt. 151).

311. 16 U.S.C. §4711.

312. Standards for Living Organisms in Ships’ Ballast Water Discharged in U.S. Waters, 77 Fed. Reg. 17254-01 (Mar. 23, 2012).

313. News Release, U.S. Coast Guard, Coast Guard Issues Standard for Living Organisms in Ships’ Discharged Ballast Water (Mar. 16, 2012), <http://www.uscgnews.com/go/doc/4007/1410847/Coast-Guard-issues-standard-for-living-organisms-in-ships-discharged-ballast-water>.

the United States.<sup>314</sup> EPA originally exempted from the permit requirement those discharges incidental to the normal operation of a vessel, including discharges of ballast water.<sup>315</sup> Environmentalists challenged this regulatory exemption, and in 2008, the U.S. Court of Appeals for the Ninth Circuit upheld a lower court's decision to revoke it.<sup>316</sup>

In response to the litigation, EPA developed its vessel general permit.<sup>317</sup> The permit included general effluent limits applicable to all discharges, as well as additional effluent limits applicable to 26 specific discharge streams.<sup>318</sup> The permit also included inspection, monitoring, recordkeeping, and reporting requirements.<sup>319</sup> Under CWA §401, states are permitted to issue their own conditions to supplement the vessel general permit if the state determines it necessary to ensure discharges do not violate the state's water quality standards.<sup>320</sup> More than 20 states included their own conditions in the permit.<sup>321</sup>

In 2011, EPA and the Coast Guard entered into a memorandum of understanding (MOU) that details the respective obligations each agency committed to implement.<sup>322</sup> Under the terms of the MOU, EPA is responsible for making interpretations of the vessel general permit and its terms. EPA and the Coast Guard jointly will cooperate to enforce the requirements of the permitting program, coordinate and share information, and communicate on a regular basis to ensure efficient implementation of the permit program. The MOU has spurred an enforcement initiative: In 2012, EPA reported that, based on data received from Coast Guard inspections, it was issuing notices of violation to vessels believed to be in violation of the vessel general permit.<sup>323</sup>

The original vessel general permit expired in December 2013. In April 2013, EPA finalized a new version of the permit, which addresses 27 specific discharge categories.<sup>324</sup> Most notable is the permit's incorporation of a numeric

technology-based effluent limitations standard to control the release of non-indigenous invasive species in ballast water discharges.<sup>325</sup>

#### e. Analysis: Shortcomings of Species-Based Authorities

Despite the protections they offer to marine species, the ESA and the MMPA each have significant shortcomings. The primary problem with both statutes is that, unlike the NMSA, the ESA and the MMPA do not set aside protected areas of the marine environment. Designation of critical habitat under the ESA cannot offer the type of broad-based ecosystem protection offered by the NMSA. Such designations only apply to a given action to the extent that the action is authorized, funded, or carried out by a federal agency and, for that reason, subject to the protections of §7(a)(2).<sup>326</sup> Moreover, by their nature, critical habitat designations, like the ESA as a whole, address only a single species at a time, because neither the ESA nor its constituent protections are designed to consider and protect entire ecosystems. The express purposes of the NMSA, in contrast, include protecting all natural habitats, populations, and ecological processes in marine sanctuaries, as well as providing authority for the sanctuaries' comprehensive conservation and management.<sup>327</sup> A related concern with the ESA is the limited protection provided to some species from activities *not* included in the §7 consultation process (that is, activities without a federal link). These activities (including fishery management, whale harvest, and so forth) significantly impact the overall health of the listed species and can dramatically lower the efficacy of ESA protections.

For its part, the MMPA lacks any direct authority to protect critical habitat or other marine ecosystems. The absence of such authority aligns with the MMPA's fundamental purpose of enabling the protection and study of marine mammals. While the statute acknowledges the importance of the marine ecosystem and species habitat in species conservation efforts, it does not incorporate habitat protection authority. This undermines the MMPA's usefulness as a stand-alone tool. Like the ESA, therefore, the MMPA falls short of providing comprehensive protection to the ocean.

The federal authorities focused on aquatic invasive species—the NISA and the NPDES vessel general permit—suffer from some of the same limitations as other federal statutes governing the marine environment. Namely, the efforts are extremely focused and are incapable of implementing comprehensive, ecosystem-based management, as the NMSA can. Each statute also has been subjected to specific criticisms.

The NISA's exemptions have been criticized. The statute provides for an exemption from the ballast manage-

314. 33 U.S.C. §1342.

315. 40 C.F.R. §122.3(a) (2006).

316. *Northwest Envtl. Advocates v. EPA*, 537 F.3d 1006 (9th Cir. 2008).

317. Final National Pollutant Discharge Elimination System (NPDES) General Permit, 73 Fed. Reg. 79473-02 (Dec. 29, 2008).

318. The NPDES program for vessels regulates not only ballast water, but also bilgewater, graywater, and deck runoff/washdown. See U.S. EPA, National Pollutant Discharge Elimination System (NPDES) Vessel Discharges, [http://cfpub.epa.gov/npdes/home.cfm?program\\_id=350](http://cfpub.epa.gov/npdes/home.cfm?program_id=350) (last visited May 8, 2014).

319. With the exception of ballast water discharges, nonrecreational vessels less than 79 feet (24.08 meters) in length, and all commercial fishing vessels, regardless of length, are not subject to this permit.

320. 33 U.S.C. §341(a).

321. Cory Hebert, *Ballast Water Management: Federal, States, and International Regulations*, 37 S.U. L. REV. 315, 329 (2010).

322. *The Coast Guard and Environmental Protection Agency Collaborate to Enforce Vessel General Permit Requirements*, ENVTL. COUNS., Apr. 2011, at 10.

323. U.S. EPA, *Update on EPA and U.S. Coast Guard MOU*, NPDES VESSELS PROGRAM Q., Spring 2012, at 2, available at [http://www.epa.gov/npdes/pubs/vgp\\_spring2012newsletter.pdf](http://www.epa.gov/npdes/pubs/vgp_spring2012newsletter.pdf).

324. First NPDES General Permit for Discharges Incidental to the Normal Operation of a Vessel, 78 Fed. Reg. 21938 (Apr. 12, 2013). Various constituencies, including industry and environmentalists, are challenging the new Vessel General Permit. See *Natural Res. Def. Council v. EPA*, Nos. 13-1745, 13-2393, 13-2757, 14-39 (2d Cir. filed May 3, 2013). Oral argument on the cases is proposed for early December 2014.

325. 78 Fed. Reg. at 21942.

326. 16 U.S.C. §1536(a)(2).

327. See *id.* §1431(b)(2), (b)(3).

ment practice if the master of the ship determines that a ballast exchange would threaten the safety or stability of the ship or its passengers because of “adverse weather, vessel architectural design, equipment failure, or any other extraordinary conditions.”<sup>328</sup> This exemption, which equates “vessel architectural design” with an “extraordinary condition,” is viewed by some as eliminating any incentive to modify and upgrade ballast piping systems or implement other management options to address ballast exchange.<sup>329</sup>

The statute has been criticized for its focus, as well. There are additional pathways by which invasive species are introduced, and the NISA addresses only issues associated with ballast water.<sup>330</sup> In addition, the overall efficacy of the ballast management regime is questionable, given that additional introductions of invasive aquatic species persist in the Great Lakes, the region that has been regulated for the longest period.<sup>331</sup>

Finally, the ability of states to tailor the terms of the vessel general permit creates uncertainty for the regulated community. Critics describe the permit program as a “patchwork quilt of regulations represent[ing] the balkanization of vessel discharge regulations.”<sup>332</sup> As discussed above, enforcement of the permit’s conditions required strengthening, and it remains to be seen what the long-term effects of the joint EPA-Coast Guard enforcement initiative will be.

## B. State Law

States have played a critical role in protecting marine resources since the colonial era.<sup>333</sup> In the Submerged Lands Act of 1953, Congress confirmed states’ jurisdiction over navigable waters within their borders.<sup>334</sup> States and territories generally have jurisdiction over coastal waters out to three nautical miles of the low watermark.<sup>335</sup>

## I. The Public Trust Doctrine

States own lands below their navigable waters in trust for the public.<sup>336</sup> States have embraced the public trust doctrine as a source of authority to protect marine areas. Florida and Louisiana, for example, include the public trust

doctrine in their state constitutions.<sup>337</sup> Traditionally, the public trust doctrine protected the public’s interest in navigation, fishing, and commerce.<sup>338</sup> Application of the doctrine in some states has evolved to protect state waters for recreation, environmental and ecological preservation, and aesthetic beauty.<sup>339</sup>

The public trust doctrine, however, does not establish a hierarchy among protected uses, many of which may conflict, and raises the question of who decides what use is in the public’s best interest.<sup>340</sup> Is the legislature, composed of elected representatives of the people, in the best position to determine the highest public use?<sup>341</sup> Or is the public’s interest in protected uses a constitutional right to be arbitrated by courts?<sup>342</sup> Or is the public trust doctrine best employed as a government defense against takings claims by private parties contesting marine restrictions?<sup>343</sup>

Few states have used the public trust doctrine to protect marine areas by prohibiting public uses that may potentially harm marine life and habitat. One outlier is the state of Washington, where the supreme court upheld a county ordinance banning the use of motorized personal watercraft in marine areas.<sup>344</sup> The court implied that the highest public use of marine areas, to be protected even at the expense of some public access or recreation opportunities, is the area’s environmental health.<sup>345</sup> Generally, however, the public trust doctrine does not provide comprehensive protection to state waters because it does not require a hierarchy of uses or prevent states from allowing uses that may harm marine ecosystems.<sup>346</sup>

## 2. Common State MPA Regulations

Relying on common law, constitutional authority, and statutory provisions, states regulate their waters to promote vital fishing and tourism industries and to conserve areas of special ecological and scientific significance. As may be expected, however, state regulation of MPAs is varied. This subpart discusses trends in state regulation of MPAs as classified by a NOAA report.<sup>347</sup>

328. 16 U.S.C. §4711(k)(1).

329. BUCK, *supra* note 301, at 5.

330. Flynn Boonstra, *Leading by Example: A Comparison of New Zealand’s and the United States’ Invasive Species Policies*, 43 CONN. L. REV. 1185, 1198 (2011).

331. BUCK, *supra* note 301, at 5.

332. Constantine G. Papavizas & Lawrence I. Kiern, *2007-2008 U.S. Maritime Legislative Developments*, 40 J. MAR. L. & COM. 315, 321 (2009).

333. Sylvia Quast & Michael A. Mantell, *Role of the States, in OCEAN AND COASTAL LAW AND POLICY*, *supra* note 22, at 67. Indeed, the Supreme Court determined in 1842 that states took over the British Crown’s rights to navigable coastal waters and underlying soils. *Martin v. Waddell’s Lessee*, 41 U.S. (16 Pet.) 367 (1842).

334. Submerged Lands Act, 43 U.S.C. §§1301 et seq.

335. *Id.* §§1301(c), 1311, 1312. There are some exceptions to this rule. For example, Texas, Florida (with respect to its Gulf of Mexico waters), and Puerto Rico have jurisdiction over waters out to roughly nine miles from the low watermark. Quast & Mantell, *supra* note 333, at 69.

336. *Shively v. Bowlby*, 152 U.S. 1 (1894).

337. FLA. CONST. art. X, §§11, 16; LA. CONST. art. IX, §1.

338. Donna R. Christie, *Marine Reserves, the Public Trust Doctrine and Intergenerational Equity*, 19 J. LAND USE 427, 432 (2004); see also J.C. Sylvan, *How to Protect a Coral Reef: The Public Trust Doctrine and the Law of the Sea*, 7 SUSTAINABLE DEV. L. & POL’Y 32, 35 (2006).

339. Christie, *supra* note 338, at 432.

340. Sylvan, *supra* note 338, at 34.

341. *See id.*

342. *See id.*

343. *See id.*

344. *Weden v. San Juan Cnty.*, 958 P.2d 273, 283-84 (Wash. 1998).

345. *Id.* at 284 (“[I]t would be an odd use of the public trust doctrine to sanction an activity that actually harms and damages the waters and wildlife of this state.”).

346. In Oregon, for instance, the supreme court held that the public trust doctrine did not prohibit the Division of State Lands from granting a permit to fill 32 acres of estuary for non-water-related uses. *Morse v. Oregon Div. of State Lands*, 590 P.2d 709, 712, 9 ELR 20459 (Or. 1979).

347. See generally BRAXTON DAVIS ET AL., *STATE POLICIES AND PROGRAMS RELATED TO MARINE MANAGED AREAS: ISSUES AND RECOMMENDATIONS FOR A NATIONAL SYSTEM* 4 (2004).

### a. State Marine Resource Areas

State laws to protect specific marine resources may create MPAs when the protected resource is mapped or mappable.<sup>348</sup> Generic resource laws, however, offer little site-specific protection where the protected resource shifts location over time.<sup>349</sup> Moreover, generic resource laws assume that protection of the resource is equally important wherever the resource is found, regardless of location, size, density, biological functions, and ecosystem significance.<sup>350</sup>

### b. State Marine Overlay Zones

Marine overlay zones, generally defined as large sites subject to uniform policies within legally defined and fixed boundaries, include a broad range of protected marine areas, from fishery management zones to restrictive, no-take marine reserves.<sup>351</sup> Marine overlay zones are more protective of a sensitive area than generic resource laws, and the two types of regulations can work together to protect sensitive resources within an overlay zone. Several coastal states have designated marine overlay zones to protect habitat of endangered or threatened species.<sup>352</sup> Coastal states also frequently establish a general shoreline overlay zone or regulatory zones to protect specific shoreline features such as beaches, tidal wetlands, or intertidal flats.<sup>353</sup>

### c. State Marine Planning Areas

State marine planning areas are “distinct marine locations subject to site-specific, ongoing management or regulatory planning within fixed boundaries.”<sup>354</sup> Although coastal states with marine planning area programs remain a minority, some states have established marine planning to achieve conservation, recreation, and scientific goals. Florida’s 41 aquatic preserves protect submerged lands of “exceptional biological, aesthetic, and scientific value.”<sup>355</sup> Each aquatic preserve is “set aside [to be] maintained essentially in its natural or existing condition.”<sup>356</sup> In the state of Washington, the Department of Natural Resources manages the aquatic reserves program for state-owned aquatic lands with unique or high-quality ecological features and habitats.<sup>357</sup>

State and federal regulations can work together to create MPAs. For example, in California, 10 state marine reserves and two state marine conservation areas protect the nearshore waters around the Channel Islands and complement a network of federal MPAs in the deeper waters surrounding the islands.<sup>358</sup> State and federal regulators coordinate policy.<sup>359</sup>

### d. State Coastal Planning Areas

State coastal planning areas are similar to marine planning areas but involve more comprehensive integration of water and land use planning to protect or promote marine resources.<sup>360</sup> Coastal planning areas that include only state-owned uplands generally focus on land management to ensure that land uses do not adversely impact sensitive marine resources or habitats. Coastal planning areas that include privately held uplands typically establish guidelines, recommendations, or policies to protect marine resources from adverse land uses.<sup>361</sup> Many state coastal planning areas that include private properties have been developed under the CZMA’s special area management planning program.<sup>362</sup>

## 3. California’s Marine Life Protection Act

Typical of many states’ marine environment management schemes, California’s system of MPAs was established in a piecemeal fashion that lacked clearly defined purposes or effective management and resulted in only an “illusion of protection.”<sup>363</sup> To remedy the problem, the Marine Life Protection Act (MLPA), passed in 1999, called for the creation of a statewide network of MPAs.<sup>364</sup> After two efforts to implement the MLPA had failed due to lack of resources and stakeholder involvement, the California Department of Fish and Game partnered with the California Resources Agency and the Resources Legacy Fund Foundation in 2004.<sup>365</sup> The parties created the Marine Life Protection Act Initiative, a public-private partnership to achieve the MLPA’s goals of incorporating best available science and the advice of resource managers, stakeholders, and the public.<sup>366</sup>

The MLPA Initiative established five study regions to plan and execute regulations. A multilayered process involves state regulators, scientists with specialties in

348. *Id.* at 4-5.

349. *Id.* at 5.

350. *Id.*

351. *Id.*

352. *Id.* at 6.

353. *Id.*

354. *Id.* at 7.

355. FLA. STAT. §258.36.

356. *Id.* §258.37(1).

357. WASH. ADMIN. CODE §332-30-151. The program establishes three types of reserves: educational, environmental, and scientific, and ecosystem considerations play a key role in the designation of an area for protection. *Id.* See also BRAXTON DAVIS & JOHN LOPEZ, CASE STUDIES OF STATE-LEVEL MARINE MANAGED AREA SYSTEMS: ADDENDUM TO STATE POLICIES AND PROGRAMS RELATED TO MARINE MANAGED AREAS: ISSUES AND RECOMMENDATIONS FOR A NATIONAL SYSTEM 18 (2004).

358. DAVIS & LOPEZ, *supra* note 357, at 3. State marine reserves are no-take areas; state marine conservation areas allow limited recreational and commercial fishing. CAL. PUB. RES. CODE §36700. See also Cal. Dep’t of Fish & Wildlife, Channel Islands MPAs: Color Map, [http://www.dfg.ca.gov/marine/channel\\_islands/ci\\_finalmap.asp](http://www.dfg.ca.gov/marine/channel_islands/ci_finalmap.asp) (last visited May 8, 2014).

359. DAVIS & LOPEZ, *supra* note 357, at 5.

360. DAVIS ET AL., *supra* note 347, at 8.

361. *Id.* at 8-9.

362. *Id.* at 8.

363. Marine Life Protection Act (MLPA), CAL. FISH & GAME CODE §§2850-2863, 2851(a).

364. *Id.* §2853.

365. CAL. DEP’T OF FISH & GAME, MASTER PLAN FOR MARINE PROTECTED AREAS 9 (Rev. Draft, Jan. 2008).

366. *Id.* at 14; CAL. FISH & GAME CODE §2855.

marine ecology, regional stakeholder groups, and public officials. Throughout the master plan development and the regional planning processes, the Resources Legacy Fund Foundation obtains and coordinates philanthropic investments that supplement public funding.<sup>367</sup>

The public-private partnership has paid off in the form of a pioneering effort to establish a statewide network of marine protection. California's regional MPA regulations implement three types of protective designations: state marine reserves; state marine parks; and state marine conservation areas. For example, the Central Coast regional MPAs cover approximately 204 square miles (roughly 18% of state waters in the region) and include 15 marine conservation areas and 13 "no-take" marine reserves.<sup>368</sup>

It is too soon to measure the long-term success of California's regional implementation process, but the MLPA Initiative serves as an example of a process that integrates best available science, stakeholder interests, and private funding to protect valuable ecological and economic resources.<sup>369</sup> Though California's growing network of MPAs serves as a model of statewide planning and coordination, the system faces ongoing funding and enforcement challenges.<sup>370</sup> Additionally, compromise was a necessary byproduct of the public-private, multilayer planning and implementation process, and, therefore, final regional plans likely do not satisfy any constituency completely, whether conservation groups or the fishing industry.<sup>371</sup>

#### 4. Analysis: Shortcomings of State Law

While California's experience shows that state regulations can protect marine resources and habitat in a comprehensive manner, the state is an outlier. Other states' traditional reliance on generic resource laws, or in limited cases on the public trust doctrine, has not supported ecosystem-based management. Even in states with established MPA programs, there remains a general lack of systematic goals and integration. For example, Florida's 41 aquatic preserves were established site by site, with little consideration of fish migration or larval transport.

The challenges of protecting vast marine resources illustrate the benefits of federal regulation. Ecosystem-based management of marine resources requires systemwide objectives, uniform monitoring, and consistent purposes. Unlike state laws, a federal law such as the NMSA has the necessary reach to establish a network of MPAs that crosses state borders, includes waters outside state jurisdictions, and preempts inconsistent state laws and regulations.

367. CAL. DEP'T OF FISH & GAME, *supra* note 365, at 16.

368. Cal. Dep't of Fish & Wildlife, Central Coast Marine Protected Areas, [http://www.dfg.ca.gov/mlpa/ccmpas\\_list.asp](http://www.dfg.ca.gov/mlpa/ccmpas_list.asp) (last visited May 8, 2014).

369. Mary Gleason et al., *Designing a Network of Marine Protected Areas in California: Achievements, Costs, Lessons Learned, and Challenges Ahead*, 74 OCEAN & COASTAL MGMT. 90, 91 (2013).

370. For example, environmental groups have volunteered to patrol local waters to supplement state enforcement staff. See Editorial, *Protecting Marine Protected Areas*, L.A. TIMES, Jan. 10, 2012, available at <http://articles.latimes.com/2012/jan/10/opinion/la-ed-0110-marine-20120110>.

371. Gleason et al., *supra* note 369, at 91.

### C. Common-Law Tort Claims/Public Nuisance

Unlike the statutory and executive authorities, tort law has emerged largely through judge-made common law. We consider here whether common-law tort doctrine might be expansive enough to enable a successful legal strategy that preserves marine ecosystems.

#### 1. Public Nuisance

While other potential routes exist, the most promising doctrinal means of advancing a tort claim likely would be public nuisance. A public nuisance constitutes "an unreasonable interference with a right common to the general public," a concept the courts have applied in a wide range of circumstances.<sup>372</sup> Consistent with the term's vague definition, public nuisance is viewed as the "tort of choice" for plaintiffs who seek "breathhtakingly broad relief" on international environmental issues.<sup>373</sup>

#### 2. Analysis: Shortcomings of Common-Law Tort Claims

Plaintiffs in nuisance cases have struggled.<sup>374</sup> These plaintiffs are forced to "establish compelling fact situations and carry out aggressive, costly, and oftentimes difficult litigation strategies."<sup>375</sup> Such litigation stands in contrast to the type of public nuisance claim approved by the Supreme Court in *New Jersey v. City of New York*, a relatively narrow suit to prevent a city from dumping into the ocean garbage that was polluting a neighboring state's waters and beaches.<sup>376</sup>

Courts generally have shown "only faint appetite . . . for creative use of the public nuisance cause of action."<sup>377</sup> Courts simply are reluctant to use tort law to advance broad policy goals such as ocean preservation; they prefer instead to address harms to a specific geographic area or class of people, where causation is clearly supported, and where there is a close fit to the traditional elements of a tort claim.<sup>378</sup> Additionally, federal courts have resisted recognizing public nuisance claims under maritime law.<sup>379</sup> Even

372. RESTATEMENT (SECOND) OF TORTS §821B(1) (1979); see also, e.g., *City of Milwaukee v. Illinois & Michigan*, 451 U.S. 304, 348, 11 ELR 20406 (1981) (Blackmun, J., dissenting) (citing the *Restatement* definition).

373. Richard O. Faulk, *Uncommon Law: Ruminations on Public Nuisance*, 18 MO. ENVTL. L. & POL'Y REV. 1, 2 (2010).

374. Baur et al., *supra* note 43, at 542.

375. *Id.*

376. *New Jersey v. City of New York*, 283 U.S. 473, 476-77, 483 (1931).

377. Douglas A. Kysar, *What Climate Change Can Do About Tort Law*, 41 ENVTL. L. 1, 35 (2011); see also Thomas H. Koenig & Michael L. Rustad, *Reconceptualizing the BP Oil Spill as Parens Patriae Products Liability*, 49 HOUS. L. REV. 291, 326 (2012) ("The failure of . . . avant-garde theories of tort causation has left plaintiffs without redress in toxic torts, products liability, environmental torts, and other collective injury cases.").

378. See Mark Latham et al., *The Intersection of Tort and Environmental Law: Where the Twains Should Meet and Depart*, 80 FORDHAM L. REV. 737, 750 (2011).

379. See, e.g., *Barber Lines A/S v. M/V Donau Maru*, 764 F.2d 50, 56-57 (1st Cir. 1985); *Louisiana ex rel. Guste v. M/V Testbank*, 752 F.2d 1019, 1030-32, 15 ELR 20273 (5th Cir. 1985) (en banc).

where federal maritime common-law claims are recognized and relief is granted, punitive damages generally are capped at a one-to-one ratio to compensatory damages.<sup>380</sup> This array of barriers to public nuisance claims indicates that tort law cannot offer a comprehensive solution to protecting ocean ecosystems.

## IV. Comparative Analysis

### A. Advantages of the NMSA Over Other Existing Authorities

When compared to other ocean resource laws that could provide spatial protection, the NMSA is best-suited to offer the kind of management regime needed to preserve ocean resources. In preserving the ocean's benefits for current and future generations, the NMSA deserves renewed attention as a unique and powerful ocean conservation tool. Although the NMSA has some weaknesses that may limit its effectiveness, as discussed above, the statute has the following significant advantages over other existing authorities in establishing, protecting, and managing specific geographic areas.

#### 1. Ecosystem-Based Management

The NMSA was created to ensure that marine areas of significant cultural, historic, scientific, educational, and environmental value are protected. To this end, the statute creates the authority to apply a comprehensive, ecosystem-based approach to solving problems of ocean degradation and conflicting uses. Many other legal authorities do not take an ecosystem-focused approach. For instance, use-based authorities such as the OCSLA and the FCMA focus primarily on offshore oil and gas development and fisheries management, while species-based authorities such as the ESA and the MMPA aim to protect and revive individual species. Federal authorities focused on aquatic invasive species are so targeted that they are incapable of implementing comprehensive marine management.

The NMSA's systematic approach to sanctuary designation is also preferable to state-based management plans, or coastal-focused authorities such as the CBRA, the CZMA, and the CWA. While these authorities aim to protect and manage the coastal environment, they by definition have a limited jurisdictional authority relative to the NMSA. For their part, courts are reluctant to assert their jurisdiction and use tort law in lieu of more comprehensive federal statutory schemes to advance broad policy goals like reversing ocean degradation.

#### 2. Compatible Uses

Taking into account the NMSA's primary goal of resource protection, national marine sanctuaries also allow for vari-

ous compatible uses, including fishing, boating, diving, and other forms of human activity. This is a broader approach than other federal authorities governing different classifications of protected areas, such as national parks and wilderness areas, which generally apply significant restrictions on human activities. For example, Monterey Bay National Marine Sanctuary, which stretches from Marin County to Cambria, California, and encompasses 6,094 square miles of ocean (276 miles of shoreline), supports one of the world's most diverse marine ecosystems.<sup>381</sup> The sanctuary was established for the purpose of resource protection, but also for research, education, and public use. Specifically, the sanctuary permits various human uses, including commercial shipping, commercial fishing, and military and recreational uses.<sup>382</sup> Uses are tailored to unique sanctuary subunits created using marine spatial planning.<sup>383</sup>

#### 3. Unified Governance and Enforcement Mechanisms

The NMSA provides comprehensive law enforcement authority to the Secretary of Commerce to enforce the protections accorded to marine sanctuaries. Regulations are sanctuary-specific and thus tailored to the unique habitats and resources of a given sanctuary. Other laws, for example the ESA and MMPA, only provide enforcement authority for activities that result in injury to constituent elements of the marine environment, such as the individual members of protected species. The NMSA, by contrast, extends its prohibitions and enforcement authority to all components of the sanctuary area.

#### 4. Substantial Public Involvement

The NMSA also provides for significant stakeholder involvement from the initial proposal of a site for designation through detailed management decisions by a sanctuary superintendent. Prior to designating a sanctuary, the Secretary must consult with congressional committees, several federal agencies, state and local governments, regional fishery councils, and any other interested parties. Further, NOAA must prepare an environmental impact statement, resource assessment, draft management plan, and spatial planning maps. Local public hearings are held, and public comments are collected and considered. Once a sanctuary is designated, advisory councils work with NOAA to develop and implement sanctuary management plans. This degree of public participation facilitates the balanced, multi-use concept behind the NMSA and helps

380. *Exxon Shipping Co. v. Baker*, 554 U.S. 471, 512-13 (2008).

381. NOAA, Monterey Bay National Marine Sanctuary, Quick Facts: The Sanctuary at a Glance, [http://montereybay.noaa.gov/intro/mbnms\\_quickfacts.html](http://montereybay.noaa.gov/intro/mbnms_quickfacts.html) (last visited May 9, 2014).

382. U.S. DEP'T OF COMMERCE, MONTEREY BAY NATIONAL MARINE SANCTUARY FINAL MANAGEMENT PLAN 4748 (2008).

383. NOAA, NOAA STRATEGIC PRIORITY: SUPPORTING EFFECTIVE COASTAL & MARINE SPATIAL PLANNING (2010), available at [http://www.noaa.gov/factsheets/new%20version/marine\\_spatial\\_planning.pdf](http://www.noaa.gov/factsheets/new%20version/marine_spatial_planning.pdf).

ensure that sanctuary-specific regulations are meaningful and enforceable.

### B. *Advantages of the NMSA Over the Antiquities Act*

Given presidential use of the Antiquities Act within the past two decades to set aside marine areas as marine national monuments, and in light of the congressional moratorium on the designation of future marine sanctuaries,<sup>384</sup> it is relevant to consider whether the Antiquities Act has become the statute of preference for protecting sensitive or important marine areas. This Article argues that, despite recent reliance on the Antiquities Act, the NMSA remains the best tool for preserving and protecting marine areas.

The fundamental purposes of the NMSA and the Antiquities Act are different. The NMSA creates a comprehensive, ecosystem-based approach to solving problems of ocean degradation and conflicting uses. The Antiquities Act is designed to preserve objects of historic and scientific interest, and its authority is limited to the smallest area necessary to do so. There are differences in the management authorities contained within the Antiquities Act and the NMSA. The Antiquities Act only addresses the president's power to designate national monuments. It does not provide any significant management authority. Historically, the president has relied upon the federal land-managing agency assigned to a national monument to use its organic authority to manage the monument.<sup>385</sup> For example, President Bush assigned management authority to the Secretaries of Commerce and the Interior, acting through NOAA and the FWS respectively, to manage the Papahānaumokuākea Marine National Monument. Other marine national monuments have been established with exclusive management authority by the Secretary of the Interior.

In contrast to the Antiquities Act, the NMSA provides comprehensive law enforcement authority to enforce the protections accorded to marine sanctuaries. This authority extends to regulating fishing outside of the marine sanctuary that impairs resources within the sanctuary.<sup>386</sup> The NMSA also provides for civil and criminal penalties for violations of the statute's protections, whereas the Antiquities Act contains only criminal provisions that have been held to be overly vague and therefore unconstitutional.<sup>387</sup> In place of the Antiquities Act's criminal provisions, the organic authority of the monument's land-managing

agency applies to criminal and civil violations of a monument's protections. But in contrast to civil penalties available under other land-based authorities, the NMSA authorizes NOAA to assess significantly higher civil penalties (up to \$100,000 per day per violation) for violations of the NMSA or its implementing regulations, and damages against people who injure sanctuary resources, including imposition of response costs.<sup>388</sup> Other land-based authorities also do not provide for in rem jurisdiction and the imposition of a maritime lien over vessels used in committing a violation.<sup>389</sup>

National monuments may work well in relatively remote areas with less human use, but they are less effective in areas near larger human populations or with more complex or higher levels of use because the Antiquities Act does not provide a predesignation process through which potential conflicts are identified, addressed, and resolved to the extent possible. Rather, the Antiquities Act gives the president immediate authority to designate a national monument without any outside consultation, and does not provide any significant management authority or stakeholder participation. Conversely, designation through the NMSA ensures substantial public involvement in the designation process, and in the ongoing management of the site through the sanctuary advisory council process.

## V. Dawn of a New Era

The NMSA is the most effective and comprehensive approach currently available to protect specific areas within the coastal and ocean zones, including entire marine ecosystems, and the statute is the only existing federal law structured with this end squarely in mind. In contrast to other management regimes, Congress designed the NMSA to provide for comprehensive management of marine ecosystems, allowing for multiple uses that are compatible with the statute's primary goal of preservation. Stakeholders play a significant role in sanctuary designations and in defining permitted uses in each sanctuary, a key attribute of the program that helps ensure affected parties buy into the NMSA's mandate to protect ocean resources.

Apart from the strengths of the NMSA relative to other management regimes, the principles behind the statute are wholly consistent with those of ocean governance advocated by scientists, policymakers, academics, and blue-ribbon commissions over several decades. The NMSA deserves renewed attention for its comparative advantages and its consistent validation. While it appears this atten-

384. Section 304(f)(1) of the NMSA, 16 U.S.C. §1434(f)(1).

385. While the organic authority of the NPS, the FWS, and BLM each provides law enforcement authority, the organic authority of the Bureau of Ocean Energy Management only provides enforcement authority relating to mineral extraction activities.

386. While the organic authority of the NPS has been interpreted to allow regulation of at least some activities beyond the boundaries of the protected lands, this authority is very limited. See Memorandum from John Leshy, Solicitor, U.S. DOI, to Bruce Babbitt, Secretary, U.S. DOI (Apr. 16, 1998), available at <http://www.doi.gov/solicitor/opinions/M-36993.pdf>. Moreover, the NPS and the FWS may not have the administrative expertise to craft protective regulations that adequately address the needs of the competing marine-based constituencies, especially the commercial fishing industry.

387. *United States v. Diaz*, 499 F.2d 113 (9th Cir. 1974).

388. See 16 U.S.C. §§1436, 1437, 1443. Significant civil penalties are important to protecting marine resources. In light of federal prosecutors' heavy case-loads, criminal violations affecting far-flung marine resources are unlikely to receive priority. In contrast, civil penalties can be enforced by the Secretary of Commerce without involving federal prosecutors, at least initially. In most cases, prosecutors can be avoided altogether, when civil penalties are not contested in court. Moreover, the level of civil penalties under the NMSA and the ability to recover response costs in addition to damages ensures more than just a slap on the wrist for destruction of the resources protected by marine sanctuaries.

389. *Id.* §§1437, 1443.

tion will not be provided by Congress (the NMSA was last reauthorized in 2000 and was due for reauthorization in 2005), it is being given by NOAA.<sup>390</sup> As NOAA realigns its offices and looks for synergies and efficiencies in a tough budget climate, the agency is recognizing the importance of place-based governance. The incorporation of the National Marine Protected Areas Center into NOAA's Office of National Marine Sanctuaries is one example; the new planning documents of the National Ocean Service offer another example; the recently announced merger of NOAA's Coastal Services Center and Office of Ocean and Coastal Resource Management to form the Office for Coastal Management is a third example.<sup>391</sup>

As discussed above, NOAA also has promulgated a number of rulemakings in recent years to strengthen and expand the national marine sanctuary system. In recognition of the obstacles confronting new sanctuary designations, NOAA has advanced rulemakings and administrative efforts to expand existing sites. These expansions are not limited in scope: They can include non-contiguous areas and can be sizable. Consider that Fagatele Bay National Marine Sanctuary went from being the smallest to the largest national marine sanctuary through an administrative rulemaking.<sup>392</sup>

Most importantly, NOAA recently published a final rule that reopens the door to considering new sanctuary designations.<sup>393</sup> Previous regulatory provisions had required NOAA to maintain a comprehensive Site Evaluation List of marine sites that preliminarily were deemed "highly qualified" for possible designation as sanctuaries.<sup>394</sup> Yet, the provisions that allowed for new sites were removed from the *Code of Federal Regulations* in 1995.<sup>395</sup> Thus, for the first time in nearly 20 years, NOAA has established a process to consider nominations for proposed designations of additional sanctuaries. The new rule did not reactivate the defunct Site Evaluation List. Rather, it created a new approach to identifying potential new sanctuary designations by requesting nominations. In short, it turned the old process upside down and created "a more grassroots, bottom-up approach to national marine sanctuary designations."<sup>396</sup> Specifically, the rule established a

process by which local communities can nominate an area of the marine environment for consideration as a national marine sanctuary.<sup>397</sup>

Based on nearly 18,000 comments submitted to the agency, the vast majority of which were in support of the proposed rule, NOAA promulgated a final rule that clarified the criteria and the process for nominations. The agency identified four criteria to evaluate the national significance of a nomination, and seven considerations for management of the area as a national marine sanctuary.<sup>398</sup> These criteria and considerations are consistent with the statutory provisions in §303(b) of the NMSA.<sup>399</sup> In general, the criteria for national significance look at natural and cultural resources, economic uses, and publicly derived benefits of the area.<sup>400</sup> The considerations for management look at a range of factors for research, education, management, conservation, partnership opportunities, and community support, with particular emphasis on the last consideration.<sup>401</sup>

The final rule also defined the process for nominations by the public, and consideration of nominations by NOAA. The agency defined six steps from development of a nomination by the public to acceptance by NOAA of the nomination to the inventory of potential sanctuary designations.<sup>402</sup> This approach to new designations fits comfortably into the philosophy and approach of the NMSA. The law already allowed for tremendous public engagement with sanctuary designation and management, even at the local level. The new rule implemented this approach one step earlier in the process, providing that the very nomination of a new site for sanctuary designation should start with local stakeholders and interested persons.

To be sure, the full effect of the rule will only be realized when Congress removes current language in the NMSA that limits new sites based on budget determinations.<sup>403</sup> While this provision has served as a de facto moratorium since it was enacted in 2000, its effect going forward remains to be seen. Nevertheless, the significance of the new rule reestablishing the sanctuary nomination process cannot be overstated: It creates an open-sourced, grassroots approach to identifying special marine places that are important to local communities nationwide and that will fold into a national framework for ocean governance through the national marine sanctuary system. This new approach has the potential to galvanize local communities and create a national movement for ocean stewardship that other programs and policies have not inspired. Indeed, we finally may see national marine sanctuaries fulfill the vision embodied in the NMSA: a comprehensive system of sanctuaries that both celebrates and conserves the best of the American ocean.

390. See National Marine Sanctuaries Amendments Act of 2000, Pub. L. No. 106-513, §14, 114 Stat. 2381 (2000).

391. See, e.g., NOAA, NOS PRIORITIES ROADMAP 13-15 (2014), available at <http://oceanservice.noaa.gov/about/>; NOAA, About the Office for Coastal Management, <http://www.coast.noaa.gov/about/> (last visited Oct. 1, 2014).

392. Expansion of Fagatele Bay National Marine Sanctuary, Regulatory Changes, and Sanctuary Name Change, 77 Fed. Reg. 43942 (July 26, 2012) (expanding the national marine sanctuary from 0.25 to 13,581 square miles).

393. Re-Establishing the Sanctuary Nomination Process, 79 Fed. Reg. 33851 et seq. (June 13, 2014).

394. See 15 C.F.R. §922.10(a) (prior to amendment on June 13, 2014) ("The Site Evaluation List (SEL) was established as a comprehensive list of marine sites with high natural resource values and with historical qualities of special national significance that are highly qualified for further evaluation for possible designation as National Marine Sanctuaries."). Selection of a site from the SEL began the formal sanctuary designation and evaluation process. *Id.* §922.21, removed by 79 Fed. Reg. at 33860.

395. National Marine Sanctuary Program, 60 Fed. Reg. 66875, 66876 (Dec. 27, 1995).

396. 79 Fed. Reg. at 33853. NOAA described the SEL as "an agency-driven, top-down approach." *Id.*

397. NOAA has issued a number of documents and videos to explain the nomination process and has created a dedicated set of web pages housing these materials. See NOAA, Sanctuary Nomination Process, <http://www.nominate.noaa.gov/> (last visited Oct. 1, 2014).

398. *Id.* at 33853-54.

399. See 16 U.S.C. §1433(a).

400. 79 Fed. Reg. at 33853.

401. *Id.* at 33853-54.

402. *Id.* at 33854-55.

403. 16 U.S.C. §1434(f)(1).