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MONUMENTALLY INADEQUATE: CONSERVATION AT ANY COST UNDER THE ANTIQUITIES ACT

I. INTRODUCTION

As one of the last official acts of his presidency, George W. Bush designated by proclamation three new marine national monuments: the Marianas Trench Marine National Monument;¹ the Pacific Remote Islands Marine National Monument;² and the Rose Atoll Marine National Monument (collectively the Pacific Monuments).³ The Pacific Monuments cover a sprawling tract of ocean in the central Pacific, together comprising 195,280 square miles, and include several distinct areas: the Rose Atoll on American Samoa; the seven islands that constitute the Line Islands; the waters surrounding three of the northernmost islands in the northern Marianas chain; and the submerged land that is Mariana Trench itself.⁴ Under the authority of the Antiquities Act of 1906,⁵ the water and land within the boundaries of the Pacific Monuments— notable for its biological diversity, pristine coral reef ecosystems and unique volcanic areas—were set aside to protect the marine

1. Proclamation No. 8335, 74 Fed. Reg. 1557 (Jan. 12, 2009) [hereinafter Marianas Trench Proclamation] (designating Marianas Trench Marine National Monument).

2. Proclamation No. 8336, 74 Fed. Reg. 1565 (Jan. 12, 2009) [hereinafter Remote Islands Proclamation] (designating Pacific Remote Islands Marine National Monument).

3. Proclamation No. 8337, 74 Fed. Reg. 1577 (Jan. 12, 2009) [hereinafter Rose Atoll Proclamation] (designating Rose Atoll Marine National Monument).

4. See Juliet Eilperin, *Bush to Protect Three Areas in Pacific*, WASH. POST, Jan. 6, 2009, at A01, available at <http://www.washingtonpost.com/wp-dyn/content/article/2009/01/05/AR2009010501181.html> (reporting on monument designations and highlighting Mr. Bush's speckled environmental record); see also John M. Broder, *Bush to Protect Vast New Pacific Tracts*, N.Y. TIMES, Jan. 6, 2009, at A13, available at <http://www.nytimes.com/2009/01/06/us/06oceans.html> (reporting about monument designations and detailing territories protected). Ms. Eilperin's article is somewhat misleading. The Pacific Remote Islands Marine National Monument does not include the three northernmost islands in the Marianas Chain; the monument includes only the waters surrounding those islands, from the mean low water line out to 50 nautical miles (nm). See Remote Islands Proclamation, *supra* note 2. Taken together, the area in square miles of the Pacific Monuments is equivalent to that of Spain. See Eilperin, *supra* note 4, at A03.

5. Antiquities Act of 1906, 16 U.S.C. §§ 431-33 (2006) (authorizing president to declare objects of historic or scientific interest that are situated upon lands owned or controlled by U.S. government to be national monuments).

environments and specific objects of scientific interest.⁶ Lands and waters that were once open to relatively free use now are subject to sharp restrictions on mineral exploration, including oil and gas, and on commercial fishing.⁷

The incidence of these proclamations affords an opportunity not only to reexamine presidential use of the Antiquities Act, but also to critically evaluate its application to preserve marine environments. Presidential designation of marine monuments is certainly not unprecedented;⁸ to the contrary, the first marine monument designated to protect federal lands and waters has existed since 1938.⁹ More recently, in 2006, President Bush designated the Northwestern Hawaiian Islands (NWHI) Marine Monument to protect nearly 1,200 nautical miles of coral islands, seamounts, banks and shoals located there.¹⁰ Environmentalists urge the continued and expanded use of the Antiquities Act to overcome the failures of traditional ocean governance policies to preserve marine ecosystems and prevent fishery stock overexploitation in United States coastal and ocean waters.¹¹ This focus, spurred by the precipitous

6. See, e.g., Marianas Trench Proclamation, *supra* note 1 (identifying various objects of biological and scientific interest); Remote Islands Proclamation, *supra* note 2 (identifying islands' unique marine and terrestrial wildlife).

7. See Eilperin, *supra* note 4, at A01 (mentioning general restrictions upon human activity within boundaries of Pacific Monuments). The Marianas Trench Monument is somewhat different from the other Pacific Monuments and is subject to different restrictions on human activity. The Marianas Trench Monument consists of three different "units": 1) islands; 2) trench; 3) volcanic. Both submerged lands and waters are included in the islands unit (approximately 16,414 nm²) and commercial fishing and mineral extraction are prohibited by proclamation. For the trench and volcanic units (approximately 79,145 nm²), fishing is not prohibited, nor are the waters (nor the organisms within those waters) included in the monument. See Marianas Trench Proclamation, *supra* note 1.

8. See Sanjay Ranchod, *The Clinton National Monuments: Protecting the Ecosystem and the Antiquities Act*, 25 HARV. ENVTL. L. REV. 535, 578 (2001) (describing briefly other marine monuments).

9. See Proclamation No. 2281, 52 Stat. 1541 (1938) (designating Channel Islands National Monument in California).

10. See Proclamation 8031, 71 Fed. Reg. 36,443 (2006) (designating NWHI National Monument in Hawaii under authority of Antiquities Act). Proclamation 8112, 72 Fed. Reg. 10,031 (2007) (amending monument's name to Papahānaumokuākea Marine National Monument).

11. See, e.g., Mike Mastry, *Coral Reef Protection under the United States Federal Law: An Overview of the Primary Federal Legislative Means by Which Coral Reef Ecosystems and Their Associated Habitat May Be Protected*, 14 U. BALT. J. ENVTL. L. 1, 18 (2006) (reviewing statutory measures used to protect ecosystems). "Use of the Antiquities Act to designate marine ecosystems as national monuments is an effective means by which to preserve and protect reef ecosystems." *Id.*; see also Jeff Brax, *Zoning the Oceans: Using the National Marine Sanctuaries Act and the Antiquities Act to Establish Marine Protection Areas and Marine Reserves in America*, 29 ECOLOGY L.Q. 71 (2002) (suggesting mechanisms to consolidate management of U.S. marine protected areas). "A better solution involves the expanded use of the Antiquities Act . . ." *Id.*

degradation of U.S. marine areas, represents a significant movement in ocean law scholarship advocating the designation of marine monuments as a new approach to national ocean policy.¹²

To supporters, the Pacific Monuments mark the beginning of a “new era of conservation in the U.S. and the world at large.”¹³ Yet, while the Pacific Monuments purport to preserve marine environments, they are not part of any formal, existing U.S. ocean policy promoting conservation.¹⁴ In fact, the Antiquities Act does not expressly allow for use of its authority in the interest of conservation.¹⁵ Nevertheless, monument designation necessarily effects conservation through the establishment of marine protected areas pursuant to a management plan, in which governmental regulations manage and coordinate human activity in the interest of preserving the marine environment therein.¹⁶ While they vary in size and purpose, marine protected areas have become a recommended avenue

124. Robin Kundis Craig, *Taking Steps Toward Marine Wilderness Protection? Fishing and Coral Reef Reserves in Florida and Hawaii*, 34 MCGEORGE L. REV. 155, 159 (2003) (showing increased acceptance of marine wilderness to protect marine resources). “Nevertheless, to restore overfished fishing stocks, marine managers worldwide are increasingly employing a regulatory device known as a marine protected area (MPA).” *Id.*

12. See Brax, *supra* note 11, at 93-97 (describing failures of worldwide fishery management and their collateral effects).

13. Eilperin, *supra* note 4, at A01 (quoting Joshua S. Reichert, managing director of Pew Environment Group).

14. For further information regarding existing U.S. ocean law and policy, see *infra* notes 26-86 and accompanying text.

15. For a discussion of the Antiquities Act’s express provisions, see *infra* notes 224-45 and accompanying text.

16. See PAPAHA NAUMOKUAKEA MARINE NAT’L MONUMENT, NAT’L OCEANIC & ATMOSPHERIC ADMIN., PAPAHA NAUMOKUAKEA MARINE NATIONAL MONUMENT MANAGEMENT PLAN (Dec. 2008), available at <http://hawaiireef.noaa.gov/management/mp.html> [hereinafter *Management Plan*] (implementing management procedures and regulations for monument). The Management Plan “describes a comprehensive and coordinated management regime” “aimed at achieving long-term ecosystem protection for the Monument.” *Id.* at ES-2, ES-3. It is important to observe that the Antiquities Act does not grant any particular federal agency the responsibility for managing federal monuments; rather, that responsibility is delegated by the President. See Mark Squillance, *The Monumental Legacy of the Antiquities Act of 1906*, 37 GA. L. REV. 473, 514-19 (2003) (explaining process of implementing monument regulations and their objectives). As directed by the proclamations, the Secretary of the Interior will have overall responsibility for managing the Pacific Monuments, in conjunction with the Commerce Department and its subsidiary, the National Oceanic and Atmospheric Administration, and, within two years, must develop a management plan to administer the monuments. See Marianas Trench Proclamation, *supra* note 1 (delegating management responsibilities of Marianas Trench Monument to Secretaries of Commerce and Interior). This Article assumes that much the same sort of management plan will be promulgated for the recently designated Monuments and management authority similarly is delegated.

for conserving our nation's oceans because of their potential, among other things, to manage ocean use more effectively.¹⁷ It is questionable, however, whether the Antiquities Act's power is appropriate for the job.

Initial public reactions to the proclamations were mostly positive.¹⁸ Yet, while the areas President Bush duly protected are extremely remote, the curtailment of or prohibition on traditional and once acceptable human activities, such as fishing, is objectionable to local interests.¹⁹ Their strenuous opposition to the marine monuments has been largely under-publicized outside of the local area, perhaps due to the generally perceived utility and beneficence of monument designation.²⁰ While this Article objectively evaluates the scientific efficacy of marine protected areas as a mechanism to protect our nation's oceans, it also shows that executive use of the Antiquities Act is not consistent with policy recommendations for their implementation. In addition, this Article articulates the preference for public comment, meaningful community involvement, and considered legislative deliberation in designing and establishing marine protected areas, rather than unilateral executive action to compel conservation.

Section II of this Article examines United States ocean law and exposes its failure to achieve effective ocean conservation and sustainable fisheries stocks.²¹ Section III investigates the nature of marine protected areas, identifying their existing role in U.S. ocean

17. See Donald C. Baur et al., *Changing Tides in Ocean Management: Putting "Protection" into Marine Protected Areas*, 28 VT. L. REV. 497, 503-04 (2004) (analyzing status of current marine protected area implementation programs and recommending improvements in legal contexts).

18. See Broder, *supra* note 4, at A13 (lauding new monument designations and their environmental implications).

19. For further information regarding the nature of local objections to the monument designations, see *infra* notes 257-64 and accompanying text.

20. See, e.g., Squillance, *supra* note 16, at 551 (stating that monuments' popularity with general public could explain congressional inaction to reverse monument designation); Christine A. Klein, *Preserving Monumental Landscapes Under the Antiquities Act*, 87 CORNELL L. REV. 1333, 1404 (2002) (citing numerous publications detailing support for federal government initiatives to preserve lands and landscapes); Nicole Stelle Garnett, *Trouble Preserving Paradise?*, 87 CORNELL L. REV. 158, 158-59 (2001) (discussing overwhelming success of open space initiatives in 2000); Broder, *supra* note 4, at A13 (mentioning relatively modest opposition from commercial and recreational fishing groups and some officials in Commonwealth of Northern Mariana Islands).

21. For a discussion of United States ocean law relative to the goals of ocean conservation and sustainable fisheries, see *infra* notes 26-91 and accompanying text.

policy and their ability to protect entire marine ecosystems.²² Section IV discusses recent proposals advocating a shift in ocean policy to conserve entire ecosystems and correct the failures of current law on the matter, while also offering an alternative point of view to illustrate the limitations of marine protected areas and ecosystem-based management.²³ Section V specifically addresses the Antiquities Act as a mode of implementing protections of entire marine ecosystems, and considers the Act as recently applied to the Pacific Monuments.²⁴ This Article concludes by lamenting President Bush's decision to protect the areas now included in the Pacific Monuments and suggests an alternative approach to balance local cultural and economic interests, including the fishing industry, with the goal ocean conservation.²⁵

II. U.S. OCEAN LAW AND POLICY

The need to devise special protections for the Pacific Monuments through presidential decree under the authority of the Antiquities Act naturally implicates the inadequacy of existing U.S. ocean law and policy to provide those protections.²⁶ Indeed, "U.S. ocean policy today is less than the sum of its parts."²⁷ U.S. coastal and ocean waters cover 4.4 million square miles, larger than the combined area of the fifty states.²⁸ Use of these waters—for such purposes as fishing, mineral exploration, and shipping—is regulated by a complicated and confusing amalgamation of overlapping jurisdictions.²⁹ States have jurisdiction to regulate activities within

22. For a discussion of marine protected areas, see *infra* notes 92-154 and accompanying text.

23. For a discussion of recent policy proposals, see *infra* notes 155-223 and accompanying text.

24. For a discussion of the Antiquities Act and its relationship to the Pacific Monuments, see *infra* notes 224-313 and accompanying text.

25. For a further discussion lamenting the President's decision to designate the Pacific Monuments, see *infra* notes 314-28 and accompanying text.

26. For a discussion of the debate surrounding the utility of current ocean management regimes in effecting ocean conservation, see *infra* notes 27-91 and accompanying text.

27. Mary Turnipseed et al., *The Silver Anniversary of the United States' Exclusive Economic Zone: Twenty-Five Years of Ocean Use and Abuse, and the Possibility of a Blue Water Public Trust Doctrine*, 36 *ECOLOGICAL L.Q.* 1, 3 (2009) (opining on U.S. ocean policy and proposing that public trust doctrine can serve as foundation for ocean management reform).

28. See *id.* at 3 (illustrating scope of U.S. waters, which includes U.S. territories and protectorates). This estimate covers all U.S. states and possessions, including territories and protectorates. *Id.*

29. See Brax, *supra* note 11, at 77-78 (highlighting complexities of U.S. MPA regulatory scheme).

the submerged lands and waters from their coastlines out to three nautical miles (nm),³⁰ while the federal government has authority over the territorial sea and the U.S. exclusive economic zone (EEZ).³¹ Under this fragmented regime, it is no surprise that there is no overriding legislation governing the oceans.³² Rather, U.S. ocean policy and governance is defined by its lack of integration, coordination and cohesiveness.³³ Laws applicable to the oceans represent a bewildering alphabet soup of regulation: the Clean Water Act (CWA);³⁴ the Endangered Species Act (ESA);³⁵ the Coastal Zone Management Act (CZMA);³⁶ the National Environmental Policy Act (NEPA);³⁷ the Marine Mammal Protection Act (MMPA);³⁸ the Outer Continental Shelf Lands Act (OCSLA);³⁹ the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson

30. The Submerged Lands Act of 1953, 43 U.S.C. § 1301(b) (2006) [hereinafter the Submerged Lands Act] (establishing limits of coast states' jurisdiction). The Submerged Lands Act states that jurisdiction may "extend[] from the coast line [no] more than three geographical miles into the Atlantic Ocean or the Pacific Ocean, or [no] more than three marine leagues into the Gulf of Mexico." *Id.* A marine league is equivalent to three nautical miles.

31. See *United Nations Convention on the Law of the Sea*, Dec. 10, 1982, 1833 U.N.T.S. 1994 at art. 56(1) [hereinafter UNCLOS] (granting each nation authority over its EEZ). UNCLOS allowed coastal nations to claim an EEZ extending out to two hundred miles from shore. *Id.* at art. 56(1)(a). In the EEZ, the coastal nation has "sovereign rights for the purpose of exploring and exploiting, conserving and managing the natural resources" found within it, whether living or nonliving. *Id.* Later presidential proclamations accord U.S. laws with UNCLOS. See Proclamation No. 5030, 48 Fed. Reg. 10,605 (Mar. 10, 1983) (proclaiming U.S. sovereign right and jurisdiction within EEZ); Proclamation No. 5928, 54 Fed. Reg. 777 (Dec. 27, 1988) (extending three-mile territorial sea to twelve miles).

32. See Baur, *supra* note 17, at 556 (voicing concern over lack of coordination and unified governance for the marine environment).

33. See Brax, *supra* note 11, at 80 (bemoaning fractured state of ocean management in U.S.).

34. Clean Water Act, 33 U.S.C. §§ 1251-1387 (2006) (establishing water quality-related effluent limitations).

35. Endangered Species Act, 16 U.S.C. §§ 1531-1543 (2006) (protecting plants and animals listed as threatened or endangered by prohibiting species "takes").

36. Coastal Zone Management Act, 16 U.S.C. §§ 1451-1465 (2006) (encouraging state participation and initiative to establish programs to develop their coastal zones).

37. National Environmental Policy Act, 42 U.S.C. §§ 4321-4370d (2006) (requiring federal agencies to draft environmental impact statements (EISs) for all major activities affecting quality of human environment).

38. Marine Mammal Protection Act, 16 U.S.C. §§ 1361-1407 (2006) (prohibiting "taking" of marine mammals and prohibiting importation of marine mammals or marine mammal products).

39. Outer Continental Shelf Lands Act, 43 U.S.C. §§ 1331-1356 (2006) (establishing federal jurisdiction over airspace above territorial sea, as well as to sea's bed and subsoil).

Act);⁴⁰ and many others.⁴¹ The delegated federal regulatory authority to administer and enforce these laws is diffused across a variety of agencies, including the Coast Guard, the Environmental Protection Agency (EPA), the Department of Interior, the National Oceanic and Atmospheric Administration (NOAA) under the Department of Commerce, the National Marine Fisheries Service (NMFS), the U.S. Fish and Wildlife Service (FWS) and the U.S. Navy.⁴² State and local governments add another layer of regulation, complicating the interrelationship of the various players in ocean governance.⁴³

This disjointed web of regulation poses certain problems.⁴⁴ While U.S. law regulates ocean usage, each type of use is regulated in isolation by separate agencies and each regulation is limited to resource-specific statutes.⁴⁵ Individual governmental agencies often do not account for the activities and policies implemented to regulate those areas that fall outside their jurisdictions, potentially leading to redundant or perhaps conflicting effects.⁴⁶ More significant is the improper and ineffective regulatory focus toward individual species management, as in the case of marine mammals and migratory birds, or single environmental problems, such as in water pollution or waste disposal.⁴⁷ With statutes such as the ESA, MMPA, and other traditional single-species restrictions, protection of habitats is limited to and dependent on the identification of a

40. Magnuson-Stevens Fishery Conservation and Management Act, 16 U.S.C. §§ 1801-1891 (2006) (establishing federal fishery management authority in exclusive economic zone).

41. Brax, *supra* note 11, at 77-79 (identifying statutes with major roles in regulating conservation and development of U.S. oceans).

42. See Craig, *supra* note 11, at 198-99 (stating that these agencies offer little protection for marine biodiversity and rarely work together); see also Donna R. Christie, *From Stratton to USOCOP: Environmental Law Floundering at Sea*, 82 WASH. L. REV. 533, 538 (2007) (tracing our understanding of threats to ocean environments and promoting stewardship and sustainability). It is estimated that "at least twenty federal agencies are involved in implementing over 140 ocean-related statutes." *Id.*

43. See Brax, *supra* note 11, at 79 (observing that states assert jurisdiction out to three miles offshore).

44. For additional discussion regarding the problems associated with disparate ocean regulation, see *infra* notes 45-85, and accompanying text.

45. Kelly McGrath, *The Feasibility of Using Zoning to Reduce Conflicts in the Exclusive Economic Zone*, 11 BUFF. ENVTL. L.J. 183, 183 (2004) (discussing current regulation scheme for ocean usage advocating comprehensive management plan for U.S. oceans).

46. See *id.* at 199 (bemoaning lack of regulatory coordination in ocean management).

47. See Brax, *supra* note 11, at 80 (showing ineffectiveness of single-species regulations).

particular protected species.⁴⁸ Once a particular species has been identified for protection, it is possible that continued exploitation of other species or resources within the same area nevertheless will harm the protected species.⁴⁹ As a result, the protection of one species could be defeated by the lack of overall management.⁵⁰

This traditional scheme of ocean governance has been largely unsuccessful in perpetuating sustainable fisheries and limiting the effects of human activity that has degraded marine species and their habitats.⁵¹ Our understanding of the detrimental effects of human activity on our oceans has developed over the last forty years.⁵² Generally, scientific studies indicate that continued, un-

48. See Baur, *supra* note 17, at 550 (discussing limitations of single-species regulations).

49. See Stephen R. Palumbi, PEW OCEANS COMM'N, MARINE RESERVES: A TOOL FOR ECOSYSTEM MANAGEMENT AND CONSERVATION 17 (2003), http://www.pewtrusts.org/uploadedFiles/wwwpewtrustsorg/Reports/Protecting_ocean_life/pew_oceans_marine_reserves.pdf [hereinafter Pew Marine Reserves] (illustrating practical example of single-species regulation failure).

For example, single-species regulations led to the closure of large areas in the Gulf of Maine to bottom fishing for cod. Because these closures were only for cod, dredging for scallops . . . was not prevented throughout these areas. Such dredging could damage not only cod but other fish as well . . . , placing management of these . . . species in conflict.

Id.

50. See *id.* (illustrating instances of counter-productiveness of features of ocean regulation).

51. Baur, *supra* note 17, at 503-04 (highlighting recent studies finding marine protected areas as important tools for managing and conserving marine resources). For additional background information on U.S. fisheries and existing management regimes, see Donna R. Christie, *Living Marine Resources Management: A Proposal for Integration of United States Management Regimes*, 34 ENVTL. L. 107, 133 (2004).

52. See generally PEW OCEANS COMM'N, AMERICA'S LIVING OCEANS: CHARTING A COURSE FOR SEA CHANGE (2003), http://www.pewtrusts.org/uploadedFiles/www-pewtrustsorg/Reports/Protecting_ocean_life/env_pew_oceans_final_report.pdf [hereinafter America's Living Oceans] (detailing effects of human activity as pervasive in marine environments). For more discussion of the Pew Oceans Commission, see *infra* notes 117, 130-34 and accompanying text. See also U.S. COMM'N ON OCEAN POL'Y, AN OCEAN BLUEPRINT FOR THE 21ST CENTURY (2004), available at http://oceancommission.gov/documents/full_color_rpt/000_ocean_full_report.pdf [hereinafter U.S. Commission Report]. For more discussion of the U.S. Commission on Ocean Policy, see *infra* notes 126-29 and accompanying text. See also Craig, *supra* note 11, at 155-59 (describing harms caused by human activity, particularly fishing); see also Christie, *supra* note 41, at 533-41 (describing Stratton Commission's mission and findings); see generally COMM'N ON MARINE SCI., ENG'G, & RES., OUR NATION AND THE SEA (1969), available at <http://www.lib.noaa.gov/noainfo/heritage/stratton/title.html> [hereinafter Stratton Report]. The Stratton Report is named after Julius A. Stratton, the Chairman of the Ford Foundation and the Commission on Marine Science, Engineering and Resources, established by an Act of Congress on June 17, 1966. *Id.* The members of the Commission were appointed by the President on January 9, 1967 and the Stratton Report was presented on January 9, 1969. *Id.*

adulterated human activity will lead to further deterioration of ocean environments, necessitating governmental intervention to arrest it.⁵³ Scientists widely agree that overfishing, more than any other factor, is the most significant cause of marine ecosystem degradation globally.⁵⁴ By the United Nations' estimate, more than seventy-five percent of world fish stocks—for which assessment information was available—were reported as already fully exploited or overexploited (or depleted and recovering from depletion).⁵⁵ When a fishery is “overfished,” the size of the fish population is reduced to a suboptimal level.⁵⁶ The resulting depletion or economic extinction of the overfished species could undermine marine ecosystems because those species can no longer perform their distinct

53. Donna R. Christie, *Implementing an Ecosystem Approach to Ocean Management: An Assessment of Current Regional Governance Models*, 16 DUKE ENVTL. L. & POL'Y F. 117, 117-18 (2006) (discussing various regional ocean governance structures and approaches to achieve “eco-regional” governance). “The necessity of ocean governance to address problems at the ecosystem level is virtually accepted these days as a truism.” *Id.* at 118.

54. See Craig, *supra* note 11, at 157 (debunking popular perception that pollution is most significant cause of degradation of ocean environments, despite media's emphasis on pollution-related news, such as oil spills and medical waste); see generally John Charles Kunich, *Losing Nemo: The Mass Extinction Now Threatening Our World's Ocean Hotspots*, 30 COLUM. J. ENVTL. L. 1, 18-32 (2005) (emphasizing devastation caused by overfishing).

55. FOOD & AGRIC. ORG., THE STATE OF THE WORLD'S FISHERIES AND AQUACULTURE - 2008 (SOFIA), THE STATUS OF FISHERY RESOURCES (2009) 7, 30-34 available at <ftp://ftp.fao.org/docrep/fao/011/i0250e/i0250e01.pdf> (reporting data compiled in 2007 regarding fisheries catch from 523 world fish stocks). It is also important to note that the standard used by the United Nations to determine exploitation rates worldwide differ from those used by the (NMFS) in the U.S. to determine overfishing rates as defined by the Magnuson-Stevens Act. For additional discussion of “overfishing,” see *infra* notes 56, 67, 69, and accompanying text. Also, the state of world fisheries may have limited relevance on the state of U.S. fisheries because overfished fisheries stocks are not evenly distributed throughout the world's oceans. *Id.* at 33 (stating that percentage of stocks fully exploited, overexploited or depleted varies greatly by area). Interestingly, the percentage of overexploited, depleted and recovering in Western Central Pacific and Eastern Central Pacific (the area of the Pacific Monuments) was ten percent or less. *Id.*

56. See Josh Eagle, *Regional Ocean Governance: The Perils of Multiple-Use Management and the Promise of Agency Diversity*, 16 DUKE ENVTL. L. & POL'Y F. 143, 146 (describing briefly effects of overfishing and critiquing various recommendations designed to improve ocean governance). Under U.S. law, “overfished” means “a rate or level of fishing mortality that jeopardizes the capacity of a fishery to produce the maximum sustainable yield on a continuing basis.” 16 U.S.C. § 1802(34) (2006). Maximum sustainable yield (MSY)—a scientifically derived numerical value that, if exceeded, will result in the depletion of a particular fishery stock—is the guiding principle of domestic fisheries management. See Christie, *supra* note 49, at 133 (explaining MSY); see also 50 C.F.R. pt. 600.310(c)(1) (2004) (defining MSY). MSY and optimum yield levels are implemented through regulations of the Commerce Department and NOAA. 16 U.S.C. § 1853(c).

role in the ecosystems they inhabit.⁵⁷ It could also leave the ecosystem vulnerable to other kinds of deterioration, such as disease and inability to cope with pollution.⁵⁸ Other direct harms are caused by commercial fishing activities themselves, such as trawling and the use of underwater explosives, which can severely damage marine ecosystems by entrapping marine mammals or non-targeted fish species (by-catch), or by ripping coral reef from the sea bottom, respectively.⁵⁹

A perceived collateral effect of overfishing is damage to coral reefs, which are a significant component of marine ecosystems.⁶⁰ While coral reefs cover only one-tenth of one percent of the ocean floor, they provide habitats for one-third of all marine fish species.⁶¹ Coral reefs also protect many coastal populations and developments from storms and sea surge, and could supply materials for useful medicinal compounds.⁶² According to one commentator, overfishing has affected in excess of ninety-five percent of the approximately 1100 reefs studied worldwide.⁶³ Because of the interdependent relationship among many organisms in marine ecosystems, overfishing of coral reef fish species and their resulting extinction could destroy the coral reefs that depend upon them.⁶⁴ This phenomenon has already been observed in eastern Africa and in the Caribbean.⁶⁵

57. See Craig, *supra* note 11, at 163 (describing condition called ecological extinction).

58. See *id.* at 158 (citing Jeremy B.C. Jackson et al., *Historical Overfishing and the Recent Collapse of Coastal Ecosystems*, 293 Sci. 629, 635 (July 27, 2001) (describing ecosystem vulnerability)).

59. See Jennifer L. Schorr, *The Australian National Representative System of Marine Protected Areas and the Marine Zoning System: A Model for the United States?*, 13 PAC. RIM L. & POL'Y J. 673, 676 (2004) (discussing Australia's system of marine protected areas and potential for applying it in U.S.). Both bottom trawling and the use of underwater explosives are prohibited in the areas where the Pacific Monuments are sited.

60. See Robin Kundis Craig, *Coral Reefs, Fishing, and Tourism: Tensions in U.S. Ocean Law and Policy Reform*, 27 STAN. ENVTL. L.J. 3, 5-6 (2008) (detailing effects of overfishing on coral reefs).

61. See Mastry, *supra* note 11, at 2 (citing Mary Gray Davidson, *Protecting Coral Reefs: The Principal National and International Legal Instruments*, 26 HARV. ENVTL. L. REV. 499, 501 (2002) (describing coral reef biology and geography)).

62. National Marine Sanctuaries, *About Your National Marine Sanctuaries, Ecosystems: Coral Reef*, <http://sanctuaries.noaa.gov/about/ecosystems/coralwelcome.html> (last visited October 28, 2009) (mentioning practical uses of coral reef); see also Craig, *supra* note 55, at 5 (identifying valuable ecosystem goods and services provided by coral reef).

63. See Craig, *supra* note 11, at 187 (citing study conducted in 2002 showing signs of ecological extinction of coral reefs).

64. See *id.* (showing that overfishing undermines coral reef ecosystems).

65. See *id.* (providing locations overfishing has occurred).

Yet the idea that overfishing is the leading agent of deteriorating marine habitats and fisheries depletion is certainly not universal.⁶⁶ Some scientists caution against accepting too readily the fact that “overfished” fisheries are necessarily depleted because of too much fishing.⁶⁷ Any factor that causes fishery stock mortality may account for fishery depletion and could lead to the appearance of overfishing.⁶⁸ One commentator believes that the overemphasis on the dangers of fishing is misleading and that a more thorough examination of the data reveals that “overfished” fisheries may be at low levels of abundance because of various natural or anthropogenic factors, such as changing water temperatures, excessive predation, and poor reproduction.⁶⁹ For example, marine mammals—whose populations have benefited significantly from greater statutory and judicial protections—are responsible for consuming enormous amounts of fish and shellfish.⁷⁰ As marine mammal populations continue to rise, so will the proportion of fish marine mammals consume.⁷¹ In addition, these and other condi-

66. For further discussion on the counterpoint to fishing as the leading cause of fisheries depletion, see *infra* notes 67-79 and accompanying text.

67. See Nils Stolpe, *Fisheries Management – It’s Time for a New Paradigm*, FISHNET USA, July 18, 2007, available at http://www.fishnet-usa.com/new_paradigm.pdf (offering alternative view of perceived risks to fish populations). This assertion is rooted in the skepticism of the fisheries harvests to achieve certain optimum, maximum sustainable yield (MSY) levels, in that they are often difficult to determine because of the complexity of interrelationships of stock, the insufficiency of available data, and the effects of short-term variations in environmental conditions. See Christie, *supra* note 49, at 132-33. Fishing at MSY for a particular managed fishery also does not take into account the effects on other stocks in the ecosystem. *Id.* Economists have called fisheries management at “socially optimum” levels of exploitation to be a “socially meaningless” objective. *Id.*

68. See Stolpe, *supra* note 67, at 5-6 (expressing fundamental axiom of fisheries management).

69. See *id.* (discussing interest groups’ failed attempt to amend the Magnuson-Stevens Act). Under the proposed change, the organization within the United States responsible for compiling and reporting such data, the National Marine Fisheries Services (NMFS), would refer to such fisheries as “depleted” rather than “overfished.” *Id.* A stark illustration of the misleading nature of this terminology can be found in the aftermath of the Exxon-Valdez accident in Alaska. When the measure of fishery populations fell below the predetermined levels of MSY, the affected fish stocks were considered to be “overfished,” even though a massive oil spill was responsible for the extraordinarily low fishery stocks. *Id.*

70. See Nils Stolpe, *Getting Real About Ecosystem-Based Management*, FISHNET USA, Feb. 1, 2008, available at http://www.fishnet-usa.com/ecosystem_management.pdf. “In perspective, in the Northwest Atlantic in 2006, marine mammals ate approximately 13 times as much fish and shellfish as commercial fishermen landed, and the annual increase in their total consumption might well have exceeded the U.S. East Coast landings in 2007.” *Id.*

71. See *id.* (explaining increased consumption of mammal population).

tions naturally cause fisheries stock levels to fluctuate widely.⁷² Thus, it is unrealistic to expect individual stocks to meet predetermined levels year over year.⁷³

Some scientists also point to other stresses, somewhat unrelated to fishing, on coastal waters to explain the phenomena of fisheries depletion.⁷⁴ They observe that all the accessories to modern life naturally affect the mortality of fish stocks.⁷⁵ These stressors include habitat loss caused by sprawling coastal development, pollution and ocean dumping, oil and other mineral extraction, improper disposal of pharmaceuticals, recreational activities on the water, and waste from cruise ships and commercial shipping.⁷⁶ Also, widespread algae blooms—caused by agricultural and urban runoff—can lead to vast hypoxic areas, known as dead zones.⁷⁷ The fragility of ocean environments dictates that all the potential causes of fisheries depletion should be investigated.⁷⁸ For these critics, truly healthy fisheries will not exist until ocean managers confront and solve these problems.⁷⁹

Regardless of the cause, significant economic loss will result from the continued deterioration of marine environments.⁸⁰ As of 2004, over two million people were employed in ocean industry areas, including fishing, marine construction, transportation, and offshore mineral extraction.⁸¹ Ocean related industries contributed

72. See Stople, *supra* note 67, 5-6 (referring to population cycles that seem to be “hard-wired” into some species). “Fish stocks come and fish stocks go, and in climatologically active periods such as that we appear to be in today, they are likely to come and go a lot more rapidly and with a lot more vigor than they have in the recent past.” *Id.*

73. See Nils Stolpe, *Fishing-Centric Management*, FISHNET USA, June 16, 2008, available at http://www.fishnet-usa.com/Fishing_centric_management.pdf (criticizing arbitrariness of fishery stock levels).

74. For further discussion regarding these additional causes of marine environment degradation, see *infra* notes 75-79 and accompanying text.

75. Stolpe, *supra* note 67, at 3-5 (offering alternative view of perceived risks to fish populations).

76. See McGrath, *supra* note 45, at 184 (highlighting threats to U.S. coastal and ocean waters).

77. See John Tibbetts, *Eating Away at a Global Food Source*, 112 ENVTL. HEALTH PERSP. 288A (2004), <http://www.ehponline.org/members/2004/112-5/EHP112pa282PDF.PDF> (investigating costs of continued coastal land development).

78. See Stople, *supra* note 67, at 3 (rejecting idea that overfishing is solely to blame for fisheries stock depletion).

79. See Turnipseed, *supra* note 27, at 5-6 (describing dangers posed to U.S. oceans and coastal waters).

80. For further discussion regarding the potential economic loss incident to the degradation of marine environments, see *infra* notes 81-85 and accompanying text.

81. See National Ocean Economics Program, *Market Data*, <http://www.ocean.economics.org/Market/> (last visited Oct. 28, 2009) (providing economic and

over \$163 billion to U.S. gross domestic product.⁸² Eco-tourism is also a valuable aspect of healthy marine ecosystems; it accounted for over three-quarters of the jobs in the ocean sector and half the economic value.⁸³ Marine environments also provide other economically quantifiable services, including capture of sediments by wetlands, protection from coastal storm damage by reefs or mangroves, production of oxygen, and sequestration of carbon dioxide.⁸⁴ Substantial economic loss would result from artificially replacing these lost natural services.⁸⁵

Notwithstanding the complexity of administering our oceans, modern U.S. ocean regulation has been ineffective at arresting the continued decline of marine ecosystems, a condition that is mostly attributable to humans.⁸⁶ Thus, some environmentalists and scholars demand a new approach.⁸⁷ The focus on controlling the *use* of various types of marine areas by prohibiting certain activities must be replaced by the more effective approach of conserving marine ecosystems.⁸⁸ If properly designed, a marine protected area can accommodate the dual goals of management and conservation.⁸⁹ There is tremendous support for marine protected areas, to the degree that their plausibility as a solution cannot be ignored.⁹⁰ But

socio-economic information available on changes and trends along U.S. coast and in coastal waters).

82. See U.S. Commission Report, *supra* note 52, at 31 (estimating total economic value of U.S. ocean industry).

83. See Craig, *supra* note 60, at 6 (emphasizing importance of U.S. ocean services). "Indeed, the employment and economic values for ocean tourism and recreation exceed those for agriculture." *Id.*; see also U.S. Commission Report, *supra* note 52, at 31 (supporting above estimates).

84. See Pew Marine Reserves, *supra* note 49, at 10 (providing details on valuable ocean functions).

85. See Craig, *supra* note 60, at 5-7 (appraising potential economic losses associated with lost natural ocean services).

86. For additional details on the inadequacy of the current ocean law regulatory scheme, see *supra* notes 27-85 and accompanying text.

87. For additional discussion regarding this new approach to ocean management, see *infra* notes 92-223 and accompanying text.

88. See Craig, *supra* note 11, at 211 (advocating new approach to ocean management and illustrating that effects of heavier reliance on MPAs and marine reserves could change many policy assumptions about U.S. oceans and how they should be regulated); see also Brax, *supra* note 11, at 73 (advocating new approach to ocean management).

89. See Baur, *supra* note 17, at 503-04 (demonstrating important characteristics of regulatory protections).

90. See Howard I. Browner & Konstantinos I. Stergiou, *Marine Protected Areas As a Central Element of Ecosystem-Based Management: Defining Their Location, Size and Number*, 274 MAR. ECOL. PROG. SERIES 271 (2004), available at <http://www.int-res.com/articles/meps2004/274/m274p269.pdf> (referencing rapidly growing interest in marine protected areas and dramatic increase in number of publications devoted to them).

they are not a panacea; in fact, more effective ocean management may be achieved without such drastic structural and systematic regulatory changes.⁹¹

III. MARINE PROTECTED AREAS AND ECOSYSTEM-BASED MANAGEMENT

Marine protected areas have been recognized as powerful tools for managing and conserving coastal and ocean resources.⁹² A marine protected area (MPA) is any marine habitat in which human activity is managed or regulated for the protection of the “natural and cultural resources” within it.⁹³ It is distinct from a marine reserve, a category of MPA, in which extraction of *any* resource, whether living, fossil, or mineral, is prohibited.⁹⁴ MPAs provide various levels of protection and a range of allowable human activity that can be tailored to fit the specific needs of the individual habitat or governmental policy objective.⁹⁵ Because MPA regulation is based on geographical limits, as distinguished from the aforementioned species-specific regulations noted above, MPAs can be useful regulatory tools for protecting marine ecosystems.⁹⁶

MPAs are already part of the national network of ocean governance; currently there are over 1700 MPAs in the United States.⁹⁷

91. See Ray Hilborn, *Moving to Sustainability by Learning from Successful Fisheries*, 36 *AMBIO* 296 (June 2007), available at <http://www.abep.eng.br/files/Learning%20from%20successful%20fisheries.pdf> (offering suggestions on how to reform current fisheries governance). For further discussion regarding the flaws of marine protected area regulation, see *infra* notes 173-86 and accompanying text.

92. See Baur, *supra* note 17, at 503 (calling MPA concept “critical” to marine ecosystem conservation).

93. See Exec. Order 13,158, 65 Fed. Reg. 34,909 (May 31, 2000) (proclaiming government policy to establish national system of MPAs and defining MPA); see also Lydia K. Bergen & Mark H. Carr, *Establishing Marine Reserves: How Can Science Best Inform Policy?*, 45 *ENV'T* 8, 10 (2003), available at http://www.piscoweb.org/files/file/popular_articles/bergencarr02.pdf (describing arguments of proponents and opponents of marine reserves in how to protect habitat and biodiversity).

94. See Bergen & Carr, *supra* note 93, at 10 (defining marine reserve).

95. See Schorr, *supra* note 57, at 677-78 (showing flexibility of MPA management schemes).

96. See Craig, *supra* note 11, at 159 (examining MPAs reliance on geographical regulation as important regulatory tool for protecting marine ecosystems).

97. See NAT'L MARINE PROTECTED AREA CTR., NAT'L OCEANIC & ATMOSPHERIC ADMIN., *THE NATIONAL SYSTEM OF MPAs: SNAPSHOT OF UNITED STATES MPAs* (2008) [hereinafter *Snapshot of MPAs*], available at http://mpa.gov/pdf/national-system/nat_sys_snapshot.pdf (providing statistical information regarding U.S. MPAs). Worldwide, human activity upon the high seas is almost completely unfettered; less than one percent of the world's oceans are protected by MPAs and less than one-hundredth of a percent are protected by marine reserves. Bergen & Carr, *supra* note 86, at 8, 10. Marine reserves comprise less than one percent of the of all U.S. waters. See *Snapshot of MPAs*.

Yet, just as there are several agencies responsible for individual facets of ocean governance, there is no single administrative institution or body of law in the U.S. that provides uniform regulations for managing and designating MPAs.⁹⁸ Federal and state laws provide several vehicles for creating MPAs and marine reserves.⁹⁹ At the federal level, the most prominent example is the National Marine Sanctuaries Act (NMSA).¹⁰⁰ The NMSA authorizes NOAA, under certain conditions, to designate “any discrete area of the marine environment as a national marine sanctuary.”¹⁰¹ Sanctuaries, a type of MPA, are designed to accommodate multiple human uses, rather than necessarily to prohibit certain types of usage.¹⁰² The designation process, however, is long and arduous because it considers all competing interests, engendering disfavor among environmentalists and conservationists.¹⁰³ In addition to other federal measures for creating MPAs, states and U.S. territories have jurisdiction to establish and manage MPAs.¹⁰⁴ In fact, approximately sixty-five percent of all MPAs in the United States are managed by coastal states and territories.¹⁰⁵ But the very existence of these different alternatives has been described as “decentralized” and “disjointed,” fostering a system that is dependent upon the proper application of dozens of different federal and state laws by a variety of separate agencies.¹⁰⁶ Because individual MPAs can be designed to regulate a variety of activities, there is no standardized system of zoning, resulting in management on an ad hoc basis and lacking consis-

98. See Schorr, *supra* note 57, at 692 (discussing nature of MPA regulation in U.S.).

99. See Baur, *supra* note 17, at 508-24 (describing principal ocean and coastal laws in U.S. that have been used to provide protection to areas of marine environment through establishment of MPAs).

100. National Marine Sanctuaries Act, 16 U.S.C. §§ 1431-1445(a) (2006) (authorizing Commerce Secretary to designate marine sanctuaries under certain circumstances).

101. *Id.* § 1433(a) (outlining criteria to establish sanctuaries). In order to establish such a sanctuary, NOAA must determine that (1) the area is of special national significance; (2) the area needs protection; and (3) the area is manageable. *Id.*

102. See *id.* § 1433(b)(C) (discussing present and potential uses of these areas); see also Craig, *supra* note 58, at 15-16 (encouraging multiple uses for national marine sanctuaries).

103. See Craig, *supra* note 58, at 15-16 (commenting on failure of recent NMSA proposals due to conflicts with fishing interests).

104. See *id.* at 15-21 (describing alternative federal vehicles for creating MPAs).

105. See Snapshot of MPAs, *supra* note 97, at 3 (reporting that 65% of all U.S. MPAs are managed by state and territorial governments).

106. Brax, *supra* note 11, at 77 (commenting on decentralized management structures in current MPAs).

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tency.¹⁰⁷ Thus, the ultimate goal of the MPA conservation effort is to manage these areas in a “continuum” to provide lasting protection to those resources already set aside for that purpose, while designating new areas only where appropriate.¹⁰⁸

Executive Order 13,158 (“Order”), signed by the President on May 26, 2000, recognized the weakness of stand-alone MPAs and envisioned a new approach to strengthen and expand the then-existing fragmented national system of MPAs.¹⁰⁹ The Order directed certain government agencies, including the Departments of Defense, State, Commerce, and the Interior, to collaborate to “enhance and expand protection of existing MPAs and to establish or recommend new MPAs.”¹¹⁰ Federal agencies were prohibited from harming the resources within existing MPAs in the course of their activities and were required to consult state and local governments regarding the establishment and management of MPAs.¹¹¹ Those existing MPAs were to be identified and then managed under a federal legal framework to be directed by the Marine Protected Area Center (“MPA Center”), an arm of NOAA.¹¹²

The new, coordinated national system contemplated by the Order was entirely different from its predecessor.¹¹³ But, the Order also did not create any substantive or procedural right to legally enforce compliance with its mandate; future presidential administrations may ignore it or revoke its funding.¹¹⁴ The formal process of review for identifying MPAs to add to the national system has

107. See Schorr, *supra* note 59, at 675 (describing lack of federal standardized zoning for MPAs).

108. See Baur, *supra* note 17, at 507 (discussing goal of MPA initiative). The challenge largely confronting the MPA initiative is not necessarily to add additional protections or to add new MPAs, rather it is to ensure protection for what already has been designated. *Id.*

109. See Exec. Order 13,158, *supra* note 93 (proclaiming government policy to establish national system of MPAs).

110. *Id.* at 34,909-10 (regarding interdepartmental cooperation in implementing Order's mandate).

111. See *id.* at 34,910-11 (delegating responsibilities for implementing national system of MPAs to relevant governmental agencies).

112. See *id.* at 34,910 (establishing MPA Center); see also, Marine Protected Areas of the United States, About the National Marine Protected Area Center, http://www.mpa.gov/mpa_center/about_mpa_center.html (last visited Oct. 28, 2009) (discussing mission and goals of MPA Center).

113. See Schorr, *supra* note 59, at 695 (describing purposes of Order). The new system, however, has weaknesses itself, namely the lack of defined standards or characteristics for selecting new MPAs, lack of new appropriations, and the lack of enforcement provisions against those who fail to effectuate the Order or against future presidential administrations from revoking it. *Id.* at 696-97.

114. See *id.* at 696-97 (highlighting Order's limitations). The Bush Administration, however, did endorse the Order on June 4, 2001. *Id.* at 695.

been slow, and federal agencies, cognizant of the lack of enforcement power, have resisted complying with the Order's vague "harm avoidance" provisions.¹¹⁵ Thus, the Order remains essentially a statement of principle, rather than a bold attempt at developing a new national conservation scheme.¹¹⁶

While it may have minimal regulatory effect, to some environmentalists the Order's principles are no less sound. A national system or network of MPAs is far more effective than single or isolated protected areas and would allow MPA protective measures to be focused at managing entire marine ecosystems.¹¹⁷ The goal of ecosystem-based management is "to maintain the health of the whole as well as the parts; . . . [i]t acknowledges the connections among things."¹¹⁸ Managing marine ecosystems focuses on gathering information and knowledge about individual ecosystems and the resources they produce and sustain, and understanding the relationship of human activities to those resources.¹¹⁹ The more we understand this interrelationship between humans and ecosystems, the more appropriate decisions can be made to protect and sustain

115. Baur, *supra* note 17, at 557-58 (discussing Order's failure to create specific action).

116. *See id.* at 557 (criticizing Order's lack of enforcement power); *see also* Schorr, *supra* note 59, at 696-97 (describing weaknesses of Executive Order 13,158); *see also* Brax, *supra* note 11, at 81 (articulating expectations of Order). Although the Order

mandates valuable first steps . . . , it neither proposes any new substantive requirements nor establishes any binding process guaranteed to survive future administrations. The most one can expect from the executive order, therefore, is a comprehensive catalogue of all national MPAs and some impetus for bringing those marine areas under one governing statute and regulatory agency.

Id. (citations omitted).

117. *See* Baur, *supra* note 17, at 556-57 (discussing benefits of implementing system of MPAs). An ecosystem is "the sum total of the organisms living in a particular place, the interactions between these organisms, and the physical environment in which they interact." Pew Marine Reserves, *supra* note 49, at 8. This definition of "ecosystem-based management," developed by the Pew Commission, is cited here because of its pervasive use among environmental advocates; the definition also is used in the U.S. Commission Report. The Pew Commission, however, is not necessarily an authoritative scientific institution and is held in disrepute in some communities. *See* Nils Stolpe, *The Pew Commission – A Basis for National Ocean Policy?*, FISHNET USA, Feb. 8, 2003, <http://www.fishingnj.org/netusa23.pdf> (criticizing Pew's dubious scientific credibility and biased political record). For a more authoritative discussion of ecosystem-based management, *see* John Tibbetts, *America's Oceans: A Blueprint for the Future*, ENVTL. HEALTH PERSPS., Feb. 2005, A107-09 (discussing ecosystem-based management).

118. *America's Living Oceans*, *supra* note 52, at 8 (defining ecosystem).

119. *See* Mark J. Hershman & Craig W. Russell, *Regional Ocean Governance in the United States: Concept and Reality*, 16 DUKE ENVTL. L. & POL'Y J. 227, 247 (2006) (explaining ecosystem-based management concept).

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them.¹²⁰ Experience on land has taught valuable lessons regarding the interrelationship among different forms of wildlife and humans within ecosystems.¹²¹ Countries throughout the world are beginning to realize that the oceans have ecologically distinguishable regions similar to those on land.¹²² Because the marine environment does not lend itself to clear and distinct boundaries, a system-based approach is necessary for the protection of particular MPAs, thus protecting each constituent part by protecting the whole.¹²³ Such a sophisticated, systematic approach would ensure that activities occurring outside an MPA's boundaries would not disturb the protected resources within it.¹²⁴

Interest groups, as well as the federal government, have paid significant attention to the importance of ecosystem-based management.¹²⁵ Congress, recognizing the weakness of traditional ocean governance, created the U.S. Commission on Ocean Policy (U.S. Commission) under the authority of the Oceans Act of 2000 to conduct a comprehensive review of U.S. ocean policy and management.¹²⁶ In its final report, *An Ocean Blueprint for the 21st Century*, published in 2004, the U.S. Commission recommended that ecosystem-based management should form the basis of U.S. ocean policy.¹²⁷ Such management "will lead to better decisions that protect

120. See *id.* (showing ecosystem-based management concept as part of greater framework of reform incorporating regionalism, governance and stewardship).

121. See Baur, *supra* note 17, at 540-43 (discussing inter-relationship between humans and ecosystems). "The legal authorities applicable to land-based conservation system units are relevant to MPAs in many ways." *Id.*; see also Bradley W. Barr & James Lindholm, *Conservation of the Sea Using Lessons from the Land*, 17 GEORGE WRIGHT FORUM 77 (2000), available at <http://www.georgewright.org/173barr.pdf>. "[M]anaging public lands can inform the process of protecting the marine environment." *Id.* at 78.

122. See Craig, *supra* note 11, at 167 (drawing relationships between terrestrial and marine statutory administration).

123. See Baur, *supra* note 17, at 507-08 (describing fundamentals of ecosystem-based management); see also Christie, *supra* note 51, at 118 (stressing importance of system-based regulatory structure). "The necessity of ocean governance to address problems at the ecosystem level is virtually accepted these days as a truism." Christie, *supra* note 53, at 118.

124. See Baur, *supra* note 17, at 507-08 (detailing MPA concept). "[T]he goal is to better advance the effort to provide 'lasting protection' to those resources already set aside for that purpose and to designate new areas where appropriate." *Id.* at 507.

125. For further discussion of the public and private interest in ecosystem-based management, see *infra* notes 126-43 and accompanying text.

126. See Oceans Act of 2000, S. 2327, PL 106-256, 106th Cong. (2000), available at <http://oceancommission.gov/documents/oceanact.pdf> (establishing U.S. Commission on Ocean Policy).

127. See Tibbetts, *supra* note 117, at A107-09 (reporting on efforts of U.S. Commission and congressional and executive responses).

the environment while balancing multiple uses of ocean areas.”¹²⁸ Under a new National Ocean Policy Framework, federal leadership would be coordinated with state and local governments and would be strengthened through restructuring the existing federal agencies under NOAA to eliminate redundant government action and increase its flexibility and responsiveness.¹²⁹

The Pew Oceans Commission (“Pew Commission”), an independent, non-governmental organization, conducted its own review of national ocean management and policy coincident to the efforts of the U.S. Commission.¹³⁰ After two years of scientific research, public hearings, and interviews of thousands of citizens who live and work near the coasts, the Pew Commission published, in 2003, its recommendations for a more effective government management strategy for the oceans.¹³¹ The Pew Commission stressed the importance of maintaining the health of marine ecosystems: “Without productive and resilient marine ecosystems, coastal economies and entire industries would be decimated and our quality of life would be immeasurably harmed.”¹³² The mode of implementing ecosystem-based management in the Pew report is quite different from that recommended by the U.S. Commission.¹³³ Rather than reinforcing existing federal agencies, the Pew Commission proposed establishing regional councils and the development of regional plans to achieve “comprehensive and coordinated governance of ocean resources.”¹³⁴

These commissions based their recommendations on recent scientific studies that purport to confirm the effectiveness of MPAs on an individual level to preserve marine ecosystems.¹³⁵ For example, a marine reserve established in the interests of national security

128. U.S. Commission Report, *supra* note 52, at 66 (setting forth goals and objectives for ecosystem-based management plans).

129. *See id.* at ES-5, ES-10 (outlining proposed National Ocean Policy).

130. *See America’s Living Oceans, supra* note 52, at 9 (explaining Pew Commission’s mission and purpose).

131. *See McGrath, supra* note 45, at 194-95 (summarizing Pew’s findings).

132. *America’s Living Oceans, supra* note 52, at 33 (summarizing effectiveness of ocean governance).

133. *See Christie, supra* note 53, at 120 (summarizing Pew’s recommendations); *see generally* Hershman, *supra* note 119, at 227-65 (defining and explaining different concepts of regional ocean governance).

134. *America’s Living Oceans, supra* note 52, at x, 33, 103; *see also* Christie, *supra* note 53, at 120-21. “The Pew Report envisions the executive, decisionmaking [sic] core of the regional councils to be federal, state, and tribal authorities with jurisdiction over relevant ocean space and resources.” Christie, *supra* note 53, at 120.

135. *See Craig, supra* note 11, at 207 (pointing to new scientific data to legitimize success of MPAs).

around the Kennedy Space Center in Florida has produced “accidental” benefits to fish within it.¹³⁶ The fish were both more abundant and larger than those in nearby unprotected areas.¹³⁷ Other, more conventional marine reserves, like the Florida Keys National Marine Sanctuary and Brackett’s Landing Shoreline Sanctuary Conservation Area in Washington, as well as areas in Africa and the Caribbean, also report larger and more numerous fish.¹³⁸ A large-scale experiment in the Georges Bank has shown similar, positive results.¹³⁹ Since 1994, federal regulations imposed year-round fishing closures on twenty thousand square kilometers in the Georges Bank, located off the coast of Cape Cod, Massachusetts.¹⁴⁰ The ongoing study has shown that the closures are important to the overall increase in size and abundance of certain fish stocks, and help “to preserve marine ecosystems and biodiversity of non-targeted fishery species” by prohibiting trawling and by-catch.¹⁴¹ These increases also can “spill-over” into other unprotected areas.¹⁴² Spill-over occurs when fish eggs and larvae disperse outside of the protected areas, or simply when fish migrate from the protected areas, perhaps by following ocean currents.¹⁴³

Governmental action in the wake of the commissions’ findings, however, has been relatively limited.¹⁴⁴ The Bush Administration responded to the U.S. Commission’s recommendations by promulgating the U.S. Ocean Action Plan (Action Plan) in September

136. See *id.* (presenting examples of MPA effectiveness). The author refers to the benefits as “accidental” because the marine reserve was created in 1962 to provide security for the space shuttle launch site, not to advance any intrinsic conservation goals. *Id.*

137. See *id.* (citing additional scientific data).

138. See Pew Marine Reserves, *supra* note 49, at 22-25 (citing scientific data regarding success of MPAs).

139. See Michael J. Fogarty & Steven A. Murawski, *Do Marine Protected Areas Really Work? Georges Bank Experiment Provides Dues to Longstanding Questions About Closing Areas to Fishing*, OCEANUS, (Sept. 22, 2005), available at <http://www.whoi.edu/oceanus/viewArticle.do?id=3782> (reporting on Georges Bank experiment).

140. See *id.* (discussing regulations closing portions of Georges Bank).

141. *Id.* (reporting results of Georges Bank experiment). The difficulties with evaluating the effectiveness of the experiment are seen with the “export of eggs and larvae.” *Id.* Closed areas benefit fisheries generally only if fish and their eggs are “exported” outside the protected areas to replenish open, over-exploited areas, a phenomenon called “spill-over.” *Id.* But, once they leave the protected areas, those fish and their eggs then are susceptible to being fished. *Id.*

142. See Pew Marine Reserves, *supra* note 49, at 25 (noting potential for “spill-over” from MPAs).

143. See *id.* (discussing “spill-over”).

144. For further discussion of the federal government’s response to the U.S. Commission’s finding, see *infra* notes 145-52, and accompanying text.

2004.¹⁴⁵ The Action Plan purported to address the U.S. Commission's recommendations by outlining a specific, immediate and long-term plan to implement those recommendations.¹⁴⁶ But contrary to the recommendations of both the Pew Commission and the U.S. Commission, the Action Plan makes no mention of ecosystem-based management nor increased use of MPAs.¹⁴⁷ The Action Plan envisioned cross-jurisdictional "cooperative conservation" and established the Committee on Ocean Policy to coordinate those governmental efforts.¹⁴⁸ Ultimately, however, the existing network of regulatory agencies and laws was merely re-enforced; no organizational changes or new governmental structure took form.¹⁴⁹ Also, while the Action Plan promoted policies for sustainable fisheries, existing fishing regulations did not change appreciably.¹⁵⁰ Rather, due to the substantial economic considerations involved in commercial fishing regulation, long-term conservation goals were subordinated to other, more immediate economic interests.¹⁵¹ In the end, the Action Plan represents an indifferent attempt to establish an over-arching national ocean policy.¹⁵²

The lack of firm governmental action to fully implement an ecosystem-based management scheme—consistent with the U.S. Commission's recommendations—persists, even though environmentalists believe that the benefits of MPAs have been demon-

145. See COMM. ON OCEAN POL'Y, COUNCIL ON ENV'TL QUALITY, U.S. OCEAN ACTION PLAN 3-5 (2004), available at <http://ocean.ceq.gov/actionplan.pdf> (representing Bush administration's response to U.S. Commission Report).

146. See generally Helen V. Smith, Note, *A Summary Analysis of the U.S. Commission on Ocean Policy's Recommendations for a Revised Federal Ocean Policy, and the Bush Administration's Response*, 14 SE. ENVTL. L.J. 133 (2005) (providing overview of implementation of Ocean Action Plan reforms in federal ocean policy in comparison with U.S. Commission recommendations).

147. See Craig, *supra* note 60, at 35 (noting policy failures of U.S. Ocean Action Plan); see also Christie, *supra* note 51, at 131 (noting policy failures of U.S. Ocean Action Plan). This response to the U.S. Commission Report "provides only a minimal and measured initial step toward regional, ecosystem-based management." *Id.*; see also John Tibbetts, *supra* note 117, at A109 (noting the need for reform of the U.S.'s ocean policy). "The White House plan does not address the commission's major proposed changes . . ." *Id.*

148. See Exec. Order No. 13,366, 3 C.F.R. pt. 244 (2005) (establishing, in part, White House office of Committee on Ocean Policy).

149. See Craig, *supra* note 60, at 34-36 (discussing further failures of U.S. Ocean Action Plan policy).

150. See Smith, *supra* note 146, at 140-45 (explaining U.S. Ocean Action Plan's failure to address fisheries management).

151. See *id.* (blaming fishing industry for blocking progressive conservation efforts).

152. See Craig, *supra* note 60, at 38 (summing failures of U.S. Ocean Action Plan).

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strated conclusively.¹⁵³ This reality may be explained by recognizing that there is a continuing debate over the efficacy of ecosystem-based management, generally, and MPAs, specifically.¹⁵⁴ The following section exposes this debate.

IV. IMPLEMENTING AND EVALUATING ECOSYSTEM-BASED MANAGEMENT

“Ecosystem-based management means different things to different authors.”¹⁵⁵ Managing a marine area at the ecosystem level is a complex undertaking, allowing many different possibilities for governance and structure.¹⁵⁶ This makes defining ecosystem-based management on anything more than a conceptual level particularly difficult.¹⁵⁷ To truly understand the precise nature of ecosystem-based management, each proposal must be considered as to its individual characteristics.¹⁵⁸

For instance, the Pew Commission proposal would implement strong regional authorities, or councils, with enforcement mechanisms applicable to all levels of government.¹⁵⁹ The regional ocean councils would be involved in developing and enforcing ocean policy plans in cooperation with existing state, federal and regional regulatory agencies.¹⁶⁰ Those plans would divide the ocean into individual ecosystems, and activities in those zones would be managed

153. *See id.* at 38-39 (summing author’s position with regard to benefits of extensive marine reserves). To be sure, Congress has taken some additional, preliminary legislative steps in the wake of the U.S. Commission’s and the Pew Commission’s findings. *See* Christie, *supra* note 53, at 131-40 (referencing National Oceans Protection Act (NOPA) of 2005, S. 1224, 109th Cong. (2005), and Oceans Conservation, Education, and National Strategy for the 21st Century Act (OCEANS-21), H.R. 2939, 109th Cong. (2005)).

154. Elliott A. Norse et al., *Marine Reserves: The Best Option for Our Oceans?*, 1 FRONTIERS IN ECOLOGY & THE ENV’T. 495, 496 (2003), available at <http://floridarivers.ifas.ufl.edu/Carl%20Class/Carl%20Class%20II/MPA%20debate.pdf> (representing conversation among scientists about this debate).

155. Ray Hilborn, *Ecosystem-Based Fisheries Management: The Carrot or the Stick?*, 274 MAR. ECOL. PROG. SERIES 269, 278 (2004) (summing author’s perception of ecosystem-based management).

156. *See* Christie, *supra* note 53, at 120-40 (discussing different approaches to ecosystem-based management and difficulties to their implementation).

157. *See* Hershman, *supra* note 119, at 235-46 (providing “conceptual depth” underlying regional ocean governance).

158. For a conceptual example of ecosystem-based management, see *infra* notes 159-62, and accompanying text.

159. *See* Christie, *supra* note 53, at 122 (summarizing Pew Commission’s recommendations regarding ocean zoning); *see also* America’s Living Oceans, *supra* note 52, at 103 (introducing Pew’s recommendations).

160. *See* America’s Living Oceans, *supra* note 52, at 102 (providing further information on Pew recommendations).

“consistent with the protection, maintenance, and restoration of marine biological diversity.”¹⁶¹ This new level of governance would likely be administered by the federal government and would address a variety of issues, such as the management of living marine resources, protection of habitats, protection of water quality, and management of development affecting marine ecosystem health.¹⁶²

The common themes among this and other proposals—some form of cross-jurisdictional authority that would balance the various resource uses to protect the structure, functioning, and key processes of marine ecosystems—is controversial.¹⁶³ Critics observe that there are practical problems associated with one comprehensive regional council balancing varied uses of natural resources.¹⁶⁴ First, many resource uses are truly incompatible and cannot be adequately balanced.¹⁶⁵ Second, when information is uncertain, or when user groups have widely disparate views of how resources ought to be used, agencies will naturally tend toward “Solomonic averaging.”¹⁶⁶ Yet, splitting the difference is equitable only in an arbitrary way, and often does not produce the best results.¹⁶⁷ In addition, there are many potential factors that contribute to ecosystem degradation and fisheries depletion, so much so that, “[w]hile conceptually appealing, the idea of implementing ecosystem-based management is daunting.”¹⁶⁸ Obtaining enough information to consider and understand the complex interactions of many living creatures and environmental conditions—and using that informa-

161. *Id.* at 102 (describing plans for managing marine ecosystems).

162. *See* Christie, *supra* note 53, at 120-21 (detailing practical limitations of Pew Commission proposal and concerns regarding infringement upon state sovereignty).

163. For criticism of ecosystem-based management, see *infra* notes 164-86, and accompanying text.

164. *See* Eagle, *supra* note 56, at 158-59 (detailing complications of regional ocean councils).

165. *See id.* (showing example of inability to balance certain types of resource use). “[H]aving enough information to consider and understand the complex interactions in an ecosystem seems to be impossible, and attempting to manage species by taking everything into account might be an interminable exercise.” Christie, *supra* note 43, at 543.

166. Eagle, *supra* note 56, at 158-59 (noting that balancing does not represent reasoned attempt to achieve equity). “Where users are in conflict across an entire landscape or seascape, averaging leads to the uniform application of middle-of-the-road management strategies.” *Id.* at 159.

167. *Id.* (referencing *NRDC v. Daley*, 209 F.3d 747 (D.C. Cir. 2000)).

168. Christie, *supra* note 53, at 136 (doubting possibility of managing marine environments at ecosystem level).

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tion to develop an effective management scheme—seems to be impossible.¹⁶⁹

Critics also observe that, while in theory ecosystem-based management implicates a comprehensive investigation of the interrelationship between humans and marine ecosystems, in practice fishing is often the only human activity subject to regulation.¹⁷⁰ This point is emphasized by the fact that environmentalists routinely cite fisheries overexploitation as the most significant cause of ocean degradation, ignoring other possible factors.¹⁷¹ In similar fashion, the notion of establishing MPAs, managed at the ecosystem level, is also open to criticism, particularly in the case of the Pacific Monuments.¹⁷² There, key proponents of the designations, such as the Pew Foundation, purposefully crusaded against the interests of commercial, recreational and cultural fishers.¹⁷³ To opponents of the Pacific Monuments, the concerns regarding conservation of marine resources and effective ocean management will become narrowed to focus almost exclusively at fishing.¹⁷⁴

From a scientific perspective, there are reasons to doubt the efficacy of MPAs as a solution to ecosystem degradation.¹⁷⁵ The starting point for this discussion recognizes that there seems to be universal agreement that sustainable fisheries should be the goal of any management scheme.¹⁷⁶ The disagreement over how to achieve this goal, however, represents what one commentator calls the “Great Divide” between environmentalists and fisheries scien-

169. *See id.* (showing impossibility of ecosystem-based management).

170. *See* Stople, *supra* note 70 (bemoaning overly narrow focus of ocean managers toward fishing).

171. For additional discussion regarding the various factors that can cause ocean degradation, see *supra* notes 66-79 and accompanying text.

172. The author is grateful for the contributions of Mr. John Gourley to this Article. Mr. Gourley, a biologist and native of Saipan, actively campaigned against the efforts of the Pew Environment Group, an arm of the Pew Charitable Trusts, and its subsidiary, the Friends of the Monument, in urging the Bush administration to designate the Pacific Monuments. For his viewpoint regarding the Pew Environment Group’s involvement in the monument designation process, see John Gourley, *The Pew Monument Madness Continues*, SAIPAN TRIBUNE, Letter to the Editor (May 13, 2009), available at <http://www.saipantribune.com/newsstory.aspx?newsID=90204&cat=15>. For a further discussion of the mission and goals of the Friends of the Monument, see *infra* note 282 and accompanying text.

173. *See id.* (referencing Pew Environment Group’s anti-fishing agenda).

174. *See id.* (stating that Pew’s intent is to take away fishing rights and any potential right for oil, gas and mineral extraction from indigenous peoples and give it to federal government to “properly” manage).

175. For criticism of the efficacy of MPAs, see *infra* notes 179-86 and accompanying text.

176. *See* Hilborn, *supra* note 91, at 296 (stressing importance of fisheries management in any ocean management scheme).

tists.¹⁷⁷ While environmentalists support expanded use of MPAs, there are reasons to question that conclusion.¹⁷⁸ First, the new science is staggeringly complex and somewhat inconclusive.¹⁷⁹ The success of MPAs in achieving sustainable fisheries and increased catch yields is directly related to its design, yet there is little scientific information as to why some MPAs work and why others do not.¹⁸⁰ Second, some fisheries scientists argue that the depleted levels of many fish stocks are the result of poor management decisions made in the past over the course of many years.¹⁸¹ They believe that current management techniques are now producing positive results and ought to be afforded the chance to yield greater results in the future.¹⁸² Third, MPAs do not counter the effects of world climate change and its detrimental effects on fisheries stock levels.¹⁸³ The rising temperature of the oceans may have unpredictable effects on aquatic life, and could be the most significant cause of fish stock mortality in the future.¹⁸⁴ Finally, it is unknown how fishing efforts—displaced by MPAs—will affect conditions outside MPA boundaries.¹⁸⁵ Protecting one geographic area through estab-

177. See *id.* at 296-98 (explaining differences in approaches to solving fisheries depletion). The “Great Divide” separates those who support establishing MPAs as central part of the solution to fisheries overexploitation from those who support reforming the current management scheme within existing institutions. *Id.* at 296-98.

178. For criticism of the efficacy of MPAs, see *infra* notes 179-86 and accompanying text.

179. See Norse, *supra* note 154, at 496 (arguing that some benefits of MPAs are controversial and have not been conclusively demonstrated); see also Louis W. Botsford et al., *Connectivity, Sustainability, and Yield: Bridging the Gap Between Conventional Fisheries Management and Marine Protected Areas*, 19 REV. IN FISH BIOLOGY & FISHERIES 69, 69-95 (2009) (identifying migration patterns of individual fish species as unknown variable in success of MPAs as applied to fisheries management and sustainability).

180. See Botsford, *supra* note 179, at 90 (discussing future challenges to implementing MPAs networks). “There have been a number of reviews of the fraction of some 70 known MPAs in which various attributes such as biomass, mean age and diversity increase, but little focus on why they increase in some, but not in others.” *Id.* (citations omitted).

181. See Norse, *supra* note 154, at 496 (blaming current state of fisheries on poor choices made in past).

182. See *id.* (discussing belief that current management techniques may yield greater results in future).

183. See Stolpe, *supra* note 70, at 2 (referencing climate change as possible factor undermining MPA management schemes).

184. See *id.* (emphasizing harms caused by fluctuating sea temperatures).

185. See Norse, *supra* note 154, at 496 (questioning effects on catch rates, catch yields and habitats outside MPAs).

It is not too surprising that abundance increases where fewer fish are removed, but the displaced fishing effort goes elsewhere. We need to ask whether the biodiversity benefits inside the protected area are more valuable than the biodiversity costs of additional fishing pressure outside.

lishing an MPA will merely shift fishing efforts to other areas, perhaps even nullifying the benefits of spill-over.¹⁸⁶

Despite these genuine concerns, the fervor among environmentalists surrounding the MPA concept and ecosystem-based management remains strong.¹⁸⁷ Environmentalists have used the conclusions of the Pew Commission and the U.S. Commission to support a new approach to ecosystem-based management: zoning the oceans in much the same way that land is managed.¹⁸⁸ To supporters, such a concept belies the changing perception of our oceans; no longer are they considered to be “vast and limitless.”¹⁸⁹ By contrast, conservationists recognized long ago the need for preserving green space on land.¹⁹⁰ Zoning terrestrial public lands, as distinguished from private property, is comparable to proposed MPA zoning techniques; our oceans are held in public trust by the government for the benefit of society at large.¹⁹¹ Accordingly, zoning the oceans contemplates state action to balance conflicting uses of public lands and resources, similar to zoning laws in municipalities.¹⁹²

Once we realize that MPAs are effort-shifting programs, we recognize that the comparison of abundance inside and outside protected areas is flawed; the benefits estimated by comparing abundance inside and outside reserves, or before and after reserves are established will be exaggerated.

Id. (internal quotations omitted).

186. *See id.* at 497 (stressing further unknown biological consequences of MPAs).

187. For a discussion concerning the popular interest in MPAs and incorporating ecosystem-based management on a national level, see *infra* notes 188-211 and accompanying text.

188. *See* McGrath, *supra* note 45, at 187 (explaining process of marine zoning).

189. *See* Craig, *supra* note 11, at 167 (discussing changing perception of oceans); *see also* Christie, *supra* note 41, at 533-38 (tracing evolving national awareness of state of nation’s coasts and oceans). “[T]he nation became aware that the oceans were not endlessly resilient but, in fact, both finite and fragile.” Christie, *supra* note 43, at 538.

190. *See* Christie, *supra* note 43, at 538 (comparing and contrasting wilderness conservation and ocean conservation)

191. *See* McGrath, *supra* note 45, at 187-94 (discussing specifics of public trust concept).

The Public Trust Doctrine states that waters and submerged lands under the reach of the Doctrine are to be held in trust for the benefit of the people. The reach of the Public Trust Doctrine extends to all lands subject to the ebb and flow of the tide, and all waters navigable in fact.

Id. at 189.

192. Josh Eagle, *The Practical Effects of Delegation: Agencies and the Zoning of Public Lands and Seas*, 35 PEPP. L. REV. 835, 849-50 (2008) (discussing zoning of public property as it relates to ocean zoning and recommending approaches toward implementation).

Comprehensive zoning proposals come in many different forms.¹⁹³ One scholar recommends the “use-intensity pattern” to accomplish this zoning.¹⁹⁴ “Intensity” is determined by the effect that a certain activity has on the ecosystem, where “low intensity” use (i.e. residential dwellings) is separated from “high intensity” use (i.e. commercial buildings).¹⁹⁵ Activities such as swimming and diving would be analogous to “low intensity” residential use, whereas dredging would be considered “high intensity.”¹⁹⁶ This plan allows for consideration of the nature of current ocean usage and, through an appropriate planning committee, would anticipate future growth by zoning the ocean according to surrounding usage and environmental need.¹⁹⁷ Ocean zones already exist for certain activities other than those dedicated to the protection of fish, coral reefs and other wildlife, including shipping lanes, mineral, oil, and gas exploration and extraction, fishing, and military operations.¹⁹⁸

Some commentators believe that existing statutory frameworks, such as the National Marine Sanctuary Act (NMSA), could be adapted to facilitate this zoning.¹⁹⁹ In 1972, Congress passed the NMSA, which “authorizes the Secretary of Commerce to designate and manage areas of the marine environment with special national

193. See, e.g., Baur, *supra* note 17, at 563-64 (explaining effective zoning in Florida Keys National Marine Sanctuary); Eagle, *supra* note 175, at 892-93 (describing Great Barrier Reef’s rezoning initiative); McGrath, *supra* note 45, at 196 (describing features of Pew Commission’s zoning plan).

194. See McGrath, *supra* note 45, at 187-8 (likening ocean management to land management).

195. *Id.* (defining intensity).

This means the map shows areas with the lowest amount of use and the plan allows for that area to be surrounded with progressively more intense uses. For example, a residential neighborhood that only allows houses would be a low intensity use, no other types of buildings are allowed there. Only residential use is allowed in that area. Next to or surrounding that area would be a more intense use, a type of buffer zone between the lower and the higher uses. An example would be a section zoned for condos, apartments, and town homes that are located between the residential zone and the commercial business zone. The land use plan consists of a zoning map (depicting all areas and current uses), and zoning regulations that detail what the uses mean.

Id. at 188.

196. See *id.* at 199 (describing activities commensurate with high and low intensity).

197. See *id.* at 187 (emphasizing flexibility of this zoning plan). “Regional ocean plans would use a wide range of zoning options including Marine Protected Areas, areas for fishing, areas for oil and gas development, commercial and recreational fishing areas, and areas for other uses.” *Id.* at 196.

198. *Id.* at 204-11 (noting that zoning plans would accommodate current type of usage).

199. See National Marine Sanctuary Act, 16 U.S.C. §§ 1431-1445 (2008) (authorizing designation of marine sanctuaries).

significance due to their conservation, recreational, ecological, historical, scientific, cultural, archaeological, educational, or esthetic [sic] qualities.”²⁰⁰ The NMSA vested broad discretionary authority in the Commerce Secretary, which subsequently was delegated to NOAA.²⁰¹ The statute sets out the process through which sanctuaries are designated, involving a lengthy consultation process to discuss and assess the public benefits, the socioeconomic effects, and the “negative impacts” of a proposed new sanctuary.²⁰² Critics, however, insist that marine sanctuaries are inadequate; they offer little protection when compared to more restrictive MPAs.²⁰³ The NMSA promotes multiple-use within the sanctuaries, rather than prohibiting certain activities.²⁰⁴ In addition, the NMSA’s procedures for designating and implementing sanctuaries seem to favor “pluralist consensus-building over swift action.”²⁰⁵ While this “gauntlet” of consultation makes it far from perfect, the NMSA may be the best available statutory mechanism for consolidating and enacting new MPAs in the United States.²⁰⁶

One commentator even recommends instituting a system modeled after a national representative system of MPAs in Australia.²⁰⁷ The Australian model consists of a “zoning classification system” developed by the World Conservation Union (IUCN).²⁰⁸ An MPA is classified into one of six different categories which, based on specific management objectives, range from complete restrictions to allowances for a wide variety of uses.²⁰⁹ Depending upon the identified primary objective of the MPA, the Australian government assigns the MPA to a particular category and manages it under a framework of uniform laws and regulations that are consis-

200. 16 U.S.C. § 1431(a)(2) (promulgating intent of NMSA).

201. See Eagle, *supra* note 192, at 873 (describing NOAA’s role in establishing marine sanctuaries).

202. See Brax, *supra* note 11, at 84-87 (describing briefly sanctuary designation process).

203. See Craig, *supra* note 11, at 204 (criticizing NMSA process).

204. See *id.* (describing sanctuaries’ defining attributes).

205. Brax, *supra* note 11, at 87 (describing competing interests of swift conservation and public involvement).

206. *Id.* at 90 (defining NMSA’s utility in U.S. ocean policy).

207. For a discussion of Australia’s ocean management regime, see *infra* notes 208-11 and accompanying text.

208. See Schorr, *supra* note 59, at 690 (describing Australia’s national representative system of MPAs).

209. See *id.* at 691 (describing Australia’s national representative system of MPAs).

tent with other MPAs throughout the country.²¹⁰ At least three-fourths of the MPA must be managed for the primary objective, which leaves some flexibility for activities beyond the restrictions of the specific category.²¹¹

Yet, even if MPAs are to be managed systematically, they must be adequately designed to achieve their intended goals.²¹² If existing regulatory structures are to be altered to accommodate new ecosystem-based management schemes, those MPA schemes—to be effective—must account for different goals and priorities.²¹³ For instance, MPAs established to promote ecosystem and biodiversity protection should be administered differently than MPAs where fishery restoration is the primary goal.²¹⁴ Fisheries scientists recommend incorporating MPAs into existing fisheries management systems.²¹⁵ If restoring fishing stocks is the goal, fishing may continue in that particular area, even if restricted in certain specific regions.²¹⁶ By contrast, if ecosystem and biodiversity protection are the goals of marine management, fishing may be prohibited altogether.²¹⁷ This balancing of goals through proactive planning affords all interested parties due consideration and results in efficient and effective management.²¹⁸

The process of implementing these recommended changes has been understandably slow.²¹⁹ Many of the recommendations contemplate a fundamental shift in ocean governance and will require unprecedented cooperation between state and local governments and the federal government.²²⁰ Some commentators criticize the

210. *See id.* at 691, 698. The system does offer some flexibility outside the rigid zoning requirements; “[a]lthough at least three-fourths of quarters of the MPA must be managed for the primary objective . . .” *Id.* at 691.

211. *See id.* at 691 (describing Australia’s national representative system of MPAs).

212. *See Baur, supra* note 17, at 507 (explaining versatility of MPAs).

213. *See id.* (explaining that protective measures applicable to MPAs will vary based upon their underlying purpose).

214. *See Craig, supra* note 11, at 159-60 (providing recommendations for effective MPA implementation).

215. *See Norse, supra* note 154, at 496-97 (showing that MPAs and current fisheries management regimes need not be mutually exclusive).

216. *See id.* (discussing essential planning considerations implicated when developing MPAs).

217. *See id.* (discussing essential planning considerations implicated when developing MPAs).

218. For additional discussion on the importance of proper planning, see *infra* notes 281-97 and accompanying text.

219. *See Christie, supra* note 53, at 118 (identifying obstacles to ecosystem-based management implementation).

220. *See, e.g., Christie, supra* note 53, at 118. “The mismatch between the jurisdictional competences of levels of government in the United States and the need

slow process by blaming interest groups, including fishers, for grinding the gears of progressive government regulation.²²¹ Others blame our federal system itself.²²² As a consequence, some commentators even promote the blatant disregard of state and local interests and advocate broad federal action to quickly and expeditiously address the perceived imminent dangers to the oceans.²²³ The Antiquities Act (Act) fits this dubious purpose.

V. THE ANTIQUITIES ACT

The Act provides that,

[t]he President of the United States is authorized, in his discretion, to declare by public proclamation historic landmarks, historic and prehistoric structures, and other objects of *historic or scientific interest* that are situated upon the lands owned or controlled by the Government of the United States to be national monuments, and may reserve as a part thereof parcels of land, the limits of which in all cases *shall be confined to the smallest area compatible with the*

to act on a regional level creates a major impediment to ocean ecosystem management and creates a dilemma for our federal system.” *Id.*; see also Christie, *supra* note 51, at 136-37 (considering incremental steps toward comprehensive ecosystem-based management). “The goal of creating an oceans regime that provides an ecosystem-based approach to management . . . is laudable, but extremely controversial and perhaps ultimately overwhelming if not approached incrementally.” *Id.* at 110. See also Hershman, *supra* note 119, at 150-53 (detailing failures of current regional ocean governance).

221. See Brax, *supra* note 11, at 120-21 (expressing frustration with fishing industry and its attempts to thwart conservation efforts).

222. See Christie, *supra* note 53, at 118-19 (explaining briefly difficulties in creating regional governance of coastal waters and oceans).

Our governmental institutions are not designed to deal with either the scale or complexity of ecosystem-based management. Our concepts of federalism and separation of powers do not provide the institutional bases for responding to problems on a regional ecosystem level. Our governance system is fundamentally rule driven and jurisdictionally constrained, and these jurisdictions are often jealously guarded. States are seriously concerned about the creation of new hierarchies and new levels of governance that could encroach further on state prerogatives.

Id. at 119.

223. See Jennifer C. White, Note, *Conserving the United States’ Coral Reefs: National Monument Designation to Afford Greater Protection for Coral Reefs in Four National Marine Sanctuaries*, 32 WM. & MARY ENVTL. L. & POL’Y REV. 901, 922-23 (2007) (citing Heidi M. Biasi, *The Antiquities Act of 1906 and Presidential Proclamations: A Retrospective and Prospective Analysis of President William J. Clinton’s Quest to “Win the West”*, 9 BUFF. ENVTL. L.J. 189, 234 (2002)). “There are numerous persuasive reasons why national monument designation . . . may provide greater protection and conservation than is presently given.” *Id.* at 919.

proper care and management of the objects to be protected.²²⁴

The Act's original purpose, as its name suggests, was to protect specific items in antiquity, such as archaeological objects and artifacts in places like Chaco Canyon and Mesa Verde from being lost, stolen, or destroyed.²²⁵ In practice, presidents have invoked the Act as a powerful and unique tool for conservation.²²⁶ Theodore Roosevelt designated the nation's first national monument less than three months after the Act's enactment and followed it with seventeen more designations within the following three years.²²⁷ Thereafter, between 1906 and 2001, fourteen presidents established 144 monuments covering approximately seventy million acres.²²⁸

Notable for its brevity, the Act succinctly bestows an enormous and nearly unqualified power upon the executive, a power which—since the Act's inception—has only grown in dimension.²²⁹ At the time of its enactment, the Act was the only statute to provide the federal government with the authority to preserve public lands; the Act was unique in authorizing only the President to exercise this discretionary power.²³⁰ Even today, most statutes that promote the

224. 16 U.S.C. § 431 (2006) (emphasis added).

225. See Matthew W. Harrison, *Legislative Delegation and Presidential Authority: The Antiquities Act and the Grand Staircase-Escalante National Monument – A Call for a New Judicial Examination*, 13 J. ENVTL. L. & LITIG. 409, 413-14 (1998) (interpreting original intent of Act narrowly); but see Squillance, *supra* note 16, at 477 (interpreting legislative intent broadly). While “[m]ost commentators who have considered the Act and its legislative history have concluded that it was designed to protect only very small tracts of land around archaeological sites[. . .] [t]he complex political history of the law, however, suggests that some of its promoters intended a much broader design.” Squillance, *supra* note 16, at 477. See also Ranchod, *supra* note 8, at 540-41 (discussing Act's legislative history).

226. See Squillance, *supra* note 16, at 487 (chronicling presidential efforts toward conservation in invoking Antiquities Act).

227. See Scott Y. Nishimoto, *President Clinton's Designation of the Grand Canyon-Parashant National Monument: Using Statutory Interpretation Models to Determine the Proper Application of the Antiquities Act*, 17 J. ENVTL. L. & LITIG. 51, 66 (2002) (chronicling Roosevelt's activist use of Act). “On September 24, 1906, three months after the Antiquities Act of 1906 was passed, President Theodore Roosevelt used his newly acquired authority to designate the first national monument, the Devils Tower National Monument in Wyoming.” *Id.*

228. See *id.* at 88-91 (detailing executive use of Act); see also Ranchod, *supra* note 8, at 544-46 (detailing executive use of Act).

229. See Brax, *supra* note 11, at 125 (illustrating elasticity of Act); see also Squillance, *supra* note 16, at 487-514 (exposing legal and social history of Act).

230. See Squillance, *supra* note 16, at 514. Originally, the “bill [that eventually became the Antiquities Act] established a middle ground between the ‘postage stamp’ archaeological sites favored by western legislators, and the large scale reservations that could be designated solely for their scenic beauty, as was favored by

preservation of public lands, such as the National Park Service Organic Act of 1916²³¹ and the National Wildlife Refuge Administration Act of 1966,²³² contemplate congressional action or approval to establish protected areas.²³³ This tremendous power to set aside public land, coupled with the conspicuous lack of congressional review, public comment or participation, or procedural prerequisites, have made the Act extremely controversial.²³⁴

Legal challenges have focused primarily on the Act's two substantive requirements: the qualifications of a "historic landmark, historic and prehistoric structures and other objects of historical or scientific interest;"²³⁵ and the determination of what constitutes "the smallest area compatible with the proper care and management of the objects protected."²³⁶ These challenges have been wholly unsuccessful.²³⁷ Courts have interpreted presidential authority broadly.²³⁸ In fact, the U.S. Supreme Court arguably aug-

the Department of Interior." *Id.* at 485. Though the Act's language originally was interpreted expansively by successive presidents, the Supreme Court did not sanction such an interpretation until 1920. *See* *United States v. Midwest Oil Co.*, 236 U.S. 459, 483 (1920) (interpreting Act).

231. National Park Service Organic Act of 1916, 16 U.S.C. §§ 1-4 (2006).

232. National Wildlife Refuge Administration Act 1966, 16 U.S.C. §§ 668dd-668ee (2006).

233. *See* Squillance, *supra* note 16, at 488 (showing uniqueness of Act as mode of conservation); *see also* James R. Rasband, *Utah's Grand Staircase: The Right Path to Wilderness Preservation?*, 70 U. COLO. L. REV. 483, 500 (1999) (discussing federal land withdrawal in context of Grand Staircase-Escalante National Monument). "Although the Antiquities Act often escapes notice in conversations about important environmental legislation, it has, in fact, been one of the most powerful conservation tools of this century." Rasband, *supra* note 233, at 500.

234. *See* Roberto Iraola, *Proclamations, National Monuments, and the Scope of Judicial Review Under the Antiquities Act*, 29 WM. & MARY ENVTL. L. & POL'Y REV. 159, 170-86 (analyzing cases and discussing limited scope of judicial review over presidential proclamations under Act).

235. *Cappaert v. United States*, 426 U.S. 128 (1976) (ruling that Act was not limited merely to archaeological sites); *see also* *Tulare County v. Bush*, 306 F.3d 1138 (D.C. Cir. 2002) (holding that proclamation sufficiently identified objects of scientific interest and historic sites as required by Act).

236. *Franke v. Wyoming*, 58 F. Supp. 890, 896 (D. Wyo. 1945) (holding President is not obliged to make any particular investigation regarding smallest area necessary for monument's management and care). Challenges also have been based on Congress's authority to delegate its power under the Property Clause to regulate and dispose of federal property. *See* *Mountain States Legal Found. v. Bush*, 306 F.3d 1132 (D.C. Cir. 2002), *cert. denied*, 24 S.Ct. 61 (2003) (ruling that there was no Property Clause violation because statute included "intelligible principles" to guide President's delegated duties).

237. For a discussion of the successive failed legal challenges to presidential designations under the Act, *see infra* notes 238-45 and accompanying text.

238. *See* Iraola, *supra* note 234, at 184 (noting Court's traditional interpretation of Act); *see also* Harrison, *supra* note 204, at 436 (arguing for reconsideration of Antiquities Act jurisprudence). "Lower federal court confusion and the lack of

mented the purview of the Act when it ruled that, although the Act's language refers to "lands," the Act authorizes the reservation of waters located on or over federal lands.²³⁹ Accordingly, a marine ecosystem—like that of the Pacific Monuments—is likely an "object" that would qualify for monument status.²⁴⁰ The federal government's asserted authority over the EEZ probably satisfies the requirement that the government must have "some control" over the lands (or waters) to allow designation of national monuments.²⁴¹ Presidential proclamations pursuant to the Act are also exempt from NEPA procedural requirements, an exemption which relieves presidential administrations of the onerous obligations of drafting environmental impact statements (EIS) and submitting to public comment periods prior to issuing a proclamation.²⁴² It is unclear, however, whether monuments lawfully designated may be

Supreme Court direction on the subject underscore the need for a new judicial rule regarding the Act." *Id.* at 436.

239. See *United States v. California*, 436 U.S. 32, 41 (1978) (accepting implicitly validity federal government's claim to submerged lands); but see Joseph Brigggett, Comment, *An Ocean of Executive Authority: Courts Should Limit the President's Antiquities Act Power To Designate Monuments in the Outer Continental Shelf*, 22 TUL. ENVTL. L.J. 403 (2009) (arguing that, for purposes of Act, federal government does not "control" submerged lands beyond limits of U.S. territorial waters).

240. See Squillance, *supra* note 16, at 513-14 (considering Act's application to marine environments lands). "The vast literature that has developed in recent years describing . . . ecosystem management offers strong support for the claim that a[n] . . . ecosystem is a legitimate object of scientific interest." *Id.* See also Ranchod, *supra* note 8, at 578-82 (stating that Clinton was justified in using Act to protect federal submerged lands and waters).

241. See Squillance, *supra* note 16, at 518-19 (opining that Act's authority could authorize designation of marine monuments). Squillance based his conclusion here on the legal opinion of the U.S. Attorney General. See Memorandum Opinion from Randolph D. Moss, Assistant Attorney General, Office of Legal Counsel, to Solicitor, Department of the Interior, General Counsel, NOAA, and General Counsel, Council on Environmental Quality, *Administration of Coral Reef Resources in the Northwest Hawaiian Islands*, 2000 WL 34475732 (Sept. 15, 2000), available at <http://www.usdoj.gov/olc/coralreef.htm> (taking legal position that President may use authority of Act to establish national monument in territorial sea or in exclusive economic zone). It is important to note that U.S. authority over the waters that constitute the Pacific Monuments is legitimized by the political relationships between the U.S. and the relevant territory. For instance, federal control over the waters designated under the Remote Islands Proclamation exists under the Covenant to Establish a Commonwealth of the Northern Marianas Islands (Covenant), which established the CNMI as a self-governing commonwealth "in political union with and under the sovereignty" of the U.S. and applied U.S. federal law as the "supreme law" of the CNMI. See Covenant, art. I, §§ 101, 102 available at http://www.cnmilaw.org/covenant_i_x.htm#article1 (last visited Oct. 28, 2009).

242. See *Alaska v. Carter*, 462 F. Supp. 1155, 1159 (D. Alaska 1978) (exempting presidential proclamations pursuant to Antiquities Act from NEPA requirements).

revoked once established.²⁴³ The Supreme Court has not ruled on the revocability of monuments designated under the Act, and it remains an open, yet contentious, question.²⁴⁴ The presumed enduring nature of such monuments epitomizes the power of the Act.²⁴⁵

Since the Act's inception, Congress has threatened to weaken or repeal it on numerous occasions, but has had very little success in those endeavors.²⁴⁶ One recent example is the National Monument Fairness Act (NMFA), introduced in June 2003.²⁴⁷ The NMFA would have amended the Act to limit the President's authority to create a national monument or to increase lands of an existing national monument involving more than 50,000 acres by requiring the President to first solicit the relevant state governor's written comments, and by providing that any presidential proclamation will lapse in two years unless it receives congressional approval.²⁴⁸ The President also would have been required to solicit public participation and comment in the development of a monument proclamation and to consult with the relevant state governor and congressional delegation, to the extent practicable, at least

243. See Iraola, *supra* note 234, at 164-65 (questioning legal validity of revoking designations under Act).

244. See *id.* (comparing scholarly positions on revocability issue); see also Squillance, *supra* note 16, at 550 (discussing congressional authority to revoke). "The Congress of the United States has the constitutional responsibility to make all needful rules governing the public lands, and there is no doubt that Congress may use this authority to alter or repeal monument designations created by the President." *Id.* (citations omitted); see also Mastry, *supra* note 11, at 20 (regarding presidential power to revoke).

[U]nless it is within the terms of the power conferred by that statute, the Executive can no more destroy his own authorized work, without some other legislative sanction, than any other person can. To assert such a principle is to claim for the Executive the power to repeal or alter an act of Congress at will.

Mastry, *supra* note 11, at 20. "No President has ever revoked a national monument created under the Antiquities Act and no President has ever tried." Nishimoto, *supra* note 227, at 94.

245. *But see* Brax, *supra* note 11, at 126-27 (noting that designations do not carry weight of law and that Congress can change monuments' size, use and management, or withhold funding for monuments' administration).

246. See Klein, *supra* note 20, at 1403 (noting failed attempts to alter presidents' authority granted by Act); see also Rasband, *supra* note 233, at 530 (noting that legislative efforts to diminish Act's power in wake of its use are hardly new). "In fact, after President Franklin Roosevelt's designation of the Jackson Hole National Monument, Congress amended the Act to exempt the State of Wyoming from any further designations." *Id.*

247. National Monument Fairness Act, H.R. 2386, 108th Cong. (2003), available at <http://thomas.loc.gov/cgi-bin/query/z?c108:H.R.+2386>; see also Jack M. Beermann, *Presidential Power in Transitions*, 83 B.U. L. REV. 947, 1004-07 (describing reforms to prevent so-called "midnight regulations").

248. See H.R. 2386 (proposing amendments to Act).

sixty days prior to any national monument proclamation.²⁴⁹ Other efforts have included legislation to repeal individual monuments altogether.²⁵⁰ Yet, despite these occasional harsh criticisms, Congress has continued to affirm presidents' monument designations by turning protected areas into national parks and by allocating funding for their management.²⁵¹ As one commentator observed, critics, while outspoken against the Act, have been unwilling to "pay the political price" associated with taking action to weaken the President's authority to designate monuments, perhaps due to the monuments' popularity.²⁵²

Evaluating the legality of designating marine areas under the Act, in general, and of designating the Pacific Monuments, in specific, is beyond the scope of this Article. Many authors have expressed their opinions regarding acceptable and unacceptable uses—legal or otherwise—of the Act.²⁵³ Nevertheless, precedent

249. See H.R. 2386 (proposing amendments to Act)

250. See Klein, *supra* note 20, at 1390-91 (describing efforts to repeal President Clinton's Grand Staircase-Escalante National Monument designation in 1996).

251. See *id.* at 1355 (showing that Congress continues to validate designations under Act).

252. *Id.* at 1403 (explaining lack of firm action to reverse monuments designations); see also *supra* note 18, and accompanying text; see also James R. Rasband, *The Future of the Antiquities Act*, 21 J. LAND RESOURCES & ENVTL. L. 619, 620 (2001).

Why is it that presidential use of the Antiquities Act triggers over and over the same concern about procedural fairness and yet the act has still not been repealed or amended? One part of the answer is clear; a vast majority like the results and thus any squeamishness about the means is rather quickly forgotten.

Rasband, *supra* note 252, at 620. To be sure, Congress has abolished two monuments: the Holy Cross and Wheeler National Monuments in Colorado and the Shoshone Cavern National Monument in Wyoming. See Act of Aug. 3, 1950, Pub. L. No. 648, 64 Stat. 404 (abolishing Holy Cross National Monument); see also Act of Aug. 3, 1950, Pub. L. No. 652, 64 Stat. 405 (abolishing Wheeler National Monument); see also Act of May 17, 1954, Pub. L. No. 360, 68 Stat. 98 (abolishing Shoshone Cavern National Monument).

253. See, e.g., Ranchod, *supra* note 8, at 578-84 (praising President Bill Clinton's designation of marine national monuments and citing congressional acquiescence to support their legality); Harrison, *supra* note 204, at 409 (expressing limits to presidential authority delegated by Congress through Antiquities Act); Briggitt, *supra* note 239, at 413 (arguing President George W. Bush exceeded his authority in designating Pacific Monuments); James P. Walsh & Gwen Fanger, *Presidential Bans on Commercial Fishing in the Pacific Marine Protected Areas: A Politically Popular But Unlawful Regulatory Action?*, MARINE RES. COMM. NEWSL. (A.B.A. Section of Environment, Energy, and Resources, Chicago, IL) Aug. 2009, at 1 available at http://www.abanet.org/environ/committees/marine/newsletter/aug09/MarineRes_Aug09.pdf (declaring that Act contains no congressional authority to unilaterally create monuments beyond three-mile territorial limit and that Magnuson-Stevens Act and NMSA trump Act's authority with respect to management of free swimming fish outside U.S. territorial jurisdiction but within EEZ); Alison Rieser & Jon M. Van Dyke, *New Marine National Monuments Settle Issues*, 24 NAT. RESOURCES & ENV'T 50 (2009) (proclaiming that any uncertainty about legality of marine national

shows that a successful legal challenge or presidential rescission in this instance is quite unlikely.²⁵⁴ This Article merely attempts to evaluate the appropriateness of employing the Act to the area that now constitutes the Pacific Monuments to promote conservation and sustainable fisheries.²⁵⁵

In general, attempts to repeal or limit the Act are direct responses to presidential subversion of the political process to effect conservation.²⁵⁶ In the case of the Pacific Monuments, this subversion spurred strong opposition, especially in the Pacific island communities most directly affected.²⁵⁷ The general lack of public comment or consultation angered the inhabitants of those islands, who spoke out at the highest levels of their local governments.²⁵⁸ In November 2008, attendees of the Micronesian Chief Executives Summit sent a letter to President Bush, urging him to refrain from using the Act to establish the Pacific Monuments.²⁵⁹ The letter was signed by the Presidents of Micronesia, Palau, and the Republic of the Marshall Islands, as well as the Governors of Guam and the Commonwealth of the Northern Mariana Islands (CNMI).²⁶⁰ These government leaders called the Antiquities Act process “unacceptable” and noted that “protected areas are only successful when they reflect the will and ideals of those affected.”²⁶¹ Similarly, Representative Madeleine Bordallo (D-Guam), Chairwoman of the

monuments has been set aside merely because executive branch deemed them legal).

254. For additional discussion regarding the presumed legality of marine national monuments designated under the Act, see *supra* notes 235-45 and accompanying text.

255. For discussion of the inappropriateness of invoking the Act to establish the Pacific Monuments, see *infra* notes 256-314 and accompanying text.

256. See Rasband, *supra* note 233, at 554 (discussing efforts to repeal or amend Act).

257. For a discussion of local opposition to the Pacific Monuments, see *infra* notes 259-64, 284-93 and accompanying text.

258. For a discussion of executive protest to the Pacific Monuments, see *infra* notes 259-64 and accompanying text.

259. See Letter from Chief Executives of the Micronesian Islands, 10th Micronesian Chief Executives Summit, to President George W. Bush, President of the United States (Nov. 20, 2008), available at http://www.marianasconservation.org/Downloads/Docs_From_Sylvan/MicroSummit10_letter_to_Bush.pdf (objecting to impending monument designation); see also Letter from Benigno R. Fitial, Governor of the Commonwealth of the Northern Mariana Islands, to President George W. Bush, President of the United States (Apr. 29, 2008), available at http://www.marianasconservation.org/Downloads/Docs_From_Sylvan/CNMI_Governors_Letter_To_Bush.pdf (last visited Aug. 18, 2009) (describing official position of CNMI government toward monument designation).

260. See Letter from Chief Executives of the Micronesian Islands, *supra* note 259 (Nov. 20, 2008) (identifying signers of the letter).

261. *Id.* (responding to plans for Pacific Monuments).

House Subcommittee on Fisheries, Wildlife and Oceans, said use of the Act would ignore the economic interests of local communities in deciding how the waters would be managed.²⁶² In her view, the inhabitants of Guam are good stewards of their ocean environment, balancing the need for sustainable marine resources with local economic interests.²⁶³ Establishing marine monuments in Guam or in the CNMI would involve limited consultation with local communities and stakeholders and would undermine existing successful fisheries management institutions.²⁶⁴

To environmentalists, the interest in preserving the waters and resources that comprise the Pacific Monuments is significant.²⁶⁵ The proclamations speak of rare species of fish and wildlife found nowhere else in the world, great biological diversity, pristine coral reef ecosystems, and the deepest known points in the global ocean.²⁶⁶ Supporters note that the Act allows a president to take prompt measures to preserve these types of natural landscapes and ecosystems in the face of imminent threats.²⁶⁷ The purpose of the Act is to ensure that public lands and resources are protected before they suffer damage.²⁶⁸ In certain circumstances, employing the political process “before these protections are in place can have the effect of targeting a resource in a manner that attracts the very damage that the proclamation is designed to prevent.”²⁶⁹

262. See Letter from Madeleine Z. Bordallo, United States Congresswoman, Delegate from Guam, to James L. Connaughton, Chairman, Council on Environmental Quality (Oct. 24, 2008), available at http://www.marianasconservation.org/Downloads/Docs_From_Sylvan/Guam_Bordallo_Letter_to_CEQ.pdf (opposing use of Act to create any marine monument in CNMI or Marianas Trench without formal public consultation).

263. See *id.* (praising local stewardship of waters that now constitute Pacific Monuments).

264. See *id.* (explaining importance of retaining local flexibility to best balance protection of marine resources and local economy).

265. See, e.g., Eilperin, *supra* note 4, at A01 (reporting environmentalists' approval of monuments); Broder, *supra* note 4, at A13 (reporting public and environmentalist support of monuments).

266. See, e.g., Marianas Proclamation, *supra* note 1 (describing area's unique biological features); Remote Islands Proclamation, *supra* note 2 (describing area's unique biological features); Rose Atoll Proclamation, *supra* note 3 (describing area's unique biological features).

267. See Klein, *supra* note 20, at 1394-95 (noting certain examples of necessary prompt presidential action).

268. See Squillance, *supra* note 16, at 477-86 (tracing developing use of Antiquities Act).

269. *Id.* at 577. These types of arguments represent a sort of “Chicken Little” environmentalism. See Denise Antolini, *Marine Reserves in Hawai'i: A New call for Community Stewardship*, 19 NAT. RES. & ENV'T 36, 43 (2004) (offering opinions on state of U.S. coastal waters and oceans). There is significant disagreement over

The Act, however, is not indispensable to marine ecosystem conservation, particularly here, where the need to protect the western Pacific ecosystems included in the Pacific Monuments was not emergent.²⁷⁰ Prior to the monument designations, the waters that now fall within the boundaries of the Pacific Monuments were regulated in accordance with existing regulatory fishing laws, administered by NOAA and the Western Pacific Regional Fishery Management Council (WESPAC).²⁷¹ It was unnecessary to deprive local interests of the on-going responsibility to harmonize their ocean management scheme with conservation objectives.²⁷² And, if the general state of U.S. oceans serves as the requisite emergency to justify monument designation, it invites the question as to why President Bush did not designate *all* of the nation's oceans.²⁷³

Environmentalists, however, have become frustrated with existing statutory and legal mechanisms like WESPAC, urging an expanded role of the executive in designating marine monuments or MPAs under the Act.²⁷⁴ One commentator extols the virtues of the Act, noting that invoking its authority allows presidents to single-handedly advance the interests of conservation, avoiding lengthy negotiations with "recalcitrant commercial and recreational fishers".²⁷⁵ Doing so would avoid protracted delays in implementing

whether the predicted catastrophic degradation of marine ecosystems will soon progress to the point of irreversibility. *Id.* at 43.

270. See Rasband, *supra* note 252, at 631 (calling rationale for employing Antiquities Act to respond quickly in emergency situations a "red herring").

271. See Press Release, National Oceanic and Atmospheric Administration, U.S. Pacific Islands Now Account for 50 Percent of Nation's MPAs (Jan. 6, 2009), available at http://www.wpcouncil.org/press/PressRelease_2009Jan6_USPacificIslandMarineMonuments_final.pdf (noting that Pacific Monuments' areas were well-administered by existing regulatory mechanisms).

272. For a discussion of local stewardship of the waters that now constitute the Pacific Monuments, see *supra* notes 262-64 and accompanying text; see also *infra* notes 289-91 and accompanying text.

273. See John Nielsen and David Malakoff, *Bush Eyes Unprecedented Conservation Program*, NPR, May 23, 2008, available at <http://www.npr.org/templates/story/story.php?storyId=90766237> (discussing Bush Administration's solicitation of conversation groups to identify marine areas as possible sites for monument designation). Part of the angst among members of the Pacific islands communities is President Bush's motivation for designating the Pacific Monuments, which is perceived not to be in the interests of conservation, but rather in the interest of creating a "blue legacy," in conjunction with the meddlesome Pew Environment Group. *Id.* For additional discussion of Pew's ill-repute, see *supra* notes 117, 172-74 and accompanying text and *infra* note 277 and accompanying text.

274. For further commentary urging expanded use of the Act, see *supra* note 11 and accompanying text.

275. Brax, *supra* note 11, at 75. "What is instead needed is the application of the Antiquities Act to the marine environment, allowing the Executive to rise above fear, parochialism, and petty self-interest and create no-take marine reserves single-handedly." *Id.*

statutory protections of marine environments, similar to the so-called “procedural nightmare” that was the effort to protect the NWHI Sanctuary, before President Bush declared it a marine monument.²⁷⁶ Likewise, the Pew Foundation’s approach to sidestepping local interests in Pacific islands resulted in a streamlined designation process lacking transparency and perhaps willfully avoiding the solicitation of public comment.²⁷⁷

Yet, the political process allows for consideration of all interested parties and will more likely lead to developing a system of effective ocean management and promoting conservation, which may or may not include a system of MPAs managed at the ecosystem level.²⁷⁸ The proposals of both the Pew Commission and the U.S. Commission promote partnership among all levels of government.²⁷⁹ Cooperative action is important because,

[w]ithout question, the process that is used to involve affected parties and the public in designating new MPAs or establishing management standards for existing ones is critical to its success. When the decisionmaking [sic] process is responsive to the impacted constituencies and effectively disseminates information, the quality of the resulting action can only be improved and, quite possibly, the level of opposition and potential for conflict can be greatly reduced.²⁸⁰

276. See Craig, *supra* note 60, at 22 (describing Mr. Bush’s use of Act to overcome NMSA process).

277. See Richard Gaines, *Lawyers: Pew Wrongly “Taking Control” of Oceans*, GLOUCESTER TIMES, Sept. 14, 2009, http://www.gloucestertimes.com/punews/local_story_256223320.html (criticizing Pew Foundation’s inappropriate involvement in campaign to create Pacific Monuments). “Pew . . . successfully threw a public information veil around the isolated islands that prevented the widespread objections of the governor and indigenous peoples to penetrate the mainstream media.” *Id.*

278. See Brax, *supra* note 11, at 127. “[R]eserves created by and with the support of a local committee of disparate interest groups are far more likely to garner long-term political support and survive political shifts and budgetary shortfalls.” *Id.*

279. See Christie, *supra* note 53, at 131-32 (citing National Oceans Protection Act of 2005, S. 1224, 109th Cong., § 2(10) (2005)) (discussing proposed National Ocean Protection Act, based upon U.S. Commission recommendations); see also *America’s Living Oceans*, *supra* note 52, at 33. The Pew Commission’s proposed National Ocean Policy Act is comprehensive legislation advocating a uniform set of general principles and standards for ocean governance, while improving coordination between government agencies and other interests groups. *Id.* The main objective of this legislation is the protection, maintenance and restoration of the health of marine ecosystems. *Id.*

280. Baur, *supra* note 17, at 566 (using establishment of sanctuary zoning system in Florida Keys reserve as example of effective and successful process). In

An adequate process, involving public consultation and scientific review, also affords the opportunity to plan.²⁸¹ Fisheries management is integral to any form of ocean management, and, because of the complexities of fisheries science, planning is essential.²⁸² The Act willfully avoids this prerequisite.²⁸³ Moratoriums on fishing, implemented within the Pacific Monuments ostensibly as a political expedient, are inconsistent with the goal of sustainable fisheries.²⁸⁴ The concept of sustainable fisheries does not segregate humans from marine environments; rather, it promotes responsible use of marine resources.²⁸⁵ Total fishing bans similar to those found in marine reserves, the most restrictive form of MPA, are an extreme solution to a complex problem; it is a solution that focuses on a protectionist and preservationist approach instead of sustainable use approach.²⁸⁶ Marine reserves merely account for a singular interest: recovery of fishery stocks.²⁸⁷ Fishing bans also do not ade-

developing that zoning system, a collaborative effort among commercial and recreational fishers, divers, conservationists, scientists, concerned citizens and government agencies resulted in an ecological reserve that satisfied the interests of all parties involved. *Id.* at 566-67.

281. See Ray Hilborn, *Knowledge on How To Achieve Sustainable Fisheries*, FISHERIES FOR GLOBAL WELFARE & ENV'T, 5th World Fisheries Congress 45-56 (2008), available at http://www.terrapub.co.jp/onlineproceedings/fs/wfc2008/pdf/wfcbk_045.pdf (exploring lessons learned in managing fisheries and predicting where the evolution of fisheries management will lead). "In all aspects of fisheries management, . . . we see cooperation with local stakeholders as almost universally essential to success." *Id.* at 55.

282. See Turnipseed, *supra* note 27, at 9 (stressing importance of fisheries to "national goal" of ecosystem-based management); see also Norse, *supra* note 154, at 497 (discussing MPA optimal design relative to individual species and their movement patterns). "For MPAs to be effective in increasing sustainable yield for a species, the sizes of the protected areas must be carefully matched to the movement of that species." *Id.* See also Botsford, *supra* note 179, at 91 (presenting scientific research regarding movement of individual fish populations to aid MPA design to maximize conservation and growth). "[T]he effects of choices that have to be made in the design of MPA networks (e.g., location, size and spacing) on their eventual success in improving sustainability or yield have received little empirical attention." Botsford, *supra* note 179, at 90.

283. For further discussion of this willful avoidance, see *supra* notes 274-77 and accompanying text.

284. See Robert Duerr, *Marine Protected Areas Go Down*, HAWAII FISHING NEWS, May 10, 2004 (on file with author) (representing views of local fishermen in Hawaii area).

285. See Katrina M. Wyman, *The Property Rights Challenge in Marine Fisheries*, 50 ARIZ. L. REV. 511, 542-43 (2008) (detailing multifaceted challenge faced by fisheries policymakers).

286. See *Guam Lawmakers Back Opposition to the Proposed Marine Monument*, PACIFIC ISLAND NEWS SERV., Nov. 19, 2008 (on file with author) (reporting on opinions of Guam lawmakers).

287. See Wyman, *supra* note 285, at 514 (speaking of fishing bans as one dimensional solution to problem of fisheries depletion). "[M]uch of the debate

quately solve the problems of overexploitation of certain individual fish stocks.²⁸⁸ In the case of the Pacific Monuments, there is no indication that conservation of marine resources or effective fisheries management could not be accomplished through alternative means.²⁸⁹ Indeed, within the WESPAC's area of responsibility, only one species is classified as "overfished" by the federal government as of September 2009.²⁹⁰ This stewardship is based upon a long tradition of a people who depend on the ocean for our basic needs and whose lives are directly connected to the ocean.²⁹¹ More generally, as a national ocean policy, marine reserves would not accommodate the many and varied interests implicated in marine fisheries, which reach beyond just fishers.²⁹² The social and economic costs of such bans are unnecessarily and disproportionately large when compared to the ecological objective of ecosystem protection.²⁹³

In addition, even if the fishing moratoriums are temporary, MPA science has not progressed to the point of achieving sustaina-

about fisheries policy takes place within pigeon-holes that ignore the breadth of the challenge facing policymakers." *Id.* at 515.

288. See Hilborn, *supra* note 91, at 297 (identifying "race to fish" as most important aspect of overexploitation and fishery stock depletion); see also Simon Jennings, *The Ecosystem Approach to Fishery Management: A Significant Step Towards Sustainable Use of the Marine Environment?*, 274 MAR. ECOL. PROG. SERIES 277, 281 (2004) (observing that closing areas to fishing is unlikely to reduce significantly aggregate impacts of fishing). "[I]ncreased use of closed areas without associated capacity reduction will displace fishing impacts to places where fisheries regulations are not so stringent, and to more vulnerable areas, such as parts of the deep sea." Jennings, *supra* note 288, at 281.

289. For information on these well-administered fisheries, see *infra* notes 290-91 and accompanying text.

290. See National Marine Fisheries Service, Nat'l Oceanic and Atmospheric Admin., U.S. Dep't of Commerce, *Subject to Overfishing (38) – as of CY 3rd Quarter 2009*, www.nmfs.noaa.gov/sfa/statusoffisheries/2009/thirdquarter/mapoverfishingstocks_cy_q3_2009.pdf (reporting individual fish species subject to overfishing in the U.S. as of September, 2009).

291. E-mail from Paul Dalzell, Senior Scientist, Western Pacific Regional Fishery Management Council in Honolulu, (Oct. 14, 2009, 15:45 EDT) (offering assessment of Pacific island culture and importance of ocean to indigenous peoples) (on file with author).

292. See Wyman, *supra* note 285, at 543 (arguing generally that policymakers must weigh many different factors when focusing on depletion of fisheries stocks).

293. See Hilborn, *supra* note 91, at 297-98 (discussing balance of conflicting objectives in sustainable fisheries); see also Jennings, *supra* note 288, at 280 (emphasizing significant short-term costs associated with implementing ecosystem-based management approach). "The ecosystem approach will not remove the very high short-term costs of protecting the environment unless incentives are introduced to link conservation and short-term financial reward." Jennings, *supra* note 288, at 280.

ble fisheries.²⁹⁴ The design of MPAs is crucial to their success.²⁹⁵ Given the hastiness of the preliminary research conducted by the Bush Administration prior to issuing its proclamations, it is unlikely that fisheries science at all contributed to the formation of the Pacific Monuments.²⁹⁶ Thus, the proclamations serve only to stack an additional layer of bureaucracy on top of existing governance structures through an MPA or system of MPAs, naturally discounting the possibility of adapting existing regulatory schemes to achieve effective management.²⁹⁷

A more effective approach to fisheries management would alter commercial fishers' incentives to stop the competitive "race to fish" and encourage sustainability and fishery stock recovery.²⁹⁸ Altering the nature of conventional fisheries management under the Magnuson Act would accomplish the goal of sustainable fisheries without the significant structural and legal changes implicated by instituting ecosystem-based management through a national system of MPAs.²⁹⁹ This goal can be achieved most effectively by shifting incentives for fishers from encouraging the expansion of fishing fleets and catch sizes to encouraging sustainability and fisheries stock recovery through a system of "dedicated access."³⁰⁰ Features of dedicated access include community quotas and allocation, fishing cooperatives that internally allocate fish, territorial fishing rights for communities, groups or individuals, and individual allocation of catch quotas.³⁰¹ Properly incentivizing fishers—by allocating fishing rights through high access fees or auction—would instill a form of marine tenure and would make the conservation of re-

294. See Botsford, *supra* note 179, at 90 (noting limitations of MPA science). "The effects of choices that have to be made in the design of MPA networks (e.g., location, size and spacing) on their eventual success in improving sustainability or yield have received little empirical attention." *Id.*

295. For further discussion regarding the relationship between the design of MPAs and their success, see *supra* notes 180, 212-17, 281-82 and accompanying text.

296. See Walsh & Fanger, *supra* note 253, at 3 (stating proclamations were not accompanied by any scientific analysis regarding actual threat of fishing activity to health of marine ecosystems in Pacific Monuments).

297. For further information regarding the potential form of the Pacific Monuments' management plan, see *supra* note 16 and accompanying text.

298. See Hilborn, *supra* note 91, at 300-01 (recommending alternative approach to fisheries management).

299. See Hilborn, *supra* note 155, at 274-75 (evaluating ecosystem-based management).

300. See Hilborn, *supra* note 91, at 297 (discussing incentives for fishermen to practice sustainable fishing practices).

301. See *id.* at 297, 300 (describing "dedicated access" and its importance); see also Wyman, *supra* note 285, at 526-34 (promoting economic advantages of conferring individual property rights for wild fisheries).

sources in the best economic interests of fishers.³⁰² This style of management would also eliminate the destructive “race to fish.”³⁰³

Interestingly, one scholar has noted that the “common interests of the conservationists and fishing communities are much greater and more compelling than revealed by the . . . sometimes hard-headed and misguided” public debates.³⁰⁴ It is true that fishermen prefer more effective fisheries management, rather than difficult to administer systems of fishing quotas and safe fishing techniques.³⁰⁵ Fishermen also admit that fishery stocks are stressed.³⁰⁶ But they advocate only temporary fishing bans to spur a reversal of the perceived over-exploitation of fisheries stocks, as opposed to permanent prohibitions.³⁰⁷ Because “sustainable fishing is a complicated science,” it is much easier for government to completely ban fishing than dedicate itself to extensive scientific study to ensure that the interests of conservationists and fishermen can coexist.³⁰⁸ Nonetheless, additional research is necessary to understand more clearly the consequences of optimal fishing levels,

302. See Hilborn, *supra* note 155, at 276. “This contrasts with conventional management in which the state gives away the rights to fish and then uses tax revenue to manage the fishery. When high access fees are charged, the state has both the incentive and the revenue to implement stringent top-down control.” *Id.* For support of the use of private property rights in the context of wild fisheries, see Wyman, *supra* note 285, at 527-59.

303. See Hilborn, *supra* note 155, at 276 (discussing implications of race to fish). This proposal is conceptually similar to the political and economic research of Elinor Ostrom, the recipient of the 2009 Nobel Memorial Prize in Economic Sciences. Elinor Ostrom, *Governing the Commons: The Evolution of Institutions for Collective Action* (1990). Ms. Ostrom developed the idea that, even in the absence of a centralized government authority, stakeholders in shared communities – like fisheries – form voluntary arrangements to govern the use of common resources to prevent overharvesting. See Neil Irwin, *Real-World Research Wins Nobel Prize in Economics*, WASH. POST, Oct. 13, 2009, available at <http://www.washingtonpost.com/wp-dyn/content/article/2009/10/12/AR2009101201487.html> (reporting Ms. Ostrom’s research).

304. Antolini, *supra* note 269, at 37 (referring to debates during designation process of NWHI sanctuary).

305. See Duerr, *supra* note 284 (providing fisherman’s perspective on fisheries management).

306. See *id.* (providing fisherman’s perspective on state of U.S. fisheries stocks).

307. See Robert Duerr, *Lingle Ends NWHI Angling*, HAWAII FISHING NEWS, Oct. 10, 2005 (on file with author) (criticizing fishing bans); see also Boris Worm et al., *Rebuilding Global Fisheries*, 325 SCI. 578 (2009) (representing latest and most comprehensive review of fisheries science as applied to overexploited or depleted fisheries). “Rebuilding these collapsed stocks may require trading off short-term yields for conservation benefits or, alternatively, more selective targeting of species that can sustain current levels of fishing pressure while protecting others from overexploitation.” *Id.*

308. See Duerr, *supra* note 307 (suggesting more targeted government regulation).

rather than relying on extreme measures that could ruin economically viable industries.³⁰⁹ Both the U.S. Commission and the Pew Commission call for additional government funding in the areas of science and technology to investigate ways to achieve sustainable fisheries and maximum sustainable yields.³¹⁰

Invoking the Act, particularly in the fashion exercised with regard to the Pacific Monuments, is an inefficient, haphazard way to correct poor fisheries management or to effect conservation, as well as an undesirable way to establish MPAs.³¹¹ The process used to involve affected parties and the public to designate new MPAs or establish management standards for existing ones is critical to their success.³¹² The Act does not provide for these procedural safeguards and the resulting management scheme misallocates the responsibilities of administering the areas purported to be protected.³¹³ Rather, the framework for effective national ocean policy and conservation already exists under current U.S. law: continuing to revise and adapt regional fisheries management under the Magnuson Act to achieve sustainable fisheries, as recommended above, to counter the effects of fisheries depletion.³¹⁴

VI. CONCLUSION

Implementation of the Pacific Monuments' management plans now rests in hands of the new presidential administration, but their fate appears not to be pre-destined.³¹⁵ Despite the praise garnered

309. See McGrath, *supra* note 45, at 213-17 (noting lack of scientific data to support implementation of zoning with multiple uses); see also Worm, *supra* note 307, at 581 (encouraging reevaluation of traditional exploitation targets).

310. See U.S. Commission Report, *supra* note 50, at ES-11, ES-13 (describing under-investment in ocean infrastructure and recommending national monitoring network to determine success of management efforts); see also America's Living Oceans, *supra* note 50, at 48 (recommending permanent fishery conservation and management trust fund). It is important to note that the demonstrated success of MPAs has been shown in marine reserves, not necessarily in areas open to fishing and other human activity. See *id.*

311. For a discussion of the incompatibility of the Act with fisheries management and conservation in area that now constitutes the Pacific Monuments, see *supra* notes 256-97 and accompanying text.

312. See Baur, *supra* note 17, at 566 (stressing importance of process used to designate MPAs and other protective areas).

313. For further discussion on the proper allocation of fisheries management responsibilities, see *supra* notes 298-303 and accompanying text. For further discussion on the importance of procedural safeguards, see *supra* notes 278-97 and accompanying text.

314. For a proposal regarding effective fisheries management, see *supra* notes 298-303 and accompanying text.

315. For discussion regarding the uncertain future of the Pacific Monuments, see *infra* notes 316-19 and accompanying text.

by the designations, supporters—including representatives from the Pew Foundation—are dissatisfied with the scope of protection afforded by the proclamations, in particular the Marianas Trench Proclamation, and have begun a campaign to amend it.³¹⁶ Opposition groups outside the Pacific islands have also emerged, dissatisfied with the Pacific Monuments on grounds somewhat unrelated to the issue of proper and effective ocean management.³¹⁷ The proposed management plan is currently under review by the Commerce Secretary and, before its implementation, there will be a formal public comment period.³¹⁸ While the Monuments' final composition and regulatory structure are still unknown, it is likely that the Pacific Monuments' management plans will implement some form of MPA or a system of MPAs, perhaps managed at an ecosystem level.³¹⁹

Whatever the outcome, the Act is a sort of conservation “gadget” that so “devalues the ennobling qualities of a fair and dem-

316. See Gemma Q. Casas, *Governor Asks Legislature to Back Anti-Monument Amendment Stand*, MARIANAS VARIETY, May 12, 2009, http://www.mvarietynews.com/index.php?option=com_content&view=article&id=16882:governor-asks-legislature-to-back-anti-monument-amendment-stand&catid=1:local-news&Itemid=2 (concerning proposed amendment to pending congressional legislation). An organization, funded by the Pew Foundation, named Friends of the Monument, which was active in working toward the designation of the Pacific Monuments, now leads efforts to amend the Marianas Trench Proclamation to protect the entire EEZ, out to 200 nm, as opposed to the current level of protection, out to 50 nm. See Letter to U.S. Representative Greg Camacho Sablan of the CNMI from Friends of the Monument, April 17, 2009 (on file with author) (detailing Friends' five areas of concern regarding how Marianas Monument could be improved). Such changes would offer protection to the waters, and the organisms living there, in addition to existing protections over the seabed, and would allow restrictions on extractive activities, including fishing. *Id.* Further information about Friends of the Monument may be found at <http://marianamonument.blogspot.com/> (last visited Oct. 28, 2009).

317. See David Vine and Miriam Pemberton, *Marine Protection as Empire Expansion*, FOREIGN POL'Y IN FOCUS, May 6, 2009 available at <http://www.fpif.org/fpiftxt/6103> (uncovering ulterior military motive to monument designation). “Those concerned about the environment must make sure that the Pentagon does not use the mantle of environmental protection as a cover for its profligate and environmentally damaging plans to use military bases to control the Pacific.” *Id.*

318. Walsh & Fanger, *supra* note 253, at 8-9 (noting with approval availability of public comment period to verify scientific basis for management plan).

319. For information on the potential form of the Pacific Monuments' management plan, see Management Plan, *supra* note 16 and accompanying text. The likelihood that management will be based at the ecosystem level is bolstered by the proposals of the new presidential administration's Ocean Policy Task Force. See OCEAN POL'Y TASK FORCE, COUNCIL ON ENVIRONMENTAL QUALITY, INTERIM REPORT OF THE OCEAN POLICY TASK FORCE, Sept. 10, 2009, available at http://www.whitehouse.gov/assets/documents/09_17_09_Interim_Report_of_Task_Force_FINAL2.pdf (proposing creation of National Ocean Council to guide inter-governmental coordination to implement ecosystem-based management and marine spatial planning objectives).

ocratic preservation process” as to dictate that presidents must avoid using it and Congress should attempt more seriously to amend or repeal it.³²⁰ A fair process requires public participation *prior* to monument designation, with explicit consideration of the effects of such designation on local communities.³²¹ Wider participation will more likely lead to achieving sustainable fisheries and engender cooperative action to manage our oceans.³²² Our existing regulatory systems should not be cast aside in favor of a new regulatory tool like the MPA; rather, the existing schemes must be revised and refined.³²³ Indeed, there have been many success stories detailing effective fisheries management, none of which involved the use of the Antiquities Act.³²⁴

Scrapping the Antiquities Act does not mean, however, that conservation must suffer at the hands of staunch local interest groups; rather, it requires skepticism about achieving conservation objectives.³²⁵ Politicians do not always know what is best for certain public lands or waters,³²⁶ and this skepticism contemplates a constant willingness to question “the necessary scope of our public lands aspirations and our means for achieving them.”³²⁷ While our ocean resources face many and varied threats, we should be skepti-

320. Rasband, *supra* note 233, at 553-55 (criticizing president’s activist use of Act and effects of its amendment).

321. *See id.* at 555 (urging public participation in preservation efforts).

322. For a discussion of the importance of cooperative planning in fisheries management, see *supra* notes 215-18 and accompanying text.

323. For a proposal regarding effective fisheries management, see *supra* notes 298-303 and accompanying text.

324. *See* Hilborn, *supra* note 91, at 297-302 (highlighting successes of current fisheries management regimes); *see also* Christie, *supra* note 53, at 141 (highlighting successes of current fisheries management regimes); *see also* America’s Living Oceans, *supra* note 52, at 28-30 (highlighting successes of current fisheries management regimes); *see also* U.S. Commission Report, *supra* note 52, at 88-89 (highlighting successes of current fisheries management regimes); *see also* Action Plan, *supra* note 145, at 10-11 (highlighting successes of current fisheries management regimes).

325. Rasband, *supra* note 233, at 633 (urging public skepticism toward Act and its efficacy).

326. *Id.* at 634 (citing Bruce Babbitt, *Federalism & the Environment: An Intergovernmental Perspective of the Sagebrush Rebellion*, 12 ENVTL. L. 847, 857-58 (1982)). “When this sovereign power is wielded by a continually changing parade of federal administrators, each with a different agenda, the situation becomes intolerable.” *Id.*

327. *Id.* at 633 (arguing against moral “certitude” of politicians in deciding what was best use for public lands and those people who resided there). Aggressive use of the Antiquities Act could be a “repetition of the historical pattern of conquest by certitude.” *Id.*

cal of the Act's utility in providing sufficient protective measures at the expense of other social and economic interests.³²⁸

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328. See Rasband, *supra* note 233, at 633 (urging public skepticism toward Act and its efficacy).

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