What Regional Ocean Planners Can Learn from U.S. Public Lands Management

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Abstract: Launched with an Executive Order in 2009, the federal government has promoted marine spatial planning of U.S. ocean waters, to be carried out under the direction of nine Regional Planning Bodies (RPBs). To help the RPBs succeed in the delicate task of balancing economic and environmental goals while satisfying a wide range of ocean stakeholders, this Article looks at the equally complex, and frequently contentious, history of public lands management in the United States, finding striking similarities between the two settings and suggesting lessons regional planners can draw on for more effective implementation of marine spatial planning.

I. Introduction to Marine Spatial Planning in the U.S.

Ocean challenges such as declining fish stocks, the loss of large marine predators, changes in marine biodiversity, endangered ocean species, coastal habitat loss, hypoxic "dead zones," ocean acidification, and many more have been documented in hundreds of scientific publications[2] and

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[2] *See, e.g.*, NATIONAL RESEARCH COUNCIL, UNDERSTANDING MARINE BIODIVERSITY (1995); Daniel Pauly et al., *Fishing Down Marine Food Webs*, 279 SCI. 860-63 (1998); COASTAL HYPOXIA: CONSEQUENCES FOR LIVING RESOURCES AND ECOSYSTEMS, Coastal and Estuarine Studies, vol. 58 (Nancy N. Rabalais & R. Eugene Turner, eds., 2001).

thoroughly summarized in two definitive commission reports.[3] Explanations for these problems point primarily to human causes such as overfishing, coastal development, point and non-point source pollution, and fossil fuel combustion, while proposed solutions vary from tighter regulation and better enforcement,[4] to market-based solutions,[5] community-based management,[6] or marine protected areas.[7]

Ecosystem-based management (EBM) has also been widely advanced as a more effective approach for managing complex and highly inter-connected marine ecosystems.[8] A consensus statement describes marine EBM as "an integrated approach to management that considers the entire ecosystem, including humans."[9] However, despite several attempts to define the necessary elements of EBM, widely disparate programs have been labeled as such, including the California Marine Life Protection Act process, the National Marine Sanctuaries Program, the Chesapeake Bay Program, and other efforts that share little more than an intent to be more holistic than traditional management approaches.[10] An ambitious, collaborative project recently analyzed EBM efforts around the world, summarizing many of their common features and suggesting lessons learned.[11]

A related approach for achieving more integrated marine management—sometimes referred to as a "tool" for implementing EBM—is marine spatial planning (MSP).[12] The idea of undertaking multiple-use spatial planning as a means to cope with the complexities of ocean ecosystems actually predates the term EBM.[13] Almost forty years ago, Young and Fricke wrote that "sea use planning … is a necessary intellectual tool … to seize hold of some of the problems that so far have been too slippery," concluding that "because of the multiplicity of competitive, and potentially damaging uses, sea use now needs to

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[3] *See* PEW OCEANS COMMISSION, AMERICA'S LIVING OCEANS: CHARTING A COURSE FOR SEA CHANGE (2003), *available at* http://www.pewtrusts.org/uploadedFiles/wwwpewtrustsorg/Reports/Protecting_ocean_life/POC_Summary.pdf, and U.S. COMMISSION ON OCEAN POLICY, AN OCEAN BLUEPRINT FOR THE 21ST CENTURY: FINAL REPORT (2004), *available at* http://jointoceancommission.org/documents/USCOP_report.pdf [hereinafter AN OCEAN BLUEPRINT].

[4] *See* U.S. COMMISSION ON THE BP DEEPWATER HORIZON SPILL AND OFFSHORE DRILLING, DEEP WATER: THE GULF OIL DISASTER AND THE FUTURE OF OFFSHORE DRILLING: REPORT TO THE PRESIDENT vii (2011).

[5] *See* Peter H. Pearse, *From Open Access to Private Property: Recent Innovations in Fishing Rights as Instruments of Fisheries Policy*, 23(1) OCEAN DEV. & INT'L LAW 71 (1992).

[6] *See* Svein Jentoft, *The Community: A Missing Link of Fisheries Management*, 24(1) MARINE POL'Y 53 (2000).

[7] *See* NATIONAL RESEARCH COUNCIL, MARINE PROTECTED AREAS: TOOLS FOR SUSTAINING OCEAN ECOSYSTEMS (2001).

[8] *See, e.g.,* PEW OCEANS COMMISSION, *supra* note 3, at 44; AN OCEAN BLUEPRINT, *supra* note 3, at 63-65; ECOSYSTEM-BASED MANAGEMENT FOR THE OCEANS (Karen McLeod & Heather Leslie eds.2009).

[9] COMPASS, Scientific Consensus Statement on Marine Ecosystem-based Management 1 (2005), *available at* http://www.compassonline.org/sites/all/files/document_files/EBM_Consensus_Statement_v12.pdf.

[10] *See* Katie K. Arkema, Sarah C. Abramson, & Bryan M. Dewsbury, *Marine Ecosystem-based Management: From Characterization to Implementation*, 4(10) FRONTIERS IN ECOLOGY 525 (2006).

[11] *See Marine Ecosystem-based Management in Practice*, ECOSYSTEM MANAGEMENT INITIATIVE, UNIVERSITY OF MICHIGAN SCHOOL OF NATURAL RESOURCES AND ENVIRONMENT, http://webservices.itcs.umich.edu/drupal/mebm/ (last visited Sept. 17, 2013).

[12] *Comprehensive Ocean Zoning: Answering Questions about this Tool for EBM*, 2(1) MARINE ECOSYSTEMS AND MGMT. 1 (2008).

[13] *See, e.g.,* SEA USE PLANNING (Elizabeth Young & Peter Fricke, eds., 1975); Robert W. Knecht & T. Kitsos, *Multiple-Use Management in the EEZ*, OCEANUS Vol. 27, no. 4 (Winter 1984/85); Lawrence Juda & R. H. Burroughs, *The Prospects for Comprehensive Ocean Management*, 14(1) MARINE POL'Y 23 (1990).

be ordered and controlled … in the interests of the community as a whole."[14] These words seem prescient in light of recent developments.

At the time of the U.S. Commission on Ocean Policy's deliberations, between 2001 and 2003, the relatively new concept of MSP was not widely discussed in U.S. policy circles. The term does not appear anywhere in the Commission's final report, although one recommendation suggests that "Congress … should establish a balanced, ecosystem-based, offshore management regime that sets forth guiding principles for the coordination of offshore activities."[15] Nevertheless, MSP was already beginning to be implemented in Canada[16] and a number of European countries,[17] and a few academics were promoting the related idea of ocean zoning.[18] Although characterizations of MSP vary slightly from author to author, one commonly cited definition states that "MSP is a public process of analyzing and allocating the spatial and temporal distribution of human activities in marine areas to achieve ecological, economic, and social objectives that are usually specified through a political process."[19]

In 2009, a memo from U.S. President Barack Obama created an interagency taskforce and directed it to develop a new National Ocean Policy, including a "framework for effective coastal and marine spatial planning."[20] The final recommendations of that task force[21] were adopted through Executive Order 13,547 in July 2010, including the establishment of a National Ocean Council (NOC) with representatives from eleven cabinet-level departments and an additional sixteen federal agencies and offices. After considerable delay and extensive rewriting of earlier drafts, the NOC issued its Final Implementation Plan for U.S. ocean policy in April 2013.[22]

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[14] SEA USE PLANNING, *supra* note 13, at 3.

[15] AN OCEAN BLUEPRINT, *supra* note 3, at 103.

[16] *See* R. J. Rutherford, G. J. Herbert, & S. S. Coffen-Smout, *Integrated Ocean Management and the Collaborative Planning Process: The Eastern Scotian Shelf Integrated Management (ESSIM) Initiative*, 29(1) MARINE POL'Y 75 (2005).

[17] *See* FRANK MAES ET AL., A FLOOD OF SPACE: TOWARDS A SPATIAL STRUCTURE PLAN FOR SUSTAINABLE MANAGEMENT OF THE SEA, BELGIAN SCI. POL'Y (2005); Fanny Douvere & Charles N. Ehler, *New Perspectives on Sea Use Management: Initial Findings from European Experience with Marine Spatial Planning*, 90(1) J. OF ENVTL. MGMT. 77 (2009).

[18] *See, e.g.*, Eliot A. Norse, *A Zoning Approach to Managing Marine Ecosystems*, *in* PROCEEDINGS FROM THE WORKSHOP ON IMPROVING REGIONAL OCEAN GOVERNANCE IN THE US 53 (2002), *available at* http://www.ceoe.udel.edu/cmp/pdf/RegionalProceedings.pdf; Gary R. Russ & Dirk C. Zeller, *From* Mare Liberum *to* Mare Reservarum, 27(1) MARINE POLICY 75 (2003).

[19] CHARLES N. EHLER & FANNY DOUVERE, MARINE SPATIAL PLANNING: A STEP-BY-STEP APPROACH TOWARD ECOSYSTEM-BASED MANAGEMENT 18 (2009), *available at* http://www.unesco-ioc-marinesp.be/.

[20] *See* Memorandum from the President of the United States to The Heads of Executive Departments and Agencies, concerning A National Policy for the Oceans, Our Coasts, and the Great Lakes (June 12, 2009), *available at* http://www.whitehouse.gov/sites/default/files/page/files/2009ocean_mem_rel.pdf.

[21] COUNCIL ON ENVIRONMENTAL QUALITY, FINAL RECOMMENDATIONS OF THE INTERAGENCY OCEAN POLICY TASK FORCE (2010), http://www.whitehouse.gov/files/documents/OPTF_FinalRecs.pdf [hereinafter OPTF FINAL RECOMMENDATIONS].

[22] NATIONAL OCEAN COUNCIL, NATIONAL OCEAN POLICY IMPLEMENTATION PLAN (2013), *available at* http://www.whitehouse.gov//sites/default/files/national_ocean_policy_implementation_plan.pdf [hereinafter NOP IMPLEMENTATION PLAN]. These developments are described in greater detail elsewhere in this volume. *See* Briana Collier, *Orchestrating Our Oceans: Effectively Implementing Coastal and Marine Spatial Planning in the U.S.*, 6 SEA GRANT L. & POL'Y J. 77 (2013); Morgan Gopnik, From the Forest to the Sea: Lessons in Managing Public Space, PhD Dissertation, Duke University Marine Lab (2013) (Publication No. AAT 3557965).

One theme echoed in all these recent ocean policy documents is the importance of allowing mid- to large-sized regions—coinciding roughly with Large Marine Ecosystems[23]— to play a leading role in implementing sustainable, multiple-use management of ocean areas. These regions have also been suggested as the appropriate scale at which to conduct MSP, with planning regions that "extend landward to the mean high-water line … [and] include inland bays and estuaries."[24] Although the MSP framework issued by the Interagency Ocean Policy Task Force lays out very specific steps for the regions to follow in creating marine plans,[25] the final NOC implementation plan leaves virtually all decisions about how to conduct marine planning—or whether to engage in planning at all—to the members of the Regional Planning Body in each region.

Recognizing the growing importance of regional action, a symposium was held at Seton Hall University School of Law in April 2013 entitled "Regional Ocean Governance: Legal & Policy Solutions for Mid-Atlantic Ocean Planning," with the purpose of providing guidance to the Mid-Atlantic Regional Planning Body.[26] This Article, based on a presentation by the author at the symposium, is thus targeted primarily at regional planners. A related article, currently in development, will cover additional topics and is intended for a broader audience of ocean policymakers, managers, stakeholders, and scholars.[27]

A. Concerns about Marine Spatial Planning

Not everyone has embraced MSP as a desirable next step in ocean management.[28] Some ocean industry sectors, particularly offshore oil and gas and international shipping, worry that MSP "could create uncertainty and harm economic activity" and that "the policy is being developed without adequate congressional engagement and consideration of the views of ocean, coastal, Great Lakes, and inland user groups, including commercial and recreational interests."[29] A series of workshops organized by Duke University's Nicholas Institute for Environmental Policy Solutions brought together a broad array of ocean users who expressed similar concerns, albeit with greater optimism that they might be

[23] LMEs were conceived as "regions of ocean space encompassing coastal areas from river basins and estuaries on out to the seaward boundary of continental shelves and the seaward boundary of coastal current systems. They are relatively large regions on the order of 200,000 km² or larger, characterized by distinct bathymetry, hydrography, productivity, and trophically dependent populations." Kenneth Sherman, *Sustainability, Biomass Yields, and Health of Coastal Ecosystems: An Ecological Perspective*, 112 MARINE ECOLOGY PROGRESS SERIES 277, 280 (1994).

[24] OPTF FINAL RECOMMENDATIONS, *supra* note 21, at 49.

[25] *See id.* at 51-60.

[26] The Symposium was sponsored by the National Sea Grant Law Center, Seton Hall University School of Law, Monmouth University's Urban Coast Institute, the Environmental Law Institute, and the New Jersey Sea Grant Consortium.

[27] Morgan Gopnik, Public Lands Management and Marine Spatial Planning (manuscript in preparation).

[28] *See* Lauren Gardner, *Oceans Plan Meets Wave of GOP Resistance*, CQ WEEKLY – IN FOCUS, June 2, 2012, http://public.cq.com/docs/weeklyreport/weeklyreport-000004098268.html (last visited Sept. 17, 2013).

[29] Press Release, National Ocean Policy Coalition, National Ocean Policy Coalition Responds To Draft Ocean Action Plan (Jan. 12, 2012), *available at* http://oceanpolicy.com/2012/01/12/national-ocean-policy-coalition-responds-to-draft-ocean-action-plan/.

overcome.[30] The U.S. House of Representatives' Natural Resources Committee has held a number of hearings highly critical of this new direction in ocean policy[31] and released a number of disparaging—if not entirely accurate—factsheets and press releases deploring its adoption.[32] Groups representing fishermen decry efforts that might reduce their access to ocean waters,[33] and a conservative website ominously worries that: "[MSP] has the potential for the greatest encroachment on private property rights we have ever faced in this nation … [MSP] has the potential for turning over control of commercial and recreational fishing to the United Nations."[34]

Even groups generally supportive of MSP have worried that their constituencies' concerns may not be given sufficient weight. For example, the public comments on the NOC's proposed MSP framework reveal that environmental advocates want to ensure that ecosystem protection, including siting of additional marine protected areas, takes precedence over economic goals while renewable energy advocates worry that the new policies might slow down ongoing permitting processes.

B. Moving Forward with Marine Spatial Planning

If regions are to take the lead in MSP, they will have to balance its proposed benefits with the concerns expressed by some stakeholders, navigating a path forward that meets their needs. A number of efforts have been made to derive lessons about MSP from its implementation in Europe, Australia, Canada, and elsewhere, culminating in a widely referenced guide to MSP issued by the United Nations Educational, Scientific, and Cultural Organization.[35] However, research on similar trans-national policy

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[30] *See* Morgan Gopnik et al., *Coming to the Table: Early Stakeholder Engagement in Marine Spatial Planning*, 36(5) MARINE POL'Y 1139 (2012).

[31] *Oversight Hearing on "The President's New National Ocean Policy - A Plan for Further Restrictions on Ocean, Coastal and Inland Activities," Before the H. Comm. on Nat. Res.*, 112th Cong. (Oct. 4 and 26, 2011); *Oversight Hearing on "Empty Hooks: The National Ocean Policy is the Latest Threat to Access for Recreational and Commercial Fishermen," Before the Subcomm. on Fisheries, Wildlife, Oceans, and Insular Affairs of the H. Comm. on Nat. Res.*, 112th Cong. (Mar. 22, 2012); and *Oversight Field Hearing on "Alaska's Sovereignty In Peril: The National Ocean Policy's Goal to Federalize Alaska," Before the Subcomm. on Fisheries, Wildlife, Oceans, and Insular Affairs of the H. Comm. on Nat. Res.*, 112th Cong. (Apr. 3, 2012).

[32] Press Release, House Committee on Natural Resources, U.S. House of Representatives, Top 10 Things to Know About President Obama's Plan to Zone the Oceans (Sept. 30, 2011), *available at* http://naturalresources.house.gov/news/documentsingle.aspx?DocumentID=262435.

[33] *See, e.g.*, Press Release, Recreational Fishing Alliance, 12 Million U.S. Saltwater Anglers Ignored (Oct. 23, 2009), *available at* http://joinrfa.org/wp-content/uploads/2013/03/TaskForce_102309.pdf; Letter from the American Sportfishing Assn. et al. to the Council on Environmental Quality re: Comments on the Draft National Ocean Policy Implementation Plan (Mar., 27, 2012), *available at* http://www.joincca.org/articles/38.

[34] *What You Need to Know About LOST (Law Of the Sea Treaty),* BEAUFORT OBSERVER ONLINE (June 26, 2012), http://www.beaufortobserver.net/Articles-NEWS-and-COMMENTARY-c-2012-06-25-261157.112112-What-you-need-to-know-about-LOST-Law-Of-the-Sea-Treaty.html.

[35] *See generally* EHLER & DOUVERE, *supra* note 19.

transplantation efforts[36] indicates that lessons from international MSP may not be fully applicable in the very different U.S. political and cultural context, which includes a history of strong private property rights and substantial mistrust of government programs, federal mandates, and the very notion of central planning.

Another source of ideas comes from analogies between MSP and the more familiar and widespread practice of land use planning.[37] This comparison too is imperfect. Land use planning typically relies on a political process to guide the development of land, including substantial areas of private property, to achieve a better overall result for a particular community. But the ocean and its resources are already a public good, to be managed by the government for the welfare of all citizens.[38] The legal and political issues of primary concern to land use planners turn out to be quite different from those confronting coastal and ocean managers.

A more promising avenue of inquiry might be to compare U.S. ocean management to that undertaken for other public goods in this country—such as public lands, clean air, or telecommunications frequencies. As explained by Duff, "Ocean areas are public space. As a result, the more apt models that ought to be considered in assessing ocean space/resource management issues are those models that have been employed to manage other public areas and resources."[39]

The U.S. federal government controls 4.5 million square miles of open water in the Great Lakes and the ocean and 3.6 million square miles of land, approximately 27% of the nation's total land area.[40] This Article looks at U.S. public lands as one long-established example of multiple-use management of public space, exploring similarities to the ocean policy setting and applying "lessons learned" from land management to the challenge of implementing regional MSP.

II. U.S. Public Lands Management

Because the *Sea Grant Law and Policy Journal* speaks primarily to an audience of ocean and coastal policy experts, there is no need to repeat here the basic history and status of U.S. ocean laws and

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[36] *See, e.g.,* David Dolowitz & David Marsh, *Who Learns What From Whom: A Review of the Policy Transfer Literature,* 44 POL. STUD. 343 (1996); Richard Rose, *What is Lesson-drawing?*, 11 J. OF PUBLIC POL'Y 1 (1991); RICHARD ROSE, LESSON-DRAWING IN PUBLIC POLICY: A GUIDE TO LEARNING ACROSS TIME AND SPACE (1993); Colin J. Bennett & Michael Howlett, *The Lessons of Learning: Reconciling Theories of Policy Learning and Policy Change*, 25 POL'Y SCI. 275 (1992); DE JONG ET AL., THE THEORY AND PRACTICE OF INSTITUTIONAL TRANSPLANTATION: EXPERIENCES WITH THE TRANSFER OF POLICY INSTITUTIONS (2002).

[37] *See* DAVID TYLDESLEY & BEN HUNT, REVIEW OF HOW THE LAND USE PLANNING SYSTEM COULD INFLUENCE THE DEVELOPMENT OF A MARINE SPATIAL PLANNING SYSTEM FOR ENGLAND (2003).

[38] *See* Mary Turnipseed et al., *Reinvigorating the Public Trust Doctrine: Expert Opinion on the Potential of a Public Trust Mandate in U.S. and International Environmental Law*, 52 ENV'T 6 (2010).

[39] John Duff, *Offshore Management Considerations: Law and Policy Questions related to Fish, Oil, and Wind*, 31 B.C. ENVTL. AFF. L. REV. 385, 402 (2004).

[40] The precise nature of that control varies. At this time, based on shared traditions, national laws, and international treaties, there is no private ownership of ocean territory. *See* U.S. COMMISSION ON OCEAN POLICY, AN OCEAN BLUEPRINT FOR THE 21ST CENTURY: FINAL REPORT, APPENDIX 6: REVIEW OF U.S. OCEAN AND COASTAL LAW – THE EVOLUTION OF OCEAN GOVERNANCE OVER THREE DECADES (2004). It is significant that the terminology of "control" and "jurisdiction" over ocean areas differs from the concept of "ownership" on land.

agencies, which have been well documented elsewhere[41] and are well-known to this readership. However, extensive interviews conducted in connection with this study reveal that the history of public lands management is foreign to this audience and thus merits a quick overview.[42]

The United States government has, at various times, laid claim to and then given away huge tracts of land.[43] In the 19th century, the government's desire to encourage westward settlement of the country by European immigrants and their descendants fueled the drive to acquire land and make it available to homesteaders and railroad companies who generally claimed the most fertile, low-lying, accessible areas. By the end of that period of land transfer, often referred to as the "disposal" of government land, the areas remaining under federal ownership tended to be drier plains, desert zones, or steep, densely forested regions. Then, toward the close of the 19th century and into the 20th, the federal government shifted course and began to "reserve" certain areas of publicly owned land; in other words, remove them from the pool available for private grants or sales. This practice began with establishment in 1872 of the first national park, Yellowstone, and was followed by the creation of additional parks and Forest Reserves (later called the National Forests) between 1891 and 1910. By 1934, virtually all disposal of public lands had come to an end. At its peak in the 19th century, the federal government controlled 80% of the nation's land area; that proportion gradually declined and leveled off at around 30% by 1970.

As a result of shifting national goals over the last century, what we think of today as the federal public lands are overseen primarily by the National Park Service, the Forest Service, the Fish and Wildlife Service, and the Bureau of Land Management, agencies with missions respectively centered on recreation and preservation; forestry and watershed protection; birding, fishing, and hunting; and grazing (Table 1). Despite these varied founding motivations, all the federal land management agencies are governed by multiple-use mandates that require them to balance many different constituencies and public desires. This tension is central to the comparison between federal lands and the U.S. Exclusive Economic Zone (EEZ).

Based on an examination of the histories, purposes, management approaches, and ecosystem characteristics of the four major types of public land,[44] it appears that the range of uses in the National Forests, and the management challenges they have faced, most closely resemble those encountered in the ocean setting (see further discussion below). Thus, in the remainder of this Article, National Forests will be used as the point of comparison between public land and ocean management.

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[41] *See, e.g.,* EDWARD WENK, JR., THE POLITICS OF THE OCEAN (1972); LAWRENCE JUDA, INTERNATIONAL LAW AND OCEAN USE MANAGEMENT: THE EVOLUTION OF OCEAN GOVERNANCE (1996); Michael Orbach, *Beyond the Freedom of the Seas: Ocean Policy for the Third Millennium*, 16 OCEANOGRAPHY 20 (2003); AN OCEAN BLUEPRINT, *supra* notes 3 and 40.

[42] The history presented in this section has been synthesized from a variety of sources, primarily including: PAUL J. CULHANE, PUBLIC LANDS POLITICS: INTEREST GROUP INFLUENCE ON THE FOREST SERVICE AND THE BUREAU OF LAND MANAGEMENT (1981); MARTIN NIE, THE GOVERNANCE OF WESTERN PUBLIC LANDS: MAPPING ITS PRESENT AND FUTURE (2008); U.S. PUBLIC LAND LAW REVIEW COMM., ONE THIRD OF THE NATION'S LAND: A REPORT TO THE PRESIDENT AND TO THE CONGRESS (1970) [hereinafter PUBLIC LAND REPORT]; CYNTHIA NICKERSON ET AL., U.S. DEPT. OF AGRIC., ECON. RES. SERV., MAJOR USES OF LAND IN THE UNITED STATES, 2007 (2011).

[43] Of course, much of that land was previously occupied and used by Native Americans and Mexican communities who were not consulted about the conversion of those lands to U.S.-owned forests. JAKE KOSEK, UNDERSTORIES: THE POLITICAL LIFE OF FORESTS IN NORTHERN NEW MEXICO (2006).

[44] *See* Gopnik, *supra* note 22.

Table 1: Amount and percentage of public lands managed by the various federal land management agencies.[45]

Agency	Acres (millions)	% of public lands
Bureau of Land Management	247.9	39.0
Forest Service	192.9	30.3
Fish and Wildlife Service	88.9	14.0
National Park Service	79.7	12.5
All other agencies, departments, and bureaus	27.0	4.2
TOTAL	**636.4**	**100.0%**

III. Study Context and Approach

This Article presents a subset of the findings and arguments developed in the course of a larger, four-year research project. The study undertook a critical review and synthesis of historical and theoretical literature on U.S. public lands, particularly the National Forests; conducted three case studies of National Forests in different regions; examined government documents related to both land and ocean management; and analyzed 96 formal and informal confidential interviews with key informants in the forest and ocean management communities, including government agency staff, community members, issue advocates, resource-dependent workers, and academics. Forty-four of the interviews were formal, in-person, semi-structured conversations, recorded, transcribed, and analyzed using the qualitative analysis software package, NVivo, as well as traditional sorting of responses by themes and keywords.[46] In addition, three government-sponsored events related to the federal MSP initiative were observed and analyzed: (1) The National Coastal and Marine Spatial Planning (CMSP) Workshop, held in Washington DC on June 21, 2011; (2) The West Coast Regional CMSP Listening Session, held in Portland, Oregon on July 1, 2011; and (3) the inaugural meeting of the Northeast Regional Planning Body, held in Portland, Maine on November 19-20, 2012.

IV. Is the U.S. Exclusive Economic Zone like Public Land?

Many forest and ocean experts interviewed over the course of this study resisted the notion that these two seemingly different communities might learn from each other. What does a landscape of mountains, streams, and forests, with its associated loggers, hikers, and hunters and its area-based management system have in common with beaches, coral reefs, and wide-open waters, plied by surfers, boaters, fishermen, and container ships under sector-based management? Certainly, there are important differences, but a structured examination rooted in the fields of policy and institutional analysis reveals a number of ways in which these two settings are remarkably similar.

The process of crafting, implementing, and revising public policy involves interactions among many actors, with different perspectives and authorities, at different scales and over extended time periods.

[45] The data in the table is derived from RUSS GORTE ET AL., CONGRESSIONAL RESEARCH SERVICE, FEDERAL LAND OWNERSHIP: OVERVIEW AND DATA, CRS R42346 (2012).

[46] Some of these interviews were conducted in connection with a project on stakeholder involvement in marine spatial planning sponsored by the Nicholas Institute for Environmental Policy Solutions at Duke University and discussed in Gopnik et al, *supra* note 30.

When public policy also involves the use and protection of natural resources, these difficulties are exacerbated by the complexity of ecosystem behavior and our limited understanding of it. Many scholars have attempted to discern and explain patterns in the initiation and evolution of public policy, typically constructing a "framework" that identifies the variables and processes expected to be most important.[47] Two well-established and widely adopted rubrics for policy analysis are the Institutional Analysis and Design (IAD) framework, spearheaded by Nobel-prize winner Elinor Ostrom,[48] and the Advocacy Coalition Framework (ACF), advanced by Paul Sabatier and others.[49] The purpose of these efforts is to identify the basic building blocks of all policy situations, from U.S. government-run urban poverty programs to Indonesian community-based fisheries management. In Ostrom's words, "my deep conviction [is] that underlying the immense variety of surface differences, all repetitive situations faced by human beings are composed of nested layers composed of the same set of elements."[50]

As might be expected of two tools designed for the same general purpose, the IAD and ACF share similar concerns, such as why certain policies come into use and how they change, and focus on a number of related elements, such as the nature of individuals and organizations in a given policy setting, relevant external contextual elements, and the strategies and rules in operation that allow for particular outcomes. The basic unit of analysis is the *policy subsystem* (in the ACF) or *action situation* (in the IAD), both bounded by a geographic and substantive scope appropriate to the system being investigated. These policy frameworks and their application to ocean and public land settings are described in much greater detail in another document.[51] For the purposes of this Article, the outcomes of that analysis are presented to illustrate how the elements considered most important by policy theorists—the ecological, social, and governance settings; the goods and services provided; the participants engaged; and the coalitions present—manifest themselves in the two arenas. Some of the most important similarities and differences are summarized below.

A. Ecological Setting

National Forests and oceans both include diverse, complex ecosystems with huge variability depending on latitude, altitude (or depth), nutrients, and water characteristics. Biodiversity is high in both locations, including both sedentary and highly migratory species, but species mobility and connectivity are generally greater in the ocean, making human-drawn boundaries even more arbitrary than on land. Endangered species are found in both locations (with associated science, litigation, and management plans aimed at protecting them) but these issues have not played as central a role in EEZ management as they have in National Forests, where invocation of the Endangered Species Act has been a major driver of events. Both ecosystems are heavily affected by humans, including over-extraction of living resources in some areas, habitat degradation (decades earlier in forests because of

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[47] *See* Edella Schlager, *A Comparison of Frameworks, Theories, and Models of Policy Processes*, *in* THEORIES OF THE POLICY PROCESS 293 (Paul Sabatier ed., 2nd ed. 2007).
[48] *See generally* ELINOR OSTROM, UNDERSTANDING INSTITUTIONAL DIVERSITY (2005).
[49] Paul Sabatier & Christopher Weible, *The Advocacy Coalition Framework: Innovations and Clarification, in* THEORIES OF THE POLICY PROCESS 189 (Paul Sabatier ed., 2007).
[50] OSTROM, *supra* note 48, at 185.
[51] *See* Gopnik, *supra* note 22.

their greater accessibility to humans), and regime-changing events, primarily fire and disease in the forest and large-scale fishing and oceanographic changes in the ocean, as well as climate change effects in both settings. Because of the large, often inhospitable areas involved, data collection is expensive in both environments and managers must make most of their decisions in the face of incomplete information and uncertain understanding. However, the added remoteness and difficulty of accessing the EEZ, particularly offshore, has further delayed ecological understanding compared to land-based systems.

B. Goods and Services

National Forests and the EEZ provide a remarkably similar set of goods and services. These include: commercially exploitable living resources (primarily timber and forage on land and fish in the sea); renewable and non-renewable energy sources; minerals, including high value ores and various types of aggregates; transportation corridors; and recreational opportunities, ranging from low-impact non-extractive activities to those requiring major infrastructure or involving resource extraction. Forests and oceans also provide important ecosystem services, such as water control, hazard mitigation, and climate control, and less tangible "services" such as aesthetic, spiritual, or existence values.

C. Social Setting

Perhaps the most evident difference between land and water is that humans live on the former and only intermittently venture into the latter. Only a small number of scuba divers and scientists are able to truly immerse themselves in ocean ecosystems and explore them in the way any hiker can observe forest conditions. Many analysts have suggested that people's emotional connections are thus stronger to forests than to oceans.[52] But even this difference is not as dispositive as some have claimed. Although the writings of John Muir, Henry Thoreau, and Ralph Waldo Emerson attest to America's deep cultural connections to the nation's forests, the ocean has also played a central role in literature, from Homer's Odyssey to Melville's Moby Dick and Hemingway's Old Man and the Sea. Oceans, like forests, are also depicted in art from pre-history to the present day.

Fifteen of the world's twenty largest cities, and seven of the ten largest in the U.S., are located on a coast, attesting to the fundamental role the ocean plays in human economic and social life. People do not currently live in the National Forests, but rather access the space temporarily for work or recreation and then return to their homes, as they do in the ocean. Forest-edge and coastal communities share many features, including a historic dependence on resource extraction that has shifted over time toward greater urbanization, a focus on recreation-related economies, and construction of vacation and retirement communities where there were once lumber towns or fishing ports. These shifts have led to similar clashes over goals and values. At this moment in time, there are somewhat lower levels of public

[52] *See* Bradley W. Barr & James Lindholm, *Conservation of the Sea Using Lessons from the Land*, 17 THE GEORGE WRIGHT FORUM 77 (2000); Orbach, *supra* note 41; and Janna M. Shackeroff, Elliott L. Hazen, & Larry B. Crowder, *The Oceans as Peopled Seascapes*, *in* ECOSYSTEM-BASED MANAGEMENT FOR THE OCEANS 33 (Karen McLeod & Heather Leslie eds., 2009).

awareness and national political and media attention in ocean settings than in the forests, perhaps due to the time lags that have occurred in gaining access to the ocean, recognizing marine resource limitations, and developing robust scientific and advocacy communities as discussed further below.

D. Governance Setting

The National Forests have one primary owner and manager, the U.S. Forest Service, which is charged with balancing multiple-uses throughout the area. In contrast, more than a dozen ocean agencies manage specific activities or functions throughout the EEZ (e.g., fisheries, shipping, safety, customs control, etc.). However, neither approach results in clear, undivided authority. In both arenas, disputes arise among federal, state, tribal, and local authorities, administrative units responsible for different areas or uses, and elected bodies with different constituencies and values. It may be easier for Regional Forest Supervisors to resolve conflicts between, say, the timber experts and ecologists working under them to implement different aspects of the Forest Service's mandate than it is for the White House to resolve conflicts between Cabinet agencies executing different statutes in the ocean. But the tradeoffs and compromises required are not altogether different.[53] Significantly, neither the National Forests nor the EEZ have been assigned a clearly dominant use by Congress unlike, for example, the National Parks. For the most part, managers are expected to accommodate a mix of potentially competing activities and users.[54]

Both National Forests and the oceans experienced transitions over the 20th century from conditions of open access, with little centralized control, to heavily regulated spaces. These changes, however, took place more recently in the ocean and access and ownership rights continue to be less clear. What is more, whatever their legal status, long-established traditional users and private businesses with leases or agreements (e.g., logging, fishing, drilling operations, dams, recreational facilities, fishing quotas) create expectations in both settings that are hard to reverse. Generally thought of as public trust resources (*de facto*, if not *de jure*), scholars of public lands and ocean space have long argued about how specific, binding, and actionable the government's public trust obligations should be, and whether or not a strict "public trust doctrine" applies in these areas.[55]

Management in both venues has followed a largely traditional, hierarchical regulatory model, with occasional experiments into alternatives such as market mechanisms, collaborative decision-making, or community-based management. One important difference arises as a result of the National Forests' longstanding emphasis on multiple-use, area-wide, prospective planning. This concept has just recently been introduced in the EEZ via MSP, which has not yet been implemented.[56]

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[53] Interviews with National Forest stakeholders from state government, industry, advocacy organizations, nearby communities, and Forest Service staff highlighted the frustration caused by competing statutes, regulations, and agencies operating within a single forest.

[54] Although both settings include some Presidential, agency, or Congressionally approved limited-use areas, such as wilderness and roadless areas in forests and marine protected areas in the ocean, they constitute a small fraction of the total area, rarely exclude all other activities, and do not resolve conflicts in the remaining areas.

[55] *See, e.g.,* Charles F. Wilkinson, *The Public Trust Doctrine in Public Land Law*, 14 U.C. DAVIS L. REV. 269 (1980), on public lands and Turnipseed et al., *supra* note 38, on ocean areas.

[56] Extensive planning does occur in connection with specific ocean uses, most notably oil and gas extraction and fishing and, to a lesser extent, marine protected areas, but multiple-use ocean planning is in its infancy.

E. Participants and Coalitions

The main categories of protagonists in the two settings overlap to a great extent, including local and national elected officials, agency leaders and career professionals, the courts, the science community, the media, non-profit advocacy groups, industry associations, and community members. In both places, disputes arise between those with different interests, different values, and different histories. Recurrent divides are found between economic and environmental interests, individual and corporate interests, locals and outsiders, extractive and non-extractive approaches to recreation, and proponents of nature-for-man and nature-for-itself.

Long-standing traditional users, such as loggers on land and fishermen in the sea, tend to clash with newer users looking for space, such as wealthy retirees or renewable energy developers. The former often have strong, multi-generational ties to the area but relatively little national power, while the latter are often able to press their agendas more effectively due to greater political access and resources.[57] Environmental non-governmental organizations (ENGOs) are active in both settings, but those advocating for land conservation are generally older, larger, more numerous, and better funded. Two established groups focused on forest issues are the Sierra Club, founded by writer and forester John Muir in 1892 with an annual budget today of around $100 million, and The Wilderness Society, founded by the independently wealthy activist Bob Marshall in 1935 with a budget today of $30 million. The two largest U.S. ocean advocacy groups are the Ocean Conservancy, founded in 1972, and Oceana, founded in 2001, both with current budgets of around $15 million.[58]

Another important contrast between participants in the two settings involves their approach to collaborative processes. Many National Forest communities meet the suggested pre-conditions for negotiated agreement,[59] including the presence of a "hurting stalemate," motivated leadership, incentives for participation, uncertainty about the future, and a sense of interdependence. Several of these communities are already implementing many of the process elements associated with successful collaboration, including trust building, transparency, and development of shared understanding. A case study of the Siuslaw National Forest in Oregon shows how these conditions enabled collaborative engagement among participants there.[60] The ocean community is only beginning to experience many of the pre-conditions for collaboration, due to increasingly intractable conflicts between commercial

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[57] Unlike the commercial fishing industry, which is made up of many widely dispersed participants with relatively few major companies, the timber industry includes both locally based mom-and-pop operators plus a few very large companies which have given it a larger voice in the political process.

[58] All dates and budget figures are from the organizations' annual reports and audited financial statements. A study commissioned by The Pew Charitable Trusts, Oak Foundation, Marisla Foundation, Turner Foundation, and Rockefeller Brothers Fund in 1999 found that less than one-half of one percent of resources spent by environmental groups in the United States went to ocean advocacy, although that number may have increased somewhat over the last 13 years. *See History*, OCEANA, http://oceana.org/en/about-us/history (last visited July 15, 2013).

[59] John M. Bryson, Barbara C. Crosby, & Melissa Middleton Stone, *The Design and Implementation of Cross-Sector Collaborations: Propositions from the Literature*, 66 PUB. ADMIN. REV. 44 (2006); Chris Ansell and Alison Gash, *Collaborative Governance in Theory and Practice*, 18 J. OF PUB. ADMIN. RES. AND THEORY 543 (2008).

[60] *See* Gopnik, *supra* note 22.

and recreational fishermen; between fishermen, the energy industry, and environmentalists; and between offshore wind energy and coastal communities. There is also considerable uncertainty for new ocean users, such as proponents for renewable energy and offshore aquaculture, who are looking for suitable space and operating permits. But elements such as trust and shared understanding remain rare commodities among ocean stakeholders.[61]

The overlaps discussed above in the two settings' ecology, goods and services, social settings, governance, and participants—the building blocks of policy analysis—are sufficient to believe that the 100-year history of forest management might offer some lessons, or at least cautionary tales, for ocean managers. The following sections summarize some of these lessons and suggest how they might influence the efforts of regional ocean planners.

V. The Challenges of Multiple-use Management

A multiple-use approach has been part of Forest Service practice since its earliest days, with five major uses, generally referred to by the shorthand of "wood, water, wildlife, range, and recreation," being accommodated as early as 1916. Forest Service leaders and managers embraced the idea that their mission required "management of … the national forests so that they are utilized in the combination that will best meet the needs of the American people" although those words were not put into law until the Multiple Use Sustained Yield Act (MUSY) was enacted in 1960.[62] The multiple-use mantra has been central to the training, values, and culture of the Forest Service[63] and has been reinforced by Congress and the courts over time as the guiding principle for National Forest management.[64]

Many participants and observers have endorsed the multiple-use approach.[65] MacCleery concluded that multiple-use "(1) provides administrative flexibility to shift management over time in response to changing public demands and preferences on public lands; and (2) sets the stage for significant debates over preferred use, especially as competing demands become intense."[66] However, the underlying assumption behind this approach—that impartial natural resource professionals will be able to

[61] *See* Gopnik et al., *supra* note 30.
[62] George C. Coggins & Parthenia B. Evans, *Multiple Use, Sustained Yield Planning on the Public Lands*, 53 U. COLO. L. REV. 411, 418-23 (1981).
[63] *See* CHARLES F. WILKINSON & H. MICHAEL ANDERSON, LAND AND RESOURCE PLANNING IN THE NATIONAL FORESTS (1987).
[64] Where Congress wished to exclude multiple-uses, they did so explicitly, for example by turning Forest Service lands into National Parks, Wilderness Areas, or military bases.
[65] *See, e.g.,* George R. Hall, *The Myth and Reality of Multiple Use Forestry*, 3 NAT. RESOURCES J. 276 (1963); Phillip L. Martin, *Conflict Resolution through the Multiple-Use Concept in Forest Service Decision-making*, 9 NAT. RESOURCES J. 228 (1969); DOUGLAS W. MACCLEERY, AMERICAN FORESTS: A HISTORY OF RESILIENCY AND RECOVERY (1992); JOHN FEDKIW, USDA FOREST SERVICE, MANAGING MULTIPLE USES ON NATIONAL FORESTS, 1905-1995: A 90-YEAR LEARNING EXPERIENCE AND IT ISN'T FINISHED YET, FS-628 (1999)
[66] Douglas W. MacCleery, *Re-Inventing the United States Forest Service: Evolution from Custodial Management, to Production Forestry, to Ecosystem Management, in* RE-INVENTING FORESTRY AGENCIES: EXPERIENCES OF INSTITUTIONAL RESTRUCTURING IN ASIA AND THE PACIFIC, RAP Publication 2008/05, 49 (Patrick Durst et al. eds. 2008).

implement a range of complementary uses on public land, based on objective analyses of sound data and science, in a way that maximizes public welfare—rests on shaky ground.[67]

At the heart of much of the criticism leveled against the multiple-use paradigm for National Forests, whether by academics, lawyers, advocates, or foresters, lie fundamental disagreements about the appropriate balance between different forest goals (ecological, economic, and social) and about the appropriate locus for decision-making.[68] Shortly after passage of MUSY, John Zivnuska summarized many of the potential problems it would create for the Forest Service, including the difficulty of comparing economic and non-economic uses, the impacts of lobbying on decisions, the pressure of Congressional budget targets, and disconnects between local and national values.[69] Nevertheless, Zivnuska concluded that the professional forester "through education and experience is qualified to judge the complex interactions of … the several uses of forests and wild lands and is aware of the various values resulting from management," and thus "has a more valid base for contributing to management decisions than any [other] individual or group."[70] Others have been less convinced that foresters possess such Solomonic skills.[71]

Writing in 1967, Behan concluded that multiple-use had become an empty buzzword and a panacea,[72] admonishing Forest Service staff to take greater advantage of MUSY's acknowledgement that "some land will be used for less than all of the resources." This view was echoed and strengthened in two related documents, a 1970 report from the Public Land Law Review Commission[73] and a 1973 article in The Yale Law Journal,[74] both of which called for dominant-use zones to be created on public lands. "Management of public lands should recognize the highest and best use of particular areas of land as dominant over other authorized uses."[75] The main difference between the two publications is that the Public Land Commission urges Congress to simply state priorities among uses, letting the *Forest Service* delineate the actual use zones, while the authors of the Yale Law Journal article would assign the zoning process directly to Congress, ostensibly to ensure "full representation of all users and interests regardless of their location," revealing a faith in Congress's impartiality that rivals Zivnuska's faith in the wisdom of foresters.

Like a National Forest, the EEZ is a fundamentally multiple-use space. The 2010 Presidential Executive Order on ocean policy addresses the multiple-use challenge in federal waters by creating a National Ocean Council and calling on all ocean-related agencies to work together to develop regional plans that "enable a more integrated, comprehensive, ecosystem-based, flexible, and proactive

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[67] *See* Michael J. Mortimer, *The Delegation of Law-Making Authority to the United States Forest Service: Implications in the Struggle for National Forest Management*, 54 ADMIN. L. REV. 907 (2002).
[68] *See* MATTHEW MCKINNEY & WILL HARMON, THE WESTERN CONFLUENCE: A GUIDE TO GOVERNING NATURAL RESOURCES (2004).
[69] *See* John A. Zivnuska, *The Multiple Problems of Multiple Use*, 59 J. OF FORESTRY 555 (1961).
[70] *Id.* at 560.
[71] *See generally* Christopher Curtis, *Managing Federal Lands: Replacing the Multiple Use System*, 82 YALE L. REV. 787 (1973), Mortimer, *supra* note 67.
[72] R. W. Behan, *The Succotash Syndrome, or Multiple Use: A Heartfelt Approach to Forest Land Management*, 7 NAT. RESOURCES J. 473, 478 (1967).
[73] PUBLIC LAND REPORT, *supra* note 42.
[74] Curtis, *supra* note 71.
[75] PUBLIC LAND REPORT, *supra* note 42, at 48.

approach to planning and managing *sustainable multiple uses* across sectors and improve the conservation of the ocean, our coasts, and the Great Lakes."[76] Like the text of MUSY, this guidance is inspiring, ambitious, and quite vague. Although several recent articles suggest that a single- or dominant-use approach could improve the management of ocean space,[77] the extent of government reorganization that would be required to establish single-use zones and corresponding agencies makes it likely that the EEZ will continue to be managed as a multiple-use space for the foreseeable future. If that is true, how can the downsides of that approach be minimized?

VI. Adapting Forest Experiences to the Ocean Context

What, if anything, have we learned from the National Forests about balancing multiple uses on public space? In 1905, Gifford Pinchot, first Chief of the U.S. Forest Service, wrote that, "where conflicting interests must be reconciled, the question will always be decided from the standpoint of the greatest good of the greatest number in the long run."[78] His inclusion of the words "in the long run" foreshadow modern-day calls for *sustainable* resource use but, in any time period, the question remains: long term sustainability *of* what and *for* what purpose?[79] Multiple-use management built on the presumption of equal priorities for all permitted uses cannot please everyone or meet all potential criteria for success including economic and administrative efficiency, equity, accountability, adaptability, and effectiveness in achieving desired outcomes.[80] As concluded by the U.S. Commission on Ocean Policy, "in any system with multiple competing objectives, it will not be possible to meet every one."[81] Tradeoffs must be made and these tradeoffs will require value judgments. The question then arises as to *how* choices will be made, and by *whom*.

Public lands experience reveals that fundamental choices must be made along three axes: (1) *Scale*, from national to local; (2) Decision-making *process*, from national electoral politics to local collaboration; and (3) Degree of *uniformity*, from standardized to flexible. The forest management community, including the federal and state agencies involved, stakeholders from vastly differing

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[76] Executive Order 13,547—Stewardship of the Ocean, Our Coasts, and the Great Lakes, 75 Fed. Reg. 43,023, 43,023 (July 22, 2010) (emphasis added).

[77] *See, e.g.*, 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 (2006); Josh Eagle, *The Practical Effects of Delegation: Agencies and the Zoning of Public Lands and Seas*, 35 PEPP. L. REV. 4 (2008); Josh Eagle & Amanda Kuker, *Public Fisheries*, 15 ECOLOGY AND SOC'Y 10 (2010); James M. Sanchirico et al., *Comprehensive Planning, Dominant-Use Zones, and User Rights: A New Era in Ocean Governance*, 86 BULL. MAR. SCI. 273 (2010).

[78] Pinchot was borrowing from the utilitarian philosopher Jeremy Bentham who wrote in his 1789 treatise, *The Principles of Morals and Legislation*: "It is the greatest good to the greatest number of people that is the foundation of morals and legislation." *See Pinchot and Utilitarianism, The Greatest Good: A Forest Service Centennial Film*, U.S. FOREST SERVICE, http://www.fs.fed.us/greatestgood/press/mediakit/facts/pinchot.shtml (last visited July 16, 2013).

[79] Richard P. Gale & Sheila M. Cordray, *Making Sense of Sustainability: 9 Answers to What Should Be Sustained*, 59 RURAL SOC. 311 (1994).

[80] *See* Mark T. Imperial, *Institutional Analysis and Ecosystem-Based Management: The Institutional Analysis and Development Framework*, 24 ENVTL. MGMT. 449 (1999).

[81] AN OCEAN BLUEPRINT, *supra* note 3, at 296.

perspectives, elected officials at many levels, and interested scientists and scholars, has experimented with solutions at virtually all points along these policy continua.

A. Scale: National, Regional, State, or Local?

Selecting an appropriate scale for policy attention involves both ecological and institutional considerations. In forests, as in the ocean, important ecosystem processes take place at scales from organismal to planetary. Likewise, the institutions that affect these spaces range from informal interactions among neighbors to global, inter-governmental treaties. Different analysts have made forceful, often mutually contradictory, arguments for and against control at various levels, but all agree that choices will need to be made: "thorny issues … do not get any easier through delay or by forcing local managers to attempt to resolve national controversies."[82]

The fact that National Forests are under federal ownership creates "a *perceived* right and interest among all citizens on how these lands should be managed,"[83] namely, a presumption of federal control, accompanied by a large body of federal law, an assortment of responsible federal agencies, and "a forest policy-making structure heavily concentrated in Washington."[84] Those in favor of national level policymaking argue that it ensures greater consistency, better expresses national values (to the extent they can be discerned), and prevents parochial concerns from determining the use of public trust resources.[85]

But that federal focus has been challenged. Western states have never been happy with the preponderance of federally controlled lands within their borders. As part of the so-called "Sagebrush Rebellion,"[86] advocacy groups and Western officials periodically promote national legislation calling for the return of federal land to the states. More dispassionate analysts have identified potential advantages to this idea, based on the value of decentralization in promoting diversity and innovation.[87] Leshy (1987) and Salcido (2007) look at the role the courts have played in partitioning responsibilities for public lands between federal and state authorities, concluding that greater *cooperation* between

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[82] Christopher A. Wood, *Here We Go Again*, FOREST MAGAZINE "INNER VOICE" NEWSLETTER (2001), *available at* http://www.fseee.org/forest-magazine/200415.

[83] MacCleery, *supra* note 66, at 72 (emphasis added).

[84] *Id.*

[85] The term "public trust" is used here based on its colloquial meaning, not as a legal term. For more in-depth legal analyses of the public trust doctrine as it applies to public lands see Wilkinson, *supra* note 55, and as it applies to the ocean see Turnipseed et al., *supra* note 38.

[86] The Sagebrush Rebellion refers to a movement started in the 1960s in the Western United States which sought to have federally owned lands returned to the states. The "Sagebrush Rebellion" bill, passed in the 1979 Nevada Legislature with similar versions passed in other Western states, was designed to create a process for state control of lands within their boundaries, in hopes that such a transfer would be authorized at the national level. The movement reflected a feeling that federal land policies were catering to a national audience while ignoring Western concerns. *See generally* McKinney & Harmon, *supra* note 68; A WOLF IN THE GARDEN: THE LAND RIGHTS MOVEMENT AND THE NEW ENVIRONMENTAL DEBATE (Philip D. Brick & R. McGreggor Cawley eds., 1996).

[87] Robert Nelson, *End of the Progressive Era: Toward Decentralization of the Federal Lands*, *In* A WOLF IN THE GARDEN, *supra* note 86, at 215.

state and federal regulators, particularly from the earliest stages of the forest planning process, would be preferable to the minutely parsed outcomes of continued legal battles.[88]

Federal forest management also assigns a special status to adjacent jurisdictions, giving local governments opportunities to review forest plans for consistency with their own land use plans.[89] A large body of theoretical and case study-based research, combined with the work of many active practitioners, makes a case for stronger local participation as key to guiding public land management.[90] Not surprisingly, many of the forest community members interviewed for this study also expressed a preference for more local control. Arguments in favor of this position range from those based on the foundations of American democracy[91] to those based on personal observation of successful locally led efforts over the last two decades.[92] Supporters contend that cross-sectoral, community-level engagement, with local leadership, can transcend seemingly intractable disputes by: (1) building trust among those with shared connections to a particular place; (2) allowing community-based collective action to experiment with new approaches (such as restoration forestry); and (3) fostering seemingly small agreements that can contribute to a virtuous cycle of success. Many of these conclusions echo research findings from the wider fields of game theory and institutional analysis.[93]

Opponents of local control reply that such an approach excludes distant citizens, who have an equal claim on public trust resources, may have equally strong feelings about their management, and thus deserve an equal voice. Coggins states this unequivocally, "When the subject is every American's natural heritage, devolved local collaborationism is entirely inappropriate," and makes a legal case for why it should not be allowed.[94] Many national environmental advocates—vocal critics of giving communities a primary role in national forest management—also believe that local residents will neither understand nor care sufficiently about ecosystem protection and will be willing to sacrifice environmental protection for local economic gain.[95]

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[88] *See* John D. Leshy, Granite Rock *and the States' Influence over Federal Land Use*, 18 ENVTL. L. 99 (1987); Rachel E. Salcido, *Offshore Federalism and Ocean Industrialization*, 82 TUL. L. REV. 1355 (2007).

[89] Karen Bunn-Falen, *Protecting Community Stability and Local Economies: Opportunities for Local Government Influence in Federal Decision- and Policy-Making Processes*, *in* A WOLF IN THE GARDEN, *supra* note 86, at 73, 78.

[90] *See, e.g.,* JULIA M. WONDOLLECK & STEVEN L. YAFFEE, MAKING COLLABORATION WORK: LESSONS FROM INNOVATION IN NATURAL RESOURCE MANAGEMENT (2000); Steven L. Yaffee & Julia M. Wondolleck, *Collaborative Ecosystem Planning Processes in the United States: Evolution and Challenges*, 31 ENVIRONMENTS 59 (2003); Daniel Kemmis & Matthew McKinney, *Collaboration as an Emerging Form of Democracy*, 100 NAT'L CIVIC REV. 2 (2011); GRAHAM MARSHALL, ECONOMICS FOR COLLABORATIVE ENVIRONMENTAL MANAGEMENT: RENEGOTIATING THE COMMONS (2005); THOMAS C. BEIERLE & JERRY CAYFORD, DEMOCRACY IN PRACTICE: PUBLIC PARTICIPATION IN ENVIRONMENTAL DECISIONS (2002).

[91] Kemmis and McKinney look to the writings of 18th Century philosophers such as Montesquieu and U.S. constitutional framers Hamilton and Madison for support of greater local control. Kemmis & McKinney, *supra* note 90, at 2.

[92] *See, e.g.,* Gerald J. Gray, Maia J. Enzer, & Jonathan P. Kusel, *Understanding Community-Based Forest Ecosystem Management: An Editorial Synthesis*, 12 J. OF SUSTAINABLE FORESTRY 1 (2001); Yaffee & Wondolleck, *supra* note 90.

[93] *See, e.g.,* ELINOR OSTROM, ROY GARDNER & JAMES WALKER, RULES, GAMES, AND COMMON-POOL RESOURCES (1994); OSTROM, *supra* note 48.

[94] George C. Coggins, *Regulating Federal Natural Resources: A Summary Case Against Devolved Collaboration*, 25 ECOLOGY L.Q. 602, 603 (1999).

[95] *See, e.g.,* Michael McClosky, *Local Communities and the Management of Public Forests*, 25 ECOLOGY L.Q. 624 (1999).

Similar debates have played out in the EEZ. Management has a strong federal focus, with state roles negotiated through "consistency" provisions in the Coastal Zone Management Act, leading to periodic dissatisfaction on both sides.[96] Since virtually all activities in the EEZ must be mediated through a coastal port, processing plant, or other transfer station, the impacts of offshore activities are felt at the shoreline and this relationship continues to be tested. Salcido urges the ocean community to work together in blurring, rather than reinforcing, the boundaries between state and federal waters and decisions.[97] States and multi-state regions have been given strong roles in fisheries through the Regional Fishery Management Councils, have taken the lead in promoting offshore renewable energy, and are central players in the Regional Planning Bodies being convened under the new National Ocean Policy.

To date, local coastal communities have not had a strong say in management of the EEZ, although some EBM projects have benefited from incorporation of local and traditional ecological knowledge.[98] Recent work by St. Martin and Hall-Arber, which documents and maps the connections between specific fishing ports and distinct offshore areas may also help policymakers recognize the relevance of local perspectives to ocean planning.

A thoughtful paper by Kagan reviews the many pros and cons of implementing environmental protection at different levels of government, including comparisons to outcomes in other federalist systems abroad. He concludes that intractable disagreements persist in the U.S. to a greater degree than elsewhere because "interest groups and politicians—and perhaps the electorate at large—want to have it both ways."[99] He goes on: "They prize local democracy [and] want to allow local and state governments discretion to make difficult tradeoffs," but do not necessarily trust these decision-makers to protect broader national values.[100] Kagan's solution is to rely on the legal system to arbitrate disputes between local, state, and federal goals, which shifts the debate from being about the appropriate *scale* of decision-making to the appropriate *manner* of decision-making, a different set of tradeoffs.

B. Decision-making Process: Political, Technocratic, Judicial, or Participatory?

The U.S. Constitution, with its subsequent 225 years of accreted interpretation, allows for a number of different bodies, operating under different mandates, to make overlapping and potentially contradictory decisions. Over time, strong claims have been made for each venue being the most appropriate for making decisions regarding public space and resources. Some point to elected officials as the true representatives of citizens' interests.[101] Some put their faith in a combination of scientists and agency professional staff as the most impartial and objective decision-makers.[102] Others—generally

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[96] Salcido, *supra* note 88, at 1390-92.
[97] *Id.* at 1439-44.
[98] *Marine Ecosystem-based Management in Practice*, *supra* note 11.
[99] Robert A. Kagan, *Trying to have it Both Ways: Local Discretion, Central Control, and Adversarial Legalism in American Environmental Regulation*, 25 ECOLOGY L.Q. 718, 730 (1999).
[100] *Id.* at 730-31.
[101] Curtis, *supra* note 71, at 799; Mortimer, *supra* note 67, at 981.
[102] *See, e.g.,* GIFFORD PINCHOT, BREAKING NEW GROUND (1947), and his philosophical followers.

lawyers—favor a more central role for the courts in interpreting often-ambiguous statutory language and overseeing presumptively partial agency leaders.[103] A more recent, but growing, cadre of participants and scholars promote the value of place-based collaborative decision-making, which emphasizes broad citizen participation, facilitated dialogue, and a preference for compromise.[104]

Because multiple-use land management requires difficult, values-based choices to be made, many have suggested that elected officials must take the lead through a *political* decision-making process.[105] According to Nie, public land laws should express clear policy choices and specify desired outcomes, to be implemented with little discretion by agencies.[106] Coggins goes so far as to accuse legislators of "embracing the multiple-use philosophy in part because it enabled them to avoid the inevitable, and politically volatile, hard choices."[107] Starting in the 1960s, environmental advocates looked to Congress as the champion of non-economic goals, such as wilderness preservation and ecosystem services, believing that economic interests would continue to dominate any agency-led multiple-use process. Howard Zahniser, a high-profile environmental advocate in the 1950s and 1960s who played a major role in advancing the Wilderness Act, explained that enacting legislation is a huge undertaking, "not because it goes so far, but because it must be taken by so many.... We [do not] disregard the reluctant ones. Rather, we persuade, we confer, we try to understand, we cooperate."[108] It is hard to imagine that Zahniser would observe the same level of comity today, or find the same level of support for environmental protection; nevertheless, because of the hurdles he cites, laws in the U.S. have generally been more stable and accepted as having greater legitimacy, than agency regulations.

Congressional battles and compromises have also played a central role in U.S. ocean management. In fact, a recurrent theme in many criticisms of MSP is its lack of support—and in some cases vociferous objections—from members of Congress. The Executive Branch has continued to move forward based on Executive Orders and agency action, but the need for Congressional appropriations is likely to hinder this strategy. It is unclear whether this temporary workaround in the face of a highly politicized Congress will prove to be a long-term barrier to the success of MSP.

A *technocratic* decision-making process was favored by progressive conservationists, led by Chief Forester Gifford Pinchot, whose thinking dominated forest management in the early 20th century. At that time, the promotion of science, impartial agency professionalism, and rational decision-making provided a welcome contrast to the previous era's combination of "first in time, first in right" land grabs and the influence of a small number of wealthy landowners and industrialists on politics. One important component of the progressive approach was their reliance on planning, using estimates of forest growth and timber demand to calculate sustainable harvest levels and forecast the demand for services by recreational hunters, hikers, and tourists. Through the 1970s and 1980s some observers continued to

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[103] *See, e.g.*, George C. Coggins, *Of Succotash Syndromes and Vacuous Platitudes: The Meaning of Multiple Use, Sustained Yield for Public Land Management*, 553 U. COLO. L. REV. 229 (1981).
[104] *See, e.g.*, WONDOLLECK & YAFFEE, *supra* note 90.
[105] *See, e.g.*, GARY C. BRYNER, U.S. LAND AND NATURAL RESOURCES POLICY: A PUBLIC ISSUES HANDBOOK (1998); Mortimer, *supra* note 67; Nie, *supra* note 42.
[106] *See generally* Nie, *supra* note 42.
[107] Coggins, *supra* note 103, at 241.
[108] Howard Zahniser, *Wilderness Forever, in* WILDERNESS: AMERICA'S LIVING HERITAGE 155 (David Brower ed., 1961).

believe that land agency experts could make multiple-use work if only they had more data, better analytic methods, and new computer-based decision tools to calculate the optimum mix of uses.[109]

However, by the late 1980s many forest scientists were rejecting traditional models of forest growth in favor of concepts such as ecosystem complexity, uncertainty, adaptability, and resilience, all of which were much more difficult to quantify and model. The prospect of including even less well-understood factors, such as economic, sociological, and cultural impacts, where data are limited and forecasts notoriously unreliable,[110] made it even less likely that purely technical solutions could be found.[111] Thus the era of faith in public land agency decisions based on "objective" analyses waned. "Scientific research can define the biological and physical decision space for ecosystem decision-making, but it cannot determine decisions that must also reflect the values of society, its interests groups, landowners, and managers."[112] The forest management community came to realize there is no such thing as an "optimal solution" discernible through technical analyses; instead, there are many different, equally defensible balances between varied, and often divergent, interests.[113]

Ocean managers have gone through similar phases of reliance on, and dissatisfaction with, the power of science and expertise to achieve sustainable multiple-use. Building on the Stratton Commission's exhortations to increase U.S. exploitation of offshore fisheries resources,[114] stock assessment scientists have been at the heart of NOAA's effort to achieve maximum sustainable yields. Reports from the National Research Council are filled with advice for refining and improving stock

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[109] *See generally* Dennis E. Teeguarden, *Benefit-Cost Analysis in National Forest System Planning: Policy, Uses, and Limitations*, 17 ENVTL. L. 393 (1986).

[110] *See* James Justus et al., *Buying into Conservation: Intrinsic Versus Instrumental Value*, 24 TRENDS IN ECOLOGY & EVOLUTION 187 (2009).

[111] Another danger of granting agencies considerable discretion in planning and decision-making is that it exposes them to charges of "capture," a concept developed by MARVER BERNSTEIN, REGULATING BUSINESS BY INDEPENDENT COMMISSION (1955), but discussed extensively in the context of public lands by Culhane, *supra* note 42; Joseph Feller, *Til the Cows Come Home: The Fatal Flaw in the Clinton Administration's Public Lands Grazing Policy*, 25 ENVTL. L. 703 (1995); Paul A. Sabatier, John Loomis, & Catherine McCarthy, *Hierarchical Controls, Professional Norms, Local Constituencies, and Budget Maximization: An Analysis of United States Forest Service Planning Decisions*, 39(1) AM. J. OF POL. SCI. 204 (1995), CHARLES DAVIS, WESTERN PUBLIC LANDS AND ENVIRONMENTAL POLITICS (2d ed. 2001); Nie, *supra* note 42, and others. At various times, the Forest Service has been accused of being captured by the timber industry, the Minerals Management Service (recently renamed the Bureau of Ocean Energy Management) of being captured by the oil industry, and the National Marine Fisheries Service of being captured by the fishing industry. It can be very difficult, however, to distinguish between true *capture*—an agency ignoring its public obligations in order to favor its friends—and *judgment*, whereby an agency makes legitimate choices within a multiple-use context in response to a wide range of constituent voices. One author who otherwise levels plenty of criticism at the Forest Service concludes on this question that foresters were "responding in variable and locally appropriate ways to heterogeneous communities." Culhane, *supra* note 42. Most agency staff, including all those interviewed for this study, vociferously defend their choices as reflecting the complex, often contradictory directions provided by the public—either directly or through elected representatives—as well as possible at any given time.

[112] FEDKIW, *supra* note 65, at 277.

[113] Yaffee & Wondolleck, *supra* note 90, at 61.

[114] THE COMMISSION ON MARINE SCIENCE, ENGINEERING AND RESOURCES, OUR NATION AND THE SEA: A PLAN FOR NATIONAL ACTION (1969), commonly referred to as the Stratton Commission Report.

assessments.[115] The Ocean Commission also concluded that "accurate, reliable science is critical to the successful management of fisheries," decrying the fact that "social, economic, and political considerations have often led the [Regional Fishery Management] Councils to downplay the best available scientific information."[116]

Most guides to MSP also emphasize the importance of objective science, GIS-based mapping, and scenario analyses.[117] One eloquent statement in favor of technically proficient professional planning for the National Forests might have been made today by MSP supporters: "The public wants beauty, recreation, and wildlife, … we have reached a national commitment to preserve endangered and threatened species, … [and] the public also wants [commercial products] from these same [areas] … How can we possibly address issues of that magnitude, and achieve an acceptable mix of all the many commodity and non-commodity values, without extensive planning?"[118]

In the U.S., *judicial* decision-making has also been critical in the management of public lands. Courts can resolve conflicts by interpreting often unclear statutory language and applying constitutional principles, thereby creating durable decisions. But judges are also people, with personal histories, perspectives, and political allegiances that inform their analyses. Clever lawyers and advocates proudly practice venue shopping to identify courts most likely to be receptive to their positions. Proponents of strong legal involvement in forest management, often attorneys and law professors,[119] point to a number of benefits in relying on courts to resolve conflicts: (1) As secure, lifetime appointees, federal judges may be more independent and objective than elected officials or agency staff; (2) Courts can consider the validity of both the *process* and *outcomes* of agency decision-making, either of which may be at the heart of a dispute; and (3) At the end of a full round of court proceedings and appeals, an issue is generally resolved in a fairly durable way. Coggins concluded that forest ecosystems would be better protected if courts were *more* willing to review agencies' discretionary decisions.[120]

But there have also been significant downsides to relying on the courts: delays of months, years, and even decades in reaching decisions; significant costs, which disadvantage individual or small-group interests; and a focus on adversarial interactions and win-lose outcomes that can poison the atmosphere for later compromise. As Yaffee and Wondolleck remind us, the legal system may work well for dispute resolution, but not for relationship building.[121] McKinney and Harman find that many

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[115] *See, e.g.,* NATIONAL RESEARCH COUNCIL (NRC), IMPROVING THE MANAGEMENT OF U.S. MARINE FISHERIES (1994); NRC, REVIEW OF NORTHEAST FISHERY STOCK ASSESSMENTS (1998); NRC, IMPROVING FISH STOCK ASSESSMENTS (1999); NRC, IMPROVING THE COLLECTION, MANAGEMENT, AND USE OF MARINE FISHERIES DATA (2000).

[116] AN OCEAN BLUEPRINT, *supra* note 3, at 277.

[117] *See generally* Ehler & Douvere, *supra* note 19; JENNIFER MCCANN & SARAH SCHUMANN, THE RHODE ISLAND OCEAN SPECIAL AREA MANAGEMENT PLAN: MANAGING OCEAN RESOURCES THROUGH COASTAL AND MARINE SPATIAL PLANNING: A PRACTITIONERS GUIDE (2013), *available at* http://seagrant.gso.uri.edu/oceansamp/pdf/Practitioner_Guide.pdf.

[118] Charles F. Wilkinson, *The National Forest Management Act: The Twenty Years Behind, the Twenty Years Ahead*, 68 U. COLO. L. REV. 659, 681-82 (1997).

[119] *See, e.g.,* Coggins, *supra* note 103; Kagan, *supra* note 99; Davis, *supra* note 111.

[120] Coggins, *supra* note 103, at 279-80.

[121] Yaffee & Wondolleck, *supra* note 90, at 61.

public lands stakeholders have turned to the courts to resolve essentially non-legal disputes.[122] They document a history of parties attempting to re-frame fundamental *values* questions under cover of rights and legal mandates. The only way they see to avoid this misdirected emphasis, and thus honestly address differences in goals and values, is through greater public dialogue.

Legal challenges to agency decisions have also been important in ocean management, notably in the area of fisheries.[123] Advocates for a given position—commercial fishermen, recreational fishermen, conservationists, or others—frequently praise or decry intervention by the courts depending on how a particular ruling has affected their interests. A report from the National Academy of Public Administration concluded that fisheries management "is increasingly exercised by the courts through litigation … and by constituencies that seek redress through these forums," with rulings that sometimes favor increased emphasis on conservation, sometimes lean toward maintaining catch levels, and sometimes simply defer to agency judgment.[124] Sanchirico et al. and Eagle and Kuker suggest that greater reliance on property rights and the relatively well-defined processes associated with them, including support from the judicial system, could resolve marine use conflicts in a more definitive way than is possible under the current system.[125]

Over time, faith in technocratic decision-making waned, frustration with court delays grew, and people realized that multiple-use forest management required someone to define "the public good." Many observers suggested that the public itself might be the best source of guidance, pointing to a more *participatory* decision-making process. Since then, there has been an explosion of experiments, case studies, analyses, and theory-building regarding the most effective role for the public, in public policy generally and specifically in National Forest management. Beginning after World War II, statutory requirements were put in place to facilitate public participation in National Forest decisions, such as those in the Administrative Procedure Act (1946), Freedom of Information Act (1966), and National Environmental Policy Act (1970).

Through the 1970s and 1980s formal opportunities for public comment were made available for virtually all agency proposals. But the trend on public lands over the last 20 years has been toward increasingly flexible, participatory efforts, referred to alternatively as place-based collaboration, community-based management, interest-based negotiation, grass-roots ecosystem management, environmental conflict resolution, and collaborative governance.[126] New communities of knowledge and practice emerged, drawing on the latest research in political science, behavioral economics,

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[122] MCKINNEY & HARMON, *supra* note 68, at 21.

[123] To date, the courts have not been called on to consider the validity of integrated ocean planning efforts.

[124] NATIONAL ACADEMY OF PUBLIC ADMINISTRATION, COURTS, CONGRESS, AND CONSTITUENCIES: MANAGING FISHERIES BY DEFAULT xi (2002).

[125] Sanchirico et al., *supra* note 77; Eagle & Kuker, *supra* note 77.

[126] *See, e.g.,* Barbara Gray, *Conditions Facilitating Interorganizational Collaboration*, 38 HUMAN RELATIONS 911 (1985); LAWRENCE SUSSKIND, SARAH MCKEARNEN, & JENNIFER THOMAS-LARMER, THE CONSENSUS BUILDING HANDBOOK: A COMPREHENSIVE GUIDE TO REACHING AGREEMENT (1999); WONDOLLECK & YAFFEE, *supra* note 90; Gray, Enzer & Kusel, *supra* note 92; Michael Hibbard & Jeremy Madsen, *Environmental Resistance to Place-Based Collaboration in the US West*, 16 SOC'Y & NAT. RESOURCES 703 (2003); Marcus B. Lane & Geoff McDonald, *Community-based Environmental Planning: Operational Dilemmas, Planning Principles and Possible Remedies*, 48 J. OF ENVTL. PLAN. & MGMT. 709 (2005); and Kirk Emerson, Tina Nabatchi & Stephen Balogh, *An Integrative Framework for Collaborative Governance*, 22 J. OF PUB. ADMIN. RES. AND THEORY 1 (2012).

sociology, psychology, communications, and education. Where managers previously focused on isolated land units, "… relying on technical models to maximize production of a narrow set of goods," now "management is moving toward an ecosystem-scale perspective where agency officials collaborate with a range of groups to manage for a broad set of values across a fragmented landscape."[127]

If indeed, the locus of decision-making is to be "the public," then legitimate questions follow about what that means. If the public means *all* citizens, elections are the traditional tools for gauging their views. But if, as many have suggested, truly meaningful participation requires face-to-face, collaborative dialogue,[128] who should be at the table and who decides? Some possibilities include: communities of *place* who share a strong connection to a specific location; communities of *interest* who share a set of goals (similar to the "advocacy coalitions" proposed in Sabatier and Weible[129]); or communities of *expertise* who focus exclusively on a specific issue, such as timber management or recreational fishing. Each of these overlapping groups of individuals will have legitimate interests in many disputes. But when the aim is to agree on an appropriate mix of uses in a federally owned or managed space, public participation experts often look to communities of *place* as the logical forum.[130] This is where the drivers for collaboration are most intense and where the prospects for enduring trust and relationship-building are greatest.

Extensive case study research, primarily in the context of public land management, has identified features commonly associated with the successful initiation, maintenance, and success of collaborative public participation in natural resource management:

- Participants must have the capacity (i.e., skills, training, and information) for joint action;
- There must be a shared problem to be solved which provides the incentive to overcome the costs of continued dialog;
- Leaders and facilitators must allow for relationship and trust building apart from direct problem-solving efforts; and
- The process should be inclusive, transparent, negotiation-based, and consensus-seeking, while accepting that full consensus may not be achieved.[131]

When they work well, collaborative efforts can break through longstanding gridlock, result in greater stakeholder satisfaction with both the process and subsequent decisions,[132] and decrease time

[127] Yaffee & Wondelleck, *supra* note 90, at 60.

[128] *See, e.g.,* STEVEN E. DANIELS & GREGG B. WALKER, WORKING THROUGH ENVIRONMENTAL CONFLICT: THE COLLABORATIVE LEARNING APPROACH (2001); ROSEMARY O'LEARY & LISA B. BINGHAM, THE PROMISE AND PERFORMANCE OF ENVIRONMENTAL CONFLICT RESOLUTION (2003).

[129] Sabatier & Weible, *supra* note 49.

[130] WONDOLLECK & YAFFEE, *supra* note 90, at 16; Kemmis & McKinney, *supra* note 90, at 4-5; *see* Graham Marshall, *Nesting, Subsidiarity, and Community-Based Environmental Governance Beyond the Local Scale*, 2 INT'L J. OF THE COMMONS 75 (2007); Beierle & Cayford, *supra* note 90, at 4.

[131] *See, e.g.,* Yaffee & Wondelleck, *supra* note 90, at 66-69; William D. Leach, *Public Involvement in USDA Forest Service Policymaking: A Literature Review*, 104 J. OF FORESTRY 43 (2006); Emerson, Nabatchi, & Balogh, *supra* note 126.

spent in administrative appeals.[133] Based on their detailed history of public lands management in the West, McKinney and Harmon conclude that the way to "produce wise, durable decisions over the use of natural resources is to bring together the right people with the best available information in constructive forums that focus on the places and issues people care about."[134]

Nevertheless, serious practical concerns about collaboration in public lands management have been raised. Critics complain that highly participatory processes, by their nature, will exclude some perspectives, either because those individuals are not aware of the proceedings or cannot be present.[135] Large national conservation groups have been some of the strongest opponents, believing that "the shift toward local control disenfranchises distant stakeholders … Most of those who own the public forests are excluded from the process."[136] Critics also imply that local communities will inevitably be more focused on economic concerns than on environmental protection.[137] One evaluation of EBM initiatives across the U.S. (both terrestrial and marine) concluded that strong political, regulatory, or judicial authority actually achieved greater levels of environmental protection than collaborative efforts.[138]

Community members reply that large, well-funded groups have chosen to concentrate their resources and power in Washington D.C. and have become disconnected from the realities on the ground, a common complaint expressed in the case study interviews conducted as part of this study. Another challenge arises in trying to merge the benefits of a flexible collaborative approach into the existing highly structured legal and political system. Although Nie worries that delegation to local processes may allow "political representatives [to avoid] responsibility for the tough choices that must be made," he supports collaboration as a useful supplement to traditional decision-making processes.[139] Even strong believers in the added benefits of collaboration believe that its outcomes are best used as one input to established administrative processes.[140]

The criticism of locally led efforts is also couched in more philosophical terms, decrying the devolution of federal government responsibilities as out of keeping with the American form of government. For example, Manring fears that "the focus on the community of place … [will] undermine the democratic accountability of the forest planning processes."[141] Others look to the public trust doctrine and emphasize the need to allow *all* its beneficiaries to assert their legal rights. However, it is worth noting that many of the critiques of local decision-making are advanced by individuals associated

[132] *See, e.g.,* Toddi A. Steelman, *Elite and Participatory Policymaking: Finding Balance in a Case of National Forest Planning*, 29 POL'Y STUD. J. 71 (2001) ; Toddi A. Steelman & Melissa A. DuMond, *Serving the Common Interest in US Forest Policy: A Case Study of the Healthy Forests Restoration Act*, 43 ENVTL. MGMT. 396 (2009).
[133] *See* Kevin L. Gericke and Jay Sullivan, *Public-Participation and Appeals of Forest Service Plans: An Empirical-Examination*, 7 SOC'Y & NAT. RESOURCES 125 (1994).
[134] MCKINNEY & HARMON, *supra* note 68, at 277.
[135] *See* Nancy J. Manring, *The Politics of Accountability in National Forest Planning*, 37 ADMIN. & SOC'Y 57 (2005).
[136] McClosky, *supra* note 95, at 629.
[137] BRYNER, *supra* note 105, at 22; MCCLOSKY, *supra* note 95, at 626; Manring, *supra* note 135.
[138] *See* JUDITH A. LAYZER, NATURAL EXPERIMENTS: ECOSYSTEM-BASED MANAGEMENT AND THE ENVIRONMENT (2008).
[139] NIE, *supra* note 42, at 76.
[140] *See, e.g.,* WONDOLLECK & YAFFEE, *supra* note 90, at 77; MCKINNEY & HARMON, *supra* note 68, at 63.
[141] Manring, *supra* note 135, at 57.

with particular policy preferences—whether for increased environmental protection or fewer restrictions on extraction—who may be concerned that their desired *outcomes* will be under-represented at the local level. One astute observation about the motivations behind collaborative efforts reminds us that, ultimately: "People act collaboratively as a strategy for achieving their own interests, including their interest in [achieving] a creative and durable solution."[142]

To date, the ocean management community has not widely embraced inclusive, collaborative governance. The processes for regulating ocean activities—from leasing offshore sites to determining shipping routes to regulating fishing—still follow a largely traditional public hearing, notice-and-comment approach to public participation. In 2002, the National Academy of Public Administration concluded that: "The view of many of [the National Marine Fisheries Service's] partners and constituents is that [the agency] does not reach out to involve them in meaningful participation in its activities. [It] does not engage them in designing policies and programs, implementing projects, and evaluating results."[143] There have been some exceptions. For example, the National Marine Fisheries Service has experimented with cooperative fishery research, which brings fishermen directly into the stock assessment process and the National Marine Sanctuary program actively engages its stakeholder advisory groups. The Regional Fishery Management Councils themselves constitute a form of participatory governance, although it is far from inclusive. In addition, a number of marine EBM efforts have experimented successfully with more inclusive processes.[144]

Although the 2010 Executive Order on MSP calls for "participation of State, tribal, and local authorities, regional governance structures, nongovernmental organizations, the public, and the private sector," implementation so far has relied on traditional outreach mechanisms. These include public hearings during which government representatives make presentations and allow short public statements, and release of draft documents with limited, written public comment periods. It is reasonable to believe, given similarities in the mix of stakeholders, types of uses present, and relevant authorities in the National Forests and the EEZ that more collaborative approaches may also prove useful in the latter setting.

In the real world, political, technocratic, judicial, and participatory approaches are usually operating simultaneously. Advocates use their resources and influence to take advantage of any opening to advance their cause. Perhaps without fully realizing it, each group then tends to praise whichever venue is best suited to their ends at any given time. For example, after boasting of the environmental movement's successful use of political tools such as grassroots mobilization, media outreach, public demonstrations, and intensive lobbying to finally gain passage of the Wilderness Act, Scott proclaims that, "A law … represents a national social consensus. […] Congressional procedures … [produce laws that] are not susceptible to willy-nilly change with the ebbs and flows of American politics."[145] Not surprisingly, industry associations express similar views, praising the solidity of legislation, the

[142] Yaffee & Wondolleck, *supra* note 90, at 69.
[143] NATIONAL ACADEMY OF PUBLIC ADMINISTRATION, *supra* note 124, at xxi-xxii (2002).
[144] *See* Leila Sievanen et al., *Linking Top-down and Bottom-up Processes through the New U.S. National Ocean Policy*, 4 CONSERVATION LETTERS 298 (2011).
[145] DOUGLAS W. SCOTT, A WILDERNESS-FOREVER FUTURE: A SHORT HISTORY OF THE NATIONAL WILDERNESS PRESERVATION SYSTEM II.C27 (2001).

impartiality of agency decisions, the wisdom of the courts, or the power of the people, depending on which of these bodies is most in tune with their interests at any moment.

C. Degree of Uniformity: Harmonization or Flexibility?

In addition to the questions about scale and process discussed above, a third difficult set of tradeoffs must be made between the desire for harmonization, with the certainty and predictability that accompany such standardization, and the search for more flexible approaches, associated with greater adaptability and innovation. Early forest managers embraced standardization, rulemaking, and coordination, all of which connote a degree of order and predictability. These concepts are also very much in tune with progressive conservationist ideals[146] and the related "modernist" view[147] that, through science, the rule of law, proactive planning, functional design, and rational analysis, society can transcend the messiness of unmediated human behavior and maximize human welfare. Scientists and engineers are enlisted to predict maximum sustainable yields or design optimum use profiles, while mapmakers are relied on to create orderly spatial representations of ecosystems and human uses.[148] One obvious advantage to uniformity is the assurance that high priority *national* goals will not be ignored in favor of local or regional interests. Good examples of this were the creation of wilderness areas and heightened protection of endangered species in the forests. Policymakers recognized that once wilderness is destroyed or a species is lost, there is little hope of reversing course, warranting a limit on flexibility in exchange for a heightened level of precaution.

Improved coordination and consolidation are also suggested as solutions to the proliferation of overlapping and seemingly redundant jurisdictions, statutes, or responsible authorities, all tasked with some aspect of forest management.[149] MacCleery observes that as forest management moved toward more ecosystem-based goals, the former divisions of responsibility no longer functioned well.

> A timber sale, formally the responsibility of the timber staff (and funded by a timber sale budget line item), may now be the mechanism to reduce forest fuels — a task which was previously the responsibility of the fire staff (funded by the fire budget line item). The same activity may also advance the objectives of restoring watershed conditions or enhancing wildlife habitat (under the purview of the watershed and wildlife staffs, respectively). It has

[146] PINCHOT, *supra* note 102.
[147] *See* JAMES C. SCOTT, SEEING LIKE A STATE: HOW CERTAIN SCHEMES TO IMPROVE THE HUMAN CONDITION HAVE FAILED (1998).
[148] Many scholars have noted that maps can obfuscate as much as they clarify by including only those features deemed important by the maps' creators. *See* MARK MONMONIER, HOW TO LIE WITH MAPS (2d ed. 1996). For example, National Forest maps do not highlight areas whose ownership is disputed by prior inhabitants, *see* Kosek, *supra* note 43, and ocean maps are notoriously spotty in their coverage, *see* NATIONAL RESEARCH COUNCIL, A GEOSPATIAL FRAMEWORK FOR THE COASTAL ZONE: NATIONAL NEEDS FOR COASTAL MAPPING AND CHARTING (2004), and limited in what they depict. *See* Kevin St. Martin & Madeleine Hall-Arber, *The Missing Layer: Geo-Technologies, Communities, and Implications for Marine Spatial Planning*, 32 MARINE POL'Y 779 (2008).
[149] *See, e.g.,* Curtis, *supra* note 71, at 799-801.

> sometimes been difficult for the existing functional disciplines … to rationalize and clarify their roles under the new mission focus.[150]

Although this observation describes disconnects *internal* to the Forest Service, similar problems occurred among agencies with overlapping forest-related missions, including the Fish and Wildlife Service, National Marine Fisheries Service, state fish and game departments, etc.

However, attempts to coordinate, centralize, or merge authorities also have critics who argue, for philosophical and practical reasons, that resource management will fare better by maintaining greater diversity among agencies and allowing more flexible, place-based solutions to develop. In his case study of so-called "government inefficiency," Chisholm discovered that widespread and effective coordination was already occurring, through "informal channels, behavioral norms, and personal agreements," and that such decentralized systems actually "increased innovation, encouraged public participation, and strengthened local government capacity."[151] Suggestions for reorganization, he concludes, are often not based on a careful study of existing institutions but reflect instead a kind of moral judgment about what a "good" organization should look like. Other writers reach similar conclusions.[152] DeShazo and Freeman found "not lone agencies making isolated decisions in a cocoon of bureaucratic insularity," but agencies intervening effectively in each other's decision-making.[153]

Related to tradeoffs between uniformity and diversity are debates about how natural resource managers can best ensure system resilience and facilitate adaptive management. From the 1970s on, a new generation of ecologists turned to concepts such as complexity, networks, cycles of growth and reorganization, multiple-equilibria, diversity, and resilience to explain natural systems.[154] Social scientists were also updating older client-agent, cause-and-effect models of policy change, looking instead to public choice theory, institutional analysis, behavioral psychology, and political ecology.[155] New findings supported the importance of flexible, context-specific, multiple-scale governance in increasing resilience to unexpected events and promoting nimbleness in adapting to changes in economic, ecological, social, or political conditions over time. Nie concludes that, by their very nature, EBM and adaptive management of public lands will require greater agency discretion, acknowledging the implication that agencies would then have to be empowered to make some fairly subjective decisions.[156] Unfortunately, flexible, adaptive management does not mesh well with traditional

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[150] MacCleery, *supra* note 66, at 70.

[151] *See* DONALD CHISHOLM, COORDINATION WITHOUT HIERACHY (1989).

[152] *See, e.g.*, EUGENE BARDACH, GETTING AGENCIES TO WORK TOGETHER: THE PRACTICE AND THEORY OF MANAGERIAL CRAFTSMANSHIP (1998); CRAIG W. THOMAS, BUREAUCRATIC LANDSCAPES: INTERAGENCY COOPERATION AND THE PRESERVATION OF BIODIVERSITY (2003); J.R. DeShazo & Jody Freeman, *Public Agencies as Lobbyists*, 105 COLUMBIA L. REV. 2217 (2005).

[153] DeShazo & Freeman, *supra* note 152, at 2303.

[154] *See, e.g.,* C.S. Holling, *The Resilience of Terrestrial Ecosystems: Local Surprise and Global Change*, *in* SUSTAINABLE DEVELOPMENT OF THE BIOSPHERE (W.C. Clark & R.E. Munn eds. 1986); LANCE H. GUNDERSON, C. S. HOLLING, & STEPHEN S. LIGHT, BARRIERS AND BRIDGES TO RENEWAL OF ECOSYSTEMS AND INSTITUTIONS (1995), Heather M. Leslie & Ann P. Kinzig, *Resilience Science*, *in* ECOSYSTEM-BASED MANAGEMENT FOR THE OCEANS 55 (Karen McLeod & Heather Leslie eds., 2009).

[155] *See* OSTROM, *supra* note 48; PAUL A. SABATIER, THEORIES OF THE POLICY PROCESS (2d ed. 2007).

[156] *See generally* NIE, *supra* note 42.

political, regulatory, and legal structures due to "short-term risk intolerance,"[157] "inherent cultural and institutional barriers … [within] management and regulatory agencies,"[158] and conflict with the legal system's "mission … to provide social stability."[159]

Very similar debates about the value of centralization/standardization versus devolution/flexibility take place in the ocean setting. The Ocean Commission repeatedly decries the lack of coordination among ocean agencies and proposes that it detracts from both environmental and economic goals. Their report devotes entire chapters to topics such as "Coordinating Management in Federal Waters" and "Strengthening the Federal Agency Structure," recommending a number of new federal bodies and proposing a long-term goal of "consolidation of all natural resource functions, including those applicable to oceans and coasts, [to] enable the federal government to move toward true ecosystem-based management."[160] However, the case studies of marine EBM documented in Wondolleck and Yaffee and discussed in Sievenan et al., demonstrate the value of flexibility, diverse approaches, and nested institutional arrangements in achieving desired outcomes.[161]

VII. Conclusion

How can 100 years of management and study of the National Forests help the eight existing Regional Ocean Partnerships and emerging Regional Ocean Planning Bodies be successful?[162] The notion of pursuing integrated, sustainable, multiple-use management of U.S. ocean areas, whether through the range of approaches encompassed under EBM or through the more specific tool of MSP, is still in its infancy, with considerable promise and plenty of opportunities for mistakes. An important theme that emerges from an examination of National Forest history and relevant policy theory is that multiple-use management of natural systems and related human communities is complex, uncertain, and deeply context-dependent. A multi-dimensional continuum of plausible management options exists, with no simple, one-size-fits-all, "best" approach for planning and managing the use of public space in the interests of all citizens. In the ocean setting, political, ecological, and cultural variability is

[157] MacCleery, *supra* note 66, at 68.
[158] Thomas, *supra* note 152.
[159] J.B. Ruhl, *Panarchy and the Law*, 17 ECOLOGY AND SOC'Y 31 (2012), *available at* http://www.ecologyandsociety.org/vol17/iss3/art31/.
[160] Proposed new bodies included a National Ocean Council; Committee on Ocean Science, Education, Technology, and Operations; Office on Ocean Education; Office on Ocean Information; Committee on Ocean Resource Management; International Committee; and Presidential Council of Advisors on Ocean Policy. *See* AN OCEAN BLUEPRINT, *supra* note 3, at 475-76.
[161] *Marine Ecosystem-based Management in Practice*, *supra* note 11; Sievanen, *supra* note 144.
[162] As mentioned above, this Article is based on a talk given at the *Regional Ocean Governance Symposium: Legal & Policy Solutions for Mid-Atlantic Ocean Planning*, held at Seton Hall University School of Law on April 12, 2013. Its recommendations are thus aimed primarily at regional ocean decision-makers. A companion article (*Public Lands Management and Marine Spatial Planning*, in prep.) will speak to the broader ocean community. Existing regional ocean partnerships include the Caribbean Regional Ocean Partnership, Great Lakes Regional Collaboration, Governors' South Atlantic Alliance, Gulf of Mexico Alliance, Mid-Atlantic Regional Council on the Ocean, Northeast Regional Ocean Council, Pacific Regional Ocean Partnership, and the West Coast Governors Alliance on Ocean Health. Three Regional Planning Bodies have been formed to date pursuant to the new National Ocean Policy in the Northeast, Mid-Atlantic, and Pacific Islands.

likely to lead to decision-making *processes* that look different from place to place. Likewise, the *outcomes* of any given policy choice will not be the same in every place or in different time periods.

But this complexity and variability does not mean that careful policy analysis has nothing to offer, or that the results of particular policy options are completely unforeseeable. Rather, ocean planners should educate themselves about the range of policy choices available and the likely consequences of selecting alternatives at different points in the broad decision space. Public land experiences highlight three important considerations:

- **The scale of problem definition and resolution**, where *national* level decision-making is more likely to express broad, majoritarian public values and preclude narrow local concerns from dictating the use of federal public trust resources while more *local* decision-making allows for stronger community engagement, greater diversity in policy solutions, and the emergence of innovative approaches and has a greater potential to build trust among diverse stakeholders. Intermediate scales will provide combinations of these large/national and small/local attributes.

- **The "who" and "how" of decision-making**, where *elected officials* come closest to representing the interests of all citizens, imbuing their decisions with a level of legitimacy, but are generally removed from on-the-ground realities and can be swayed by wealthy, organized constituencies; *professional agency staff* can be more objective and are trained to rely on science and technical skill, but are less well-suited to make value judgments; *the courts* can interpret ambiguous statutory language and adjudicate the validity of agency decisions relatively independently, but provide little transparency or accountability to the public; and *the community*, through participation and collaborative dialogue, can access localized knowledge, build trust, and craft innovative solutions but may exclude some interested parties and favor local over national interests.

- **The extent of flexibility allowed**, where *standardized* procedures and organizational structures can achieve greater consistency and predictability while *diversified* context-specific approaches can be better suited to local conditions, foster innovation, and increase nimbleness in adapting to changing conditions.

Different choices among the range of options described above will result in different internal and external outcomes, with different levels of success with respect to: resolving conflicts, satisfying participants, improving efficiency, meeting timelines, ensuring accountability, generating revenues, protecting ecosystems, increasing resilience, promoting civic engagement, facilitating monitoring and compliance, defending the interests of vulnerable minorities, or any of dozens of other worthy, but potentially conflicting, goals.

The ocean community is struggling with many of these tradeoffs now, as different constituencies argue for approaches to marine planning they believe will better suit their needs. The Interagency Framework for MSP and earlier drafts of the NOC's Implementation Plan put forth very detailed, top-

down prescriptions for the regions to follow.[163] In reaction to vociferous criticism from industry, Congress, and some states, the final version of the National Ocean Policy Implementation Plan—a virtually complete rewrite of previously released drafts—embraces the need for regional variability, stating that: "Marine planning will … address regionally determined priorities, based on the needs, interests, and capacity of a given region. […] Each region has flexibility to build the elements of its plans over time in response to what the region wants to accomplish [and] the resources available."[164] This approach acknowledges the importance of place-based governance central to institutional analysis, but the extent of devolution—from federal agencies to large regional compacts of state, tribal, and federal representatives—remains quite limited. One sentence in the Interagency Framework states that regions have the "flexibility to develop sub-regional plans, provided that these plans are encompassed in an overarching regional plan and overseen by the regional planning body," but the idea of multi-level, sub-regional nested planning is not mentioned, despite National Forest experience with the importance of nested plans and substantial research that validates such an approach.[165] Issues of great local significance can be overlooked at the larger scale, while novel resolutions may be found through collaboration among parties at smaller scales. The regions should allow such local initiatives to emerge and then develop mechanisms for reconciling any disparities that arise between adjacent sub-regions. This approach also supports the principle of subsidiarity,[166] whereby local input takes precedence for decisions with primarily local effects (e.g., allocation of nearshore space for fixed gear[167]), while increasingly broad regional to national input is heeded as the scale of potential impacts increases (e.g., climate change, endangered species).

The extent and style of public participation in marine planning also remains in question. Increased public participation is listed by the Interagency Ocean Policy Task Force as one of the expected benefits of marine planning and is mentioned repeatedly throughout the Framework. However, although participation is recommended in part "to strengthen mutual and shared understanding," a phrase that hints at a more collaborative approach, other details in the Framework indicate that the process envisioned will rely on fairly traditional techniques. Elements suggested include informational workshops, public hearings, public comment processes, document availability, educational materials, webinars, and guidance manuals. The final Implementation Plan also states that "robust stakeholder engagement and public participation are essential," but offers no additional detail.[168] In addition, at the three public events observed during the course of this study, all of which were billed as opportunities for stakeholder input, more than half the available time was filled by statements and presentations from agency representatives, with very limited windows for brief statements from the public. None of the documents released or the statements made at these public events embraced the kinds of collaborative

[163] For a detailed analysis of the Interagency Framework and early drafts of the NOC Implementation Plan, *see* Gopnik, *supra* note 22.
[164] NOP Implementation Plan, *supra* note 22, at 22.
[165] *See, e.g.*, ELINOR OSTROM, GOVERNING THE COMMONS: THE EVOLUTION OF INSTITUTIONS FOR COLLECTIVE ACTION (1990); Oran Young, *Vertical Interplay Among Scale-Dependent Environmental and Resource Regimes*, 11 ECOLOGY AND SOC'Y 27 (2006); Sievanen, *supra* note 144.
[166] *See* Marshall, *supra* note 130.
[167] *See* JAMES ACHESON, CAPTURING THE COMMONS: DEVISING INSTITUTIONS TO MANAGE THE MAINE LOBSTER INDUSTRY (2003).
[168] NOP IMPLEMENTATION PLAN, *supra* note 22, at 23.

effort likely to help a wide range of potentially competing or conflicting partners reach a shared vision, as has been done successfully in some National Forests[169] and a few ocean programs.[170] Regions will need to go beyond formalistic approaches if they hope to foster real cross-sector learning and dialogue.

Finally, regional ocean planning requires access to reliable data, sound analytic methods, and ever-evolving scientific understanding. The Interagency Task Force and National Ocean Council documents devote considerable attention to these topics and the launch of national and regional ocean data portals may be the most tangible success of marine planning efforts to date. To date, these efforts have focused primarily on natural sciences data, including oceanographic features, species identification, habitat types, and other physical, chemical, and biological information. However, the study of forest management reminds us that balanced, multiple-use management is a fundamentally *social* process, underscoring the importance of understanding the social, cultural, and behavioral aspects of ocean communities. While natural science findings will remain critical to understanding the ecosystems and resources involved, they tell managers nothing about the human factors that drive activities in the ocean and the institutions that govern them. Regional partnerships should reach out actively to the social science community to fill these gaps, noting that the costs of acquiring data in these areas is modest compared to those associated with oceanographic data collection, and the gains could be fundamental.

Proactive ocean planning is a new concept, but there is a storehouse of untapped knowledge and experience acquired in other policy arenas available to those seeking improvement in our stewardship of the ocean and its resources. This study draws on some of that knowledge and experience to help improve the prospects for regional multiple-use marine planning in U.S. waters.

[169] *See generally* WONDOLLECK & YAFFEE, *supra* note 90; DANIELS & WALKER, *supra* note 128.

[170] J.M. Delaney, *Community Capacity Building in the Designation of the Tortugas Ecological Reserve*, 14 GULF AND CARIBBEAN RES. 163 (2003); Sievanen, *supra* note 144.