LEAD, FOLLOW, OR BE LEFT BEHIND: THE CASE FOR COMPREHENSIVE OCEAN POLICY AND PLANNING FOR FLORIDA

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I. INTRODUCTION

Although coastal zone management certainly incorporates the adjacent seas,[1] during the first decades of the Coastal Zone Management Act of 1972 (CZMA),[2] states directed most policy development and management efforts to the landward side of the coastal zone where the most immediate conflicts and needs arose. At the federal level, even extension of a two-hundred-mile Exclusive Economic Zone (EEZ)[3] in 1983 led to little or no change in ocean policy or ocean management. The seas were undoubtedly becoming more intensely used for both living and non-living resource development, but the United States dealt with these issues primarily through legal regimes addressing single sectors, such as offshore oil and gas development[4] or fisheries management.[5] Even within those sectors, management strategies focused narrowly, for example, addressing issues related to single species or particularly distressed fisheries in fishery management. To-

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1. 16 U.S.C. § 1453(1) (2012).

2. Coastal Zone Management Act of 1972, Pub. L. No. 92-583, 86 Stat. 1280 (1972) (codified as amended at 16 U.S.C. §§ 1451–64).

3. Exclusive Economic Zone of the United States of America, Proclamation No. 5030, 3 C.F.R. 22, 23 (1983).

4. *See* Outer Continental Shelf Lands Act of 1953, 42 U.S.C. §§ 1331–56A (2006) (creating the administrative regime for exploration, development, and production of seabed oil, gas, and other minerals beyond state marine boundaries).

5. *See* Magnuson-Stevens Fishery Conservation and Management Act, 16 U.S.C. §§ 1801–84 (2012) (creating a framework for the conservation and management of the nation's coastal and ocean fisheries).

day, ocean uses are intensifying, raising user conflicts and stressing ocean resources and ocean systems more than humanity was considered capable of doing a century ago. Tragedies like the BP oil spill[6] demonstrate the widespread effects of a single ocean use across all sectors of ocean and coastal activities and on the ecosystems upon which these sectors rely. Management of today's oceans requires rational development of ocean policies, priorities, and governance structures.

On July 19, 2010, President Obama established the first United States national ocean policy with purposes intended

> to ensure the protection, maintenance, and restoration of the health of ocean, coastal, and Great Lakes ecosystems and resources, enhance the sustainability of ocean and coastal economies, preserve our maritime heritage, support sustainable uses and access, provide for adaptive management to enhance our understanding of and capacity to respond to climate change and ocean acidification, and coordinate with our national security and foreign policy interests.[7]

The Executive Order established a National Ocean Council[8] and directed executive agencies, under the guidance of the Council, to implement recommendations developed by an Interagency Ocean Policy Task Force and adopted by the Executive Order.[9] The primary means of accomplishing the policy's ocean stewardship goals recommended by the Task Force was through development of coastal and marine spatial plans (CMSPs)[10] on a regional basis that incorporate state as well as federal waters.[11] For states that

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6. The 2010 Deepwater Horizon oil spill in the Gulf of Mexico had a massive impact on the Gulf region, affecting a wide range of activities, from drilling to fishing to tourism. *See* NAT'L COMM'N ON THE BP DEEPWATER HORIZON OIL SPILL AND OFFSHORE DRILLING, REPORT TO THE PRESIDENT, DEEP WATER: THE GULF OIL DISASTER AND THE FUTURE OF OFFSHORE DRILLING (Jan. 2011), *available at* http://www.gpo.gov/fdsys/pkg/GPO-OILCOMMISSION/content-detail.html (detailing the circumstances that lead to the disaster, the environmental and economic consequences of the spill, and the policy changes proposed to prevent the recurrence of an offshore drilling accident).

7. Stewardship of the Ocean, Our Coasts, and the Great Lakes, Exec. Order No. 13,547, 3 C.F.R. 227, 227 § 1 (July 19, 2010).

8. *Id.* § 4.

9. *Id.* § 1.

10. *Id.*

11. *See* WHITE HOUSE COUNCIL ON ENVTL. QUALITY, FINAL RECOMMENDATIONS OF THE INTERAGENCY OCEAN POLICY TASK FORCE 49 (July 19, 2010), *available at* http://www.whitehouse.gov/files/documents/OPTF_FinalRecs.pdf. ("The geographic scope of the planning area for CMSP in the United States includes the territorial sea, the EEZ, and the

have taken significant steps toward planning and managing ocean waters within their boundaries, CMSPs potentially provide new opportunities for ensuring that development and activities in the federal offshore will adequately consider state policies and priorities. For other states, like Florida, that have not developed comprehensive coastal and marine policy and planning, national ocean policy development may lead to weak participation in the regional planning process, loss of state prerogative concerning major coastal planning issues, and a fundamental failure in the governance of the states in regard to their coasts and waters. In essence, these states, including Florida, must act expeditiously to lead, follow, or be left behind in planning for and managing their coastal seas.

This Article will examine the historical evolution of state ocean policy development, including the motivations of coastal states to take steps to develop comprehensive state ocean policy. Next, the Article will address why *now* is the critical time for state ocean policy development. Finally, the Article will address the guiding principles for Florida's ocean policy development.

II. HISTORICAL BACKGROUND OF STATE OCEAN POLICY PLANNING

In January 1969, a presidentially appointed commission—the Commission on Marine Sciences, Engineering, and Resources, commonly known as the Stratton Commission—released a report entitled *Our Nation and the Sea*.[12] The Stratton Commission Report provided the first comprehensive review and assessment of the nation's ocean policy[13] and focused on effective use of the coasts and oceans.[14] The primary outcomes of the Stratton Commission were the creation of the National Oceanic and Oceano-

Continental Shelf. The geographic scope of the planning area would extend landward to the mean high-water line.").

12. COMM'N ON MARINE SCI., ENG'G AND RES., OUR NATION AND THE SEA: A PLAN FOR NATIONAL ACTION, H.R. DOC. NO. 91-42 (1969) [hereinafter STRATTON COMMISSION REPORT].

13. *See id.* at 4–5 (presenting the findings of a broad-based investigative study on subjects ranging from coastal habitat preservation to ocean and sub-ocean resource extraction); Donna R. Christie, *From Stratton to USCOP: Environmental Law Floundering at Sea*, 82 WASH. L. REV. 533, 533–34 (2007) (finding that although environmental concerns were certainly represented in the STRATTON COMMISSION REPORT, the focus was primarily on resource exploitation).

14. Christie, *supra* note 13, at 534.

graphic Administration (NOAA), a dedicated oceans arm of the Department of Commerce,[15] and the CZMA, which was intended to coordinate federal and state actions in the coastal zone.[16]

In the CZMA, Congress recognized that planning and management of the coastal zone within state boundaries is a state—rather than federal—function, but that there is a national interest in effective management of coastal lands and waters.[17] The Act initially provided federal funding for the states to develop and administer coastal programs according to guidelines set out in the CZMA.[18] The states were given substantial discretion concerning the nature and structure of their programs[19] and even in determining the geographic scope of the coastal zone.[20] The Act did, however, define the seaward limits of the coastal zone to extend "seaward to the outer limit of [s]tate title and ownership under the Submerged Lands Act."[21] Yet during the first decades of the implementation of the Act, the landward side of the coastal zone was the primary focus of state programs.

While federal funding for program development and administration was an initial incentive for state participation in coastal

15. *Id.* at 536.

16. STRATTON COMMISSION REPORT, *supra* note 12, at 8–9.

17. ALISON RIESER ET AL., OCEAN AND COASTAL LAW 250 (4th ed. 2013).

18. 16 U.S.C. § 1454 (Supp. II 1973). Originally, the authority to give states grants to create coastal zone management programs was to end in 1977; this was extended once, with slightly more stringent requirements, to 1979. Coastal Zone Management Act Amendments of 1976, Pub. L. No. 94-370, § 4, 90 Stat. 1013, 1016 (1976). Congress allowed the authority to issue these grants to lapse, and funding to create management programs was not restored until 1990. Omnibus Budget Reconciliation Act of 1990, Pub. L. No. 101-508, § 6205, 104 Stat. 1388, 1388-302 to 1388-303 (1990). Currently, Section 1454 simply says that the creation of any new coastal management program must be submitted for review under Section 1455 to receive funding. 16 U.S.C. § 1455 (2012).

19. 16 U.S.C. § 1455(d)(11); RIESER ET AL., *supra* note 17, at 267.

20. *See* 16 U.S.C. § 1453(1) (2006) (defining the inland boundary in nebulous terms that leave the act of demarcation in the hands of the respective states); *see also* RIESER ET AL., *supra* note 17, at 266 (describing how different coastal states have defined the inland boundary of their coastal zones).

21. 16 U.S.C. § 1453(1). Under the Submerged Lands Act of 1953, 43 U.S.C. §§ 1301–1315 (2006), Florida made claim to state title and boundaries that extended three marine leagues into the Gulf of Mexico and three geographic miles into the Atlantic Ocean. These boundaries and title were confirmed by the United States Supreme Court in *United States v. Louisiana*, 363 U.S. 1 (1960) (the Gulf boundary) and *United States v. Florida*, 363 U.S. 121 (1960) (the Atlantic boundary). Florida continues in its Constitution, however, to claim a state boundary in the Atlantic Ocean "to the edge of the Gulf Stream or a distance of three geographic miles whichever is the greater distance." FLA. CONST. art. II, § 1.

management planning,[22] the CZMA provided an additional, long-term incentive for states: the so-called federal consistency requirement. This provision created a limited waiver of federal supremacy that committed federal agencies to conduct and sponsor activities "directly" affecting the coastal zone in a manner consistent with the state-created and federally approved coastal management program (CMP) to the maximum extent practicable.[23] In addition, federal agency permitting was prohibited when the state found that the permittee's activity would be inconsistent with the state CMP.[24] These provisions had the promise of giving states considerable influence on federal ocean actions, particularly outer continental shelf (OCS) oil and gas leasing and permitting of oil and gas exploration and development.[25]

The promise of the CZMA consistency requirement was soon eroded, however, when the Supreme Court limited the scope of the provision's influence. In *Secretary of the Interior v. California*,[26] California and others brought suit to require the Secretary of Interior to make a consistency determination before conducting an OCS lease sale off the California coast.[27] The Secretary contended that because the proposed lease sale was not an activity that "directly affect[ed]"[28] the California coastal zone, no consistency determination was required by the CZMA.[29] Written on behalf of the Court's five-to-four majority, Justice O'Connor's opinion left the consistency doctrine in a state of considerable confusion. The Court rejected the state's argument that "leasing sets in motion a chain of events that culminates in oil and gas development, and that leasing therefore 'directly affects' the coastal zone within the meaning of Section 307(c)(1)."[30] The Court relied upon the structure of the Outer Continental Shelf Lands

22. *See* RIESER ET AL., *supra* note 17, at 250 (describing such federal funding as the "traditional incentive").

23. 16 U.S.C. § 1456(c) (Supp. II 1973).

24. *Id.*

25. *See* RIESER ET AL., *supra* note 17, at 270–71 (highlighting the fact that the CZMA required federal government activities to conform with a state's coastal program when those activities affected the state's coastal zone).

26. 464 U.S. 312 (1984).

27. *Id.* at 318–19.

28. *Id.* at 319.

29. *Id.* at 318–19.

30. *Id.* at 319.

Act (OCSLA),[31] which limits initial activity under the lease to preliminary exploration that "has no significant effect on the coastal zone,"[32] to isolate the effect of the lease sale. Because the sale was only the first of "a series of decisions that *may* culminate in activities directly affecting that zone,"[33] the Court concluded that "the possible effects on the coastal zone that may eventually result from the sale of a lease cannot be termed 'direct.'"[34] The Court further relied on the fact that in the 1978 amendments to the OCSLA, Congress had specifically coordinated the OCSLA and CZMA provisions in regard to consistency of OCS activities at the exploration and development stages, but had failed to include language in the OCSLA addressing consistency at the lease sale stage.[35] Congress, the Court concluded, had made a policy decision not to require federal consistency at the lease sale stage.[36]

Perhaps of even more concern was that in the opinion the Court continued to speculate on the scope of the CZMA by suggesting that only federal activities conducted *in* the coastal zone could have direct effects.[37] Although this discussion was dicta, some agencies grasped the opportunity to limit the scope of the consistency requirement and, consequently, state input into federal decision-making. The United States Army Corps of Engineers, for example, adopted the interpretation that federal activities must be conducted *in* the coastal zone to have "direct

31. 43 U.S.C. §§ 1331–1356A (2006 & Supp. II 2009). Development of OCS oil and gas resources is divided by the OCSLA into four stages. First, a five-year lease plan is prepared by the Department of Interior. 43 U.S.C. § 1344 (2006). Individual lease sales are the second stage. 43 U.S.C. § 1337 (2006 & Supp. II 2009). A lease holder may only conduct preliminary surveys and testing. *Sec'y of the Interior*, 464 U.S. at 338–39. Both the subsequent exploration and development stages require submission of plans by the leaseholder that must be approved by the Department of Interior, 43 U.S.C. § 1340(c)(1) (2006), and that are specifically subject to the CZMA consistency requirement. *Id.* § 1340(c)(2).

32. *Sec'y of the Interior*, 464 U.S. at 321.

33. *Id.* (emphasis added). If approval for a subsequent stage is denied, the lease may not go forward. *Id.* at 339–40.

34. *Id.* at 342.

35. *Id.* at 340–41.

36. *Id.* at 342–43.

37. "Section 307(c)(1)'s 'directly affecting' language was aimed at activities conducted or supported by federal agencies on federal lands physically situated in the coastal zone but excluded from the zone as formally defined by the Act." *Id.* at 330.

effects" that would require the federal agency to comply with the CZMA.[38]

States that had developed coastal management programs in reliance on the CZMA consistency provisions were stunned by the decision and pushed for amendment of the Act to overrule the effects of the Supreme Court's decision.[39] Congress was slow in responding, however, and a development in the interim led states to begin to consider other options. When President Reagan announced the extension of the United States territorial sea to twelve miles in 1988,[40] he limited the effect of the proclamation to the United States' international relations and asserted that the extension of the territorial sea for international purposes did nothing to alter domestic law.[41] If they could not exercise their voices concerning offshore development through the CZMA consistency provision, coastal states began to consider the viability of expanding state influence in the marginal seas by extension of state boundaries to twelve miles through amendment of the Submerged Lands Act.[42]

While states were still exploring the possibility and consequences of trying to amend the Submerged Lands Act to recognize state boundaries to twelve miles offshore, Congress finally amended the CZMA in 1990 to overrule the 1984 Supreme Court limitations on the federal consistency requirement. The Coastal Zone Act Reauthorization Amendments of 1990 (CZARA)[43] readdressed the federal consistency requirement and provided specifically that federal actions and federally permitted activities, both "within or outside" a state's coastal zone that "affect[ ] any land

38. Corps of Engineers Ocean Dumping Regulations, 53 Fed. Reg. 14,902, 14,905 (Apr. 26, 1988); *see also* RIESER ET AL., *supra* note 17, at 273 (referencing the Army Corps's expansive reading of the Court's decision).

39. Phillip D. Reed, *Supreme Court Beaches Coastal Zone Management Act*, 14 ENVTL. L. REP. 10161, 10167 (1984).

40. Territorial Sea of the United States of America, Proclamation No. 5928, 54 Fed. Reg. 777, 777 (Dec. 27, 1988).

41. *Id.*

42. The Submerged Lands Act generally recognized state marine boundaries to three miles. 43 U.S.C. § 1312 (2006). State marine boundaries would not change automatically as a result of the President's claim extending the territorial sea from three to twelve miles for international purposes. *Id.*; *see* Edward J. Cook, *Federalism at Sea? State–Federal Relations in an Extended Territorial Sea*, 5 J.L. & POL. 429, 430 (1989) (predicting that "coastal states will almost certainly seek to increase their ownership of the seabed and the water column to the extent of the twelve-mile limit").

43. Coastal Zone Reauthorization Amendments of 1990, Pub. L. No. 101-508, § 6201, 104 Stat. 1388, 1388-299 to 1388-319 (1990).

or water use or natural resource of the coastal zone," must meet the consistency requirements of the CZMA.[44] These amendments restored the states' role in offshore decision-making and ensured that offshore activities, as well as those in the coastal zone, would address state policies and concerns for the management of state oceans and coasts.

Some states had, however, already started the process of developing policies and management plans for their state oceans and beyond.[45] Oregon's Ocean Resources Management Plan (Ocean Plan) was prepared by a Task Force created in 1987 by the State legislature.[46] The innovative Ocean Plan addressed policies, planning, and management not only in state waters, but also in an Ocean Stewardship Area that extends seaward to the two-thousand-meter isobath[47] at the edge of the continental margin.[48] The Ocean Plan was incorporated into both the State's federally approved coastal management program[49] and the State's comprehensive planning program as a statewide planning goal.[50] In 1989, Washington enacted the Ocean Resources Management Act,[51] which adopted policies and reviewed criteria for activities affecting ocean resources and banned oil and gas exploration, development, and production in state waters.[52] Other states, including North Carolina, Hawaii, Florida, and California, took

44. 16 U.S.C. § 1456(c)(1)(A) (2012). For federal actions, consistency with state coastal management must be to the "maximum extent practicable." *Id.* Federally permitted activities must be "conducted in a manner consistent with the program." *Id.* § 1456(c)(3)(A).

45. *See generally* Marc J. Hershman, *Ocean Management Policy Development in Subnational Units of Government: Examples from the United States*, 31 OCEAN & COASTAL MGMT. 25, 29–33 (1996) (describing five federal programs that have expanded the opportunities for states to establish policy in the offshore waters they control).

46. THE OR. OCEAN RES. MGMT. TASK FORCE, OREGON'S OCEAN RESOURCES MANAGEMENT PLAN 5 (1991), *available at* http://www.oregon.gov/LCD/OCMP/pages/ocean_plan.aspx#Ocean_Plan_Document.

47. "[A]n imaginary line or one drawn on a map connecting all points of equal depth below the surface of a body of water." *Isobath*, Dictionary.com, http://dictionary.reference.com/browse/isobath (last visited Apr. 13, 2015).

48. *Id.* at 13.

49. Hershman, *supra* note 45, at 29.

50. The state's Land Conservation and Development Commission adopted the Ocean Plan as part of the state's comprehensive planning program in 1977 as Statewide Planning Goal 19, Ocean Resources. *See* http://www.oregon.gov/LCD/OCMP/pages/ocean_policies.aspx (last visited Apr. 13, 2015) (stating that, "Oregon . . . specifies the Ocean Plan as a primary component of the Oregon Ocean Resources Management Program").

51. WASH. REV. CODE § 43.143 (2010).

52. *Id.* §§ 43.143.010–.030.

initial steps toward ocean policy planning by initiating reports and studies on ocean management issues.[53]

More recently, ocean policy planning has entered a new era with California and Massachusetts leading the efforts. Building on the ocean planning and management policies of the California Ocean Resources Management Act of 1990,[54] California moved forward with Governor Schwarzenegger's Ocean Action Plan in 2004.[55] The Action Plan included the adoption of the California Ocean Protection Act,[56] which created the Ocean Protection Council and charged it with establishing policies, recommending legislation, and coordinating ocean agencies and activities.[57] The Council was also given responsibility for implementing the Marine Life Protection Act (MLPA),[58] which has led to the creation of a coordinated network of marine protected areas along California's coast.[59] To better organize and manage the proliferation of marine protected areas, the Marine Managed Areas Improvement Act of 2000[60] categorized marine protected areas into six classifications.[61] The Act also organized "agencies, departments, boards, commissions, and conservancies with jurisdiction or management interests"[62] into a State Interagency Coordinating Committee tasked with creating guidelines for designating protected areas, reviewing proposals for new marine protected areas, and periodically reviewing whether existing areas are achieving the goals of the designation.[63] Successful implementation of the MLPA has

53. Hershman, *supra* note 45, at 29.

54. CAL. PUB. RES. CODE §§ 36000–36500 (2013).

55. CAL. RES. AGENCY & CAL. ENVTL. PROT. AGENCY, PROTECTING OUR OCEAN: CALIFORNIA'S ACTION STRATEGY i (2004), *available at* http://www.aquariumofpacific.org/images/mcri_uploads/CA_ActionStrat.pdf.

56. CAL. PUB. RES. CODE §§ 35500–35650.

57. *Id.* §§ 35600(a), 35615(a)(1), (2), (6).

58. CAL. FISH & GAME CODE § 2850.5 (2013).

59. *See generally* Deborah A. Sivas & Margaret R. Caldwell, *A New Vision for California Ocean Governance: Comprehensive Ecosystem-Based Marine Zoning*, 27 STAN. ENVTL. L.J. 209, 238–39 (2008) (explaining the categorization system of marine protected areas implemented under the MLPA); *California Marine Protected Areas (MPAs)*, CAL. DEP'T OF FISH AND WILDLIFE, http://www.dfg.ca.gov/marine/mpa (last visited Apr. 13, 2015) (stating that passage of the MLPA required the Department of Fish and Wildlife to make more-coherent its system of areas designated as marine protected areas).

60. CAL. PUB. RES. CODE § 36600–36620.

61. The six categories are: state marine reserves, state marine parks, state marine conservation areas, state marine cultural preservation areas, state marine recreational management areas, and state water quality protection areas. *Id.* § 36700.

62. *Id.* § 36800.

63. *Id.* §§ 36800, 36850.

been largely attributed, however, to the Marine Life Protection Act Initiative—a public–private effort including a Blue Ribbon Task Force, a Master Plan Science Advisory Team, and a Regional Stakeholder Group for each region of the state, all volunteer bodies.[64]

California has also joined with Oregon and Washington in the West Coast Governors' Agreement on Ocean Health to create a regional collaboration capable of managing ocean and coastal resources along the entire west coast of the United States on an ecosystem basis.[65]

Massachusetts's Ocean Management Initiative was launched in 2003 with the establishment of the Massachusetts Ocean Management Task Force.[66] The Task Force was charged with investigating ocean use trends and existing governance mechanisms; drafting recommendations for administrative, regulatory, and statutory changes; and developing ocean management principles that address the pace and complexity of today's opportunities and challenges.[67] The recommendations of the Task Force provided a foundation for the Oceans Act of 2008.[68] The Oceans Act required the State to develop a comprehensive ocean management plan through a process involving both the scientific community and stakeholders.[69] In addition to receiving assistance from an advisory council of nine scientists,[70] the State's Department of Energy and Environmental Affairs was advised in plan

64. John Kirlin et al., *California's Marine Life Protection Act Initiative: Supporting Implementation of Legislation Establishing a Statewide Network of Marine Protected Areas*, 74 OCEAN & COASTAL MGMT. 3, 4, 7–8, 10–11 (2013).

65. THE OFFICE OF THE GOVERNORS: WASH., OR., & CAL., WEST COAST GOVERNORS' AGREEMENT ON OCEAN HEALTH: ACTION PLAN 2 (2008), *available at* http://www.westcoastoceans.org/media/WCGA_ActionPlan_low-resolution.pdf.

66. Mass. Exec. Office Energy & Envtl. Aff., *Massachusetts Ocean Management Initiative (2003–2004)*, MASS.GOV, http://www.mass.gov/eea/agencies/czm/program-areas/ocean-management/ocean-management-initiative (last visited Apr. 13, 2015).

67. Mass. Exec. Office Energy & Envtl. Aff., *Charge to the Massachusetts Ocean Management Task Force*, MASS.GOV, http://www.mass.gov/eea/agencies/czm/program-areas/ocean-management/ocean-management-initiative/ocean-management-task-force-charge.html (last visited Apr. 13, 2015).

68. MASS. GEN. LAWS ch. 21A, § 4C (2009).

69. *Id.* § 4C(d).

70. *See id.* (mandating the institutions at which the scientists must be employed). The Ocean Science Advisory Council includes nine scientists with expertise in the marine sciences and data management who assisted in development of the ocean management plan. Mass. Exec. Office Energy & Envtl. Aff., *Ocean Science Advisory Council*, MASS.GOV, http://www.mass.gov/eea/waste-mgnt-recycling/coasts-and-oceans/mass-ocean-plan/ocean-science-advisory-council.html (last visited Apr. 13, 2015).

development by a seventeen-member commission of stakeholders, regulators, and policymakers.[71] The goals of the ocean management plan were to:

> (1) Balance and protect the natural, social, cultural, historic, and economic interests of the marine ecosystem through integrated management[;]
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> (2) Recognize and protect biodiversity, ecosystem health, and the interdependence of ecosystems[;]
>
> (3) Support wise use of marine resources, including renewable energy, sustainable uses, and infrastructure[; and to]
>
> (4) Incorporate new knowledge as the basis for management that adapts over time to address changing social, technological, and environmental conditions . . . .[72]

The goals of the plan were achieved by coordinating planning across jurisdictional levels within an adaptive framework.[73] The plan takes a spatial planning approach, using ecosystem-based management principles to identify and protect "special, sensitive, [and] unique" areas for protection[74] and attempts to balance allowed uses, activities, and infrastructure by designation of areas and uses to minimize conflicts and streamline permitting.[75] Adoption of the plan in 2009,[76] with its use of a marine spatial planning approach, put Massachusetts in the forefront of comprehensive state ocean and coastal planning in the United States.

Rhode Island, "actively pursuing the development of a clean energy economy"[77] and responding to the governor's call for an

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71. The Ocean Advisory Commission included legislators and agency heads, as well as representatives of commercial fishing, environmental organizations, offshore renewable energy, and coastal Regional Planning Agencies. *Id.*

72. 1 MASS. OFFICE ENERGY & ENVTL. AFF., MASSACHUSETTS OCEAN MANAGEMENT PLAN: MANAGEMENT AND ADMINISTRATION 1-3, 1-4 (2009), *available at* http://www.env.state.ma.us/eea/mop/final-v1/v1-text.pdf.

73. *Id.* at 1–3.

74. *Id.*

75. *Id.*

76. Mass. Exec. Office Energy & Envtl. Aff., *2009 Massachusetts Ocean Management Plan*, MASS.GOV, http://www.mass.gov/eea/waste-mgnt-recycling/coasts-and-oceans/mass-ocean-plan/final-massachusetts-ocean-management-plan.html (last visited Apr. 13, 2015).

77. Danny Musher, *The Rhode Island State Energy Plan*, ST. OF R.I. OFF. OF ENERGY RES., http://www.energy.ri.gov/energyplan/index.php (last visited Apr. 13, 2015).

expedited process for offshore wind turbine siting,[78] soon followed Massachusetts into comprehensive ocean planning.[79] The State developed a Special Area Management Plan (SAMP) to determine how and where the State's oceans would be used to protect traditional uses and accommodate new uses through a collaborative process involving the State and federal governments, stakeholders and scientists.[80] Rhode Island was not a novice at marine spatial planning, having used the approach in designing ecosystem-based management schemes for six previous SAMPs.[81] The plan created use categories for all of the State's marine waters out to three nautical miles from shore,[82] designating multi-use waters,[83] areas of particular concern,[84] and areas designated for

78. JENNIFER MCCANN & SARAH SCHUMANN, THE RHODE ISLAND OCEAN SPECIAL AREA MANAGEMENT PLAN: MANAGING OCEAN RESOURCES THROUGH COASTAL AND MARINE SPATIAL PLANNING, A PRACTITIONER'S GUIDE 7 (Grover Fugate et al. eds., 2013) [hereinafter R.I. PRACTITIONER'S GUIDE], *available at* http://seagrant.gso.uri.edu/oceansamp/pdf/Practitioner_Guide.pdf; *see also* 1 JENNIFER MCCANN ET AL., RHODE ISLAND OCEAN SPECIAL AREA MANAGEMENT PLAN, ch. 1, 11 (2011) [hereinafter R.I. OCEAN SAMP], *available at* http://seagrant.gso.uri.edu/oceansamp/pdf/samp_crmc_revised/RI_Ocean_SAMP.pdf ("In 2004, the Rhode Island General Assembly passed the Renewable Energy Standard (R.I.G.L. 39-26-1 et seq.) which mandates that the state meet [sixteen] percent of its electrical power needs with renewable energy by 2019. In 2007, Rhode Island's Office of Energy Resources (OER) determined that investment in offshore wind farms would be necessary for achieving Governor Donald Carcieri's additional mandate that offshore wind resources provide [fifteen] percent of the [S]tate's electrical power by 2020. In response, the CRMC proposed the creation of a SAMP as a mechanism to develop a comprehensive management and regulatory tool that would proactively engage the public and provide policies and recommendations for appropriate siting of offshore renewable energy.")

79. R.I. PRACTITIONER'S GUIDE, *supra* note 78, at 8 (defining SAMPs as "ecosystem-based management strategies designed to preserve and restore ecological systems," that are "developed and implemented in coordination with local municipalities, as well as government agencies and community organizations").

80. *Id.* at 4.

81. R.I. OCEAN SAMP, *supra* note 78, at Exec. Summary 1; *see also* Barbara A. Vestal, *Dueling with Boat Oars, Dragging Through Mooring Lines: Time for More Resolution of Use Conflicts in States' Coastal Waters?* 4 OCEAN & COASTAL L.J. 1, 64 (1999) ("Rhode Island, one [of] the first states to use marine zoning as a component of its comprehensive land and water management system, established a state coastal permitting system in 1971. It requires a Coastal Resources Management Council (CRMC) assent for all new development activities in tidal waters, on the shoreline, or landward to within 200 feet of specified coastal features, and for specific, potentially high-impact development in any location. The program is built on water use categories which apply to all coastal waters of the [S]tate. Each water use category permits only certain uses, and the permissible upland activity is dictated by the adjoining water use category." (footnotes omitted)).

82. R.I. OCEAN SAMP, *supra* note 78, at ch. 1, 3.

83. In these waters, the "policy is to achieve a balance among diverse activities while preserving and restoring ecological systems." *Id.* at ch. 1, 5.

84. *Id.*

preservation.[85] The SAMP planning area extends beyond state waters to certain areas identified as "vital to the state's way of life."[86]

The Rhode Island Ocean SAMP, adopted in October 2010,[87] provides the policy framework for the Coastal Resources Management Council, which has regulatory, planning, and management jurisdiction for offshore projects in Rhode Island waters.[88] Beyond conceiving a plan for management and regulation of state waters, Rhode Island views the SAMP as providing the basis for a substantial role for the State in decision-making concerning federal activities in the offshore.[89]

III. THE BEGINNINGS OF OCEAN POLICY DEVELOPMENT IN FLORIDA

Florida's first step toward ocean policy development was a study commissioned by the Florida Governor's Office in 1988 to review the State's laws and policies related to coastal and ocean management, to identify gaps, overlaps, and conflicts in jurisdictions and authorities, and to make recommendations concerning ocean management policy.[90] In response to the report's emphasis

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> These Areas of Particular Concern have been identified through the Ocean SAMP process and include: areas with unique or fragile physical features, or important natural habitats; areas of high natural productivity; areas with features of historical significance or cultural value; areas of substantial recreational value; areas important for navigation, transportation, military and other human uses; and areas of high fishing activity. For example, glacial moraines within the Ocean SAMP area have been designated as Areas of Particular Concern because they are important habitat areas for fish due to their relative structural permanence and structural complexity.

Id.

85. Areas Designated for Preservation are intended to preserve important habitats for their ecological value, including for example certain sea duck foraging habitats, and prohibits certain types of offshore development in these areas. *Id.*

86. R.I. PRACTITIONER'S GUIDE, *supra* note 78, at 8.

87. *Id.* at 7.

88. R.I. OCEAN SAMP, *supra* note 78, at ch. 1, 14; *see also* R.I. PRACTITIONER'S GUIDE, *supra* note 78, at 26 (summarizing permitting requirements and permitting authorities for Ocean SAMP developments).

89. R.I. PRACTITIONER'S GUIDE, *supra* note 78, at 28; R.I. OCEAN SAMP, *supra* note 78, at 4.

90. Donna R. Christie & Paul Johnson, *State Ocean Policy Initiatives in Florida*, 18 COASTAL MGMT. 283, 284–85 (1990). *See generally* DONNA R. CHRISTIE, FLORIDA'S OCEAN FUTURE: TOWARD A STATE OCEAN POLICY 3 (1989) (prepared for the Governor's Office of Planning and Budgeting) (identifying the objectives of the study conducted as a precursor to the development of a State Ocean Policy for Florida).

on the need for complete and coordinated information on the State's resources and uses, the Statewide Ocean Resource Inventory (SORI) was funded by the Florida Coastal Management Program and developed by the Florida Marine Research Institute (FMRI) to provide a Geographic Information System (GIS) system that links management issues with spatial and nonspatial inventories of data associated with the management issues.[91] SORI continues to contribute to marine planning and decision-making as the predecessor to the Coastal and Marine Resources Assessment's Marine Spatial Planning Tool[92] and has served as the model for NOAA's Ocean Planning Information Service (OPIS).[93]

Ocean policy was again addressed at the executive level in 1998 when Governor Lawton Chiles declared the "Year of the Ocean" and created a Governor's Ocean Committee to make recommendations for a comprehensive approach to state ocean management.[94] The Committee comprised a broad representation of stakeholder, government, conservation, education, science, recreation, and business interests.[95] Although the Committee proposed a broad array of recommendations and strategies, the most visi-

91. *See* Courtney Westlake et al., *Protecting Florida's Oceans (Abstract)*, ESRI (1997), http://proceedings.esri.com/library/userconf/proc97/proc97/abstract/a360.htm (describing the efforts and goals of the Statewide Ocean Resource Inventory project); *see also* Fla. Governor's Ocean Comm., *Florida's Ocean Horizon*, 1000 FRIENDS OF FLA. (1999), http://www.1000friendsofflorida.org/floridas-ocean-horizon/ (same).

92. *Coastal and Marine Resources Assessment System*, FLA. FISH AND WILDLIFE CONSERVATION COMM'N, http://ocean.floridamarine.org/CAMRA/ (last visited Apr. 13, 2015) (describing the system as "[a] map-based application" that provides users with visual representations of different data sets drawn from a wide spectrum of natural and manmade information, features, and actions); *see infra* text accompanying notes 249–64 (explaining the critical role CMSP should play in Florida's ocean planning program and detailing the efforts of CMSP's proponents, including groups such as the Florida Oceans and Coastal Council, the Florida Ocean Alliance, and the Florida Coastal and Ocean Coalition).

93. *See, e.g.*, Cindy Fowler, *NOAA's Ocean Planning Information System for the South Atlantic States*, 8 COASTAL CURRENTS 1, Spring 2000, at 5, *available at* http://www.dep.state.fl.us/cmp/publications/cc/ccspr00.pdf ("As the only comprehensive marine GIS in the nation, SORI was the natural and logical choice as a model for [a national ocean information system].").

94. *See* FLA. GOVERNOR'S OCEAN COMM., FLORIDA'S OCEAN STRATEGIES: FINAL REPORT TO THE GOVERNOR app. A (1999), *available at* http://www.floridaoceanalliance.org/documents/governor_ocean_final_report.pdf (identifying the State's assets embodied in or dependent on the oceans and coasts, the State's long term goals for those assets, and the challenges to achieving those goals).

95. James F. Murley & Laura Cantral, *Development of a Comprehensive Ocean Policy for Florida*, TRENDS AND FUTURE CHALLENGES FOR U.S. NAT'L OCEAN AND COASTAL POLICY 121, 123 (1999), *available at* http://oceanservice.noaa.gov/websites/retiredsites/natdia_pdf/ctrends_proceed.pdf.

ble result was Florida's 2005 creation of the Florida Oceans and Coastal Council to review, assess, and prioritize ocean research, create a statewide ocean research plan, and make recommendations to the legislature for research funding.[96] The Act also required the Council to "prepare a comprehensive oceans and coastal resource assessment that shall serve as a baseline of information"[97] which would include:

> (a) Patterns of use of oceans and coastal resources;
>
> (b) Natural resource features, including, but not limited to, habitat, bathymetry, surficial geology, circulation, and tidal currents;
>
> (c) The location of current and proposed oceans and coastal research and monitoring infrastructure;
>
> (d) Industrial, commercial, coastal observing system, ships, subs, and recreational transit patterns; and
>
> (e) Socioeconomic trends of the state's oceans and coastal resources and oceans and coastal economy.[98]

Unfortunately, the Council and its work have not been consistently funded.[99]

IV. WHY NOW?

Ocean policy development and ocean management planning by states has often received a low priority. Compared to the intensive use of the landward side of the coastal zone, the number and intensity of resource and use conflicts in the marginal seas have been relatively low. Often, the impetus for states to dedicate scarce resources to ocean policy and management has been a specific challenge to their sovereign prerogatives or perceived authority, such as the Supreme Court's limitation of the CZMA's

96. *See* FLA. STAT. §§ 161.72(2), 161.74(1)–(2) (2013) (describing the Council's role in identifying coastal concerns that the legislature should target with lawmaking and funding).

97. *Id.* § 161.74(3).

98. *Id.*

99. *See, e.g.*, JULIE HAUSERMAN, FLORIDA'S COASTAL AND OCEAN FUTURE 24 (2006), *available at* http://www.nrdc.org/water/oceans/florida/flfuture.pdf (recounting Governor Bush's veto of the Council's budget in 2006).

consistency requirement[100] or the need to address new environmental issues or uses of the marginal seas, such as wind farm development in New England.[101] But the twenty-first century holds more challenges for ocean use and resource management. Today, for example, Florida faces not only the need to protect its resources and economy and to consider the consequences of newly proposed uses of its state ocean waters, but also the challenge of participating effectively in development and implementation of national ocean policy and marine spatial planning in federal offshore waters.

A. Offshore Oil and Gas Development and Florida's Oceans

From 1944 until 2005,[102] the mineral development rights for Florida's Gulf of Mexico submerged lands were in the hands of a single party, Coastal Petroleum,[103] but oil and gas development of those offshore lands had not been a major priority for most of that period for either the owner of the rights or for the State.[104] In fact, the Legislature in 1990 had prohibited the Board of Trustees of the Internal Improvement Trust Fund from issuing permits for oil and gas development.[105] Florida also consistently opposed oil and gas development in adjacent federal OCS waters in recent decades.[106] In 2005, Florida finally reacquired the mineral rights of the leaseholder in the Gulf of Mexico for $12.5 million,[107] end-

100. *Supra* text accompanying notes 26–34.

101. *Supra* text accompanying notes 70–71.

102. *Infra* text accompanying note 103.

103. For a discussion of the history of Coastal Petroleum's lease in Florida's Gulf of Mexico waters, see Leigh Derenne Braslow, *Coastal Petroleum's Fight to Drill off Florida's Gulf Coast*, 12 J. LAND USE & ENVTL. L. 343 (1997).

104. *See generally id.* at 348–52 (describing the history of oil and gas leases in Florida's Gulf of Mexico waters).

105. Under the provision, no permit to drill for oil or gas may be issued within offshore state waters "[w]ithout exception." FLA. STAT. § 377.24(9) (2012).

106. *See* Braslow, *supra* note 103, at 347–53 (discussing Florida legislation that banned offshore oil drilling); Valerie J. Amor, *Local Cities Oppose Oil and Gas Drilling, Passing Resolutions and Legislative Language*, EXAMINER.COM (Mar. 2, 2010), http://www.examiner.com/article/local-cities-oppose-oil-and-gas-drilling-passing-resolutions-and-legislative-language (singling out opposition ordinances passed in Broward County cities); Bruce I. Friedland, *Florida Lawmakers Oppose Oil Drilling*, JACKSONVILLE.COM (Apr. 26, 2001), http://jacksonville.com/tu-online/stories/042601/met_6013004.html (describing actions taken by Florida's Senators and Representatives to block offshore mineral development in Florida).

107. Memorandum of Agreement by and between Coastal Petroleum Co., et al. and the State of Florida Dated June 1, 2005, *Memorandum of Settlement* (June 1, 2005), *available*

ing the potential for any development by the company and resolving the inconsistency involved in the State's position of having leased oil and gas production in its state waters while objecting to nearby federal OCS development.

During the 2009 legislative session, however, new interest in offshore oil and gas development surfaced. The Florida House hastily passed legislation that would have removed the prohibition on granting new leases on state-owned submerged lands and permits for exploration and development of oil or gas resources in state waters between three and nine miles off Florida's Gulf coast.[108] Although the bill ultimately died before reaching a Senate vote in 2009,[109] a similar bill was introduced in the next legislative session, prior to the Deepwater Horizon oil spill.[110] Unsurprisingly, the bill died in the Committee on Environmental Preservation and Conservation immediately after the spill.[111] But the spill also prompted then-Governor Charlie Crist to call a special session to consider amending the Florida Constitution to prohibit drilling off of the coast of Florida.[112] The proposal, if it had been approved during the 2010 special session, would have allowed Florida voters to consider the constitutional amendment. The Florida House, however, effectively blocked the proposal.[113] Additionally, in 2011, two joint resolutions of the house and the senate,[114] introduced to amend the Constitution to prohibit oil

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at http://www.sec.gov/Archives/edgar/containers/fix041/21239/000108935505000119/ex-10_h.htm.

108. H.R. 1219, 2009 Leg., Reg. Sess. § 5 (Fla. 2009) (proposed FLA. STAT. § 377.24(6), (7), (9)); Josh Hafenbrack & Tonya Alanez, *Florida House Approves Offshore Drilling*, SUN SENTINEL (Apr. 28, 2009, 1:20 AM EDT), http://www.sun-sentinel.com/news/local/florida/sfl-florida-oil-drilling-042709,0,210.story.

109. H.R. HISTORY OF HOUSE BILLS, 2009 Leg., Reg. Sess. 343 (Fla. 2009).

110. S.B. 2622, 2010 Leg., Reg. Sess. § 5 (Fla. 2010) (proposed FLA. STAT. § 377.24(6), (7), (9)); S. HISTORY OF SENATE BILLS, 2010 Leg., Reg. Sess. 214 (Fla. 2010).

111. FLA. S. HISTORY OF SENATE BILLS, 2010 Leg., Reg. Sess. at 214.

112. *Crist Calls Special Session to Ban Oil Drilling*, SUNSENTINEL (May 11, 2010, 3:03 PM EST), http://weblogs.sun-sentinel.com/news/politics/dcblog/2010/05/crist_calls_special_session_to.html.

113. The Florida House adjourned after forty-nine minutes of deliberation (the shortest special session to date), ultimately leading to the proposal's death. Steve Bousquet et al., *Florida Legislature Adjourns, Rejecting Vote on Constitutional Amendment Banning Oil Drilling*, TAMPA BAY TIMES (July 20, 2010, 1:10 PM), http://www.tampabay.com/news/business/energy/florida-legislature-adjourns-rejecting-vote-on-constitutional-amendment/1109979.

114. S.J. Res. 928, 2011 Leg., Reg. Sess. (Fla. 2011) (proposed amendment to FLA. CONST. art. II, § 7); H.R.J. Res. 383, 2011 Leg., Reg. Sess. (Fla. 2011) (proposed amendment to FLA. CONST. art. II, § 7).

drilling in Florida offshore state waters, died before being voted on.[115] The failure to incorporate prohibitions on oil and gas development into the Florida Constitution leaves open the possibility for the legislature to reopen the issue of offshore oil and gas development in Florida waters without the opportunity to plan for its environmental or economic effects or to develop a dedicated regulatory framework for the activities.

In spite of the Deepwater Horizon oil spill, the interest in oil and gas development in Florida has not waned. Recently, a Harris Interactive poll conducted for the American Petroleum Institute indicated that sixty-four percent of voters in Florida support offshore drilling.[116] Although the current emphasis in Florida has been on drilling onshore in southwest Florida[117] and on hydraulic fracturing ("fracking"),[118] the issue of drilling in Florida's offshore waters is likely to arise again. A moratorium on oil and gas leasing, created by the Gulf of Mexico Energy Security Act (GOMESA) of 2006,[119] covers federal waters out to 125 miles off Florida in the Gulf of Mexico until 2022.[120] Like Florida's prohibi-

115. S. History of Senate Bills, 2011 Leg., Reg. Sess., S.J. Res. 928 at 94 (Fla. 2011); H.R. History of House Bills, 2011 Leg., Reg. Sess., H.R.J. Res. 383 at 215 (Fla. 2011).

116. Brian Straessle, *Poll Shows Florida Voters Strongly Support Offshore Drilling*, AM. PETROLEUM INST. (Oct. 17, 2013), http://www.api.org/news-and-media/news/newsitems/2013/oct-2013/poll-shows-florida-voters-strongly-support-offshore-drilling. The poll survey included only a sample of 603 Florida registered voters. *Id.* The poll also addressed offshore United States drilling in general, not specifically the offshore Florida region. HARRIS INTERACTIVE, WHAT AMERICA IS THINKING—ACCESS—FLORIDA 1, 2–4 (2013), *available at* http://www.api.org/newsandmedia/news/newsitems/2013/oct-2013/~/media/Files/News/2013/13-October/What-America-Is-Thinking-Access-FL.pdf.

117. *See generally* Evan Williams, *Drilling for Local Oil: Oil Companies Come Back to Southwest Florida*, FLA. WEEKLY (June 5, 2013), http://fortmyers.floridaweekly.com/news/2013-06-05/Business_News/DRILLING_FOR_LOCAL_OIL.html (discussing recent investments of oil companies in Southwest Florida).

118. It should be noted that fracking as a technique to recover natural gas and oil can be used both onshore and offshore. *See, e.g.*, Ken Broder, *More Offshore Fracking Discovered in Southern California Waters*, ALLGOV CALIFORNIA (Oct. 23, 2013), http://www.allgov.com/usa/ca/news/controversies/more-offshore-fracking-discovered-in-southern-california-waters-131023?news=851462; Ken Broder, *While Fracking on Land Comes Under Fire, Energy Companies Quietly Do It Offshore*, ALLGOV CALIFORNIA (Aug. 5, 2013), http://www.allgov.com/usa/ca/news/top-stories/while-fracking-on-land-comes-under-fire-energy-companies-quietly-do-it-offshore-130805?news=850776 (discussing recent offshore fracking practices in California).

119. Gulf of Mexico Energy Security Act of 2006, Pub. L. No. 109-432, § 104, 120 Stat. 3000, 3003 (2006) (codified as amended at 43 U.S.C. § 1331 (2006)).

120. *Id.* § 104(a), 120 Stat. at 3003. Other areas in the Eastern Gulf of Mexico Planning Area were opened for leasing by GOMESA. Most recently, the federal Bureau of Ocean Energy Management (BOEM) prepared a Final Environmental Impact Statement on oil and gas lease sales 225 and 226, tentatively scheduled to be held in 2014 and 2016. Outer

tion on oil and gas leasing in state waters, however, this moratorium is subject to legislative prerogative.[121] Other states, particularly Virginia, are actively attempting to have Congress lift the moratoria that exist in federal waters. A bill introduced by Virginia's senators seeks comparable sharing of revenues with the state of Virginia.[122] Similar legislation advocating OCS revenue-sharing with coastal states has been introduced several times since the passage of GOMESA.[123] States seem more willing to support offshore oil and gas development if guaranteed a significant share of the revenues generated in areas of the states' shores. Florida, too, could rethink its position on offshore oil and gas in exchange for an allocation of the revenues produced from OCS leasing and production.

The number and variability of factors that contribute to the probability of oil and gas exploitation in state and federal waters off Florida's shores[124] makes it virtually impossible to predict if or when drilling will happen. But that uncertainty does not mean that planning for the effects of such development concedes the inevitability of oil and gas development or that planning and policymaking cannot contribute to better decision-making con-

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Continental Shelf (OCS), Gulf of Mexico (GOM), Oil and Gas Lease Sales Eastern Planning Area (EPA) Lease Sales 225 and 226 78 Fed. Reg. 62,660 (Oct. 22, 2013).

121. In both 2011 and 2012, the United States House of Representatives passed legislation that would have expanded oil leasing although it would not have lifted the moratorium. Kevin Derby, *Florida Congressmen Clash on Offshore Drilling*, SUNSHINE STATE NEWS (May 12, 2011, 3:55 AM EST), http://www.sunshinestatenews.com/story/florida-congressmen-clash-offshore-drilling; William E. Gibson, *Oil Drilling off Florida Approved by U.S. House*, SUN SENTINEL (Feb. 17, 2012), http://articles.sun-sentinel.com/2012-02-17/business/fl-offshore-drilling-florida-20120217_1_oil-drilling-environment-and-tourism-royalties-that-energy-companies.

122. S. 1024, 113th Cong. § 3(b)(1)(A)–(2)(A) (2013); Chris McDonald, *Virginia Senators Propose Off-Shore Drilling Bill*, W&L LAW'S JECE BLOG (June 12, 2013), http://jeceblog.com/2013/06/12/virginia-senators-propose-off-shore-drilling-bill/.

123. Sean Parnell & Patrick McCrory, *OCS Governors Coalition Hails Introduction of Revenue Sharing Legislation, Highlights Need for Efficient and Consistent Regulations*, PROJECT VOTE SMART (May 6, 2013), http://votesmart.org/public-statement/782886/ocs-governors-coalition-hails-introduction-of-revenue-sharing-legislation-highlights-need-for-efficient-and-consistent-regulations; Nick Snow, *Administration Opposes Bill to Share OCS Revenue with Coastal States*, OIL & GAS J. (July 24, 2013), http://www.ogj.com/articles/2013/07/administration-opposes-bill-to-share-ocs-revenue-with-coastal-states.html.

124. *See generally* COLLINS CTR. FOR PUB. POLICY, POTENTIAL IMPACTS OF OIL & GAS EXPLORATION IN THE GULF (Apr. 2010) (considering various economic and environmental factors that are relevant in the debate of whether to approve or disapprove offshore oil drilling in federal and Florida waters of the Gulf of Mexico).

cerning ocean uses and resources.[125] In light of this uncertainty, the succinct statement of a report prepared for the Florida Select Policy Council on Strategic and Economic Planning stating its number one recommendation seems particularly relevant: "Integrated maritime planning and management is critical to reducing risks from prospective oil and gas activities."[126]

B. Offshore Alternative Energy Development

The oceans are becoming important sites for alternative, renewable energy development. Offshore renewable energy (ORE) has the potential to provide a substantial portion of Florida's energy needs. A very small fraction of the energy produced by the Gulf Stream, for example, could supply an estimated thirty-five percent of Florida's energy needs.[127] In some cases, such as ocean kinetic energy or ocean thermal conversion, the ocean is the source of the energy. In other cases, like wind farms, offshore siting often has better wind resource availability, but offshore siting also avoids the problems of incompatible land uses (NIMBYs[128]) and the unavailability or high cost of coastal property in proximity to urban energy consumers. These new uses of the oceans will compete with many of the traditional ocean uses for coastal space and contribute to cumulative impacts on the ocean environment.

Many of the currently proposed energy projects will not take place in Florida's state waters, but this does not mean that the State has no stake in the planning and development of the offshore beyond state boundaries. Siting and operation of projects and transmission lines to the shore can have substantial environmental and economic consequences within the Florida coastal

125. *See, e.g.*, *id.* at 6–7 (describing the variables state policy-makers must evaluate when considering state and federal moratoriums on offshore mineral extraction).

126. WILLIS STRUCTURED RISK SOLUTIONS, FLORIDA GULF COAST OIL AND GAS RISK ASSESSMENT 1, 6 (2010), *available at* http://www.myfloridahouse.gov/Sections/Documents/loaddoc.aspx?PublicationType=Committees&CommitteeId=2546&Session=2010&DocumentType=Meeting%20Packets&FileName=SPCSEP_Mtg_4-14-10_online.pdf.

127. *Renewable Energy Programs: Ocean Current Energy*, BUREAU OCEAN ENERGY MGMT., http://www.boem.gov/Renewable-Energy-Program/Renewable-Energy-Guide/Ocean-Current-Energy.aspx (last visited Apr. 13, 2015).

128. NIMBY stands for Not In My Backyard and is a generally pejorative term used to describe individuals that oppose development that may benefit the larger community at the expense of local property interests. Susan Lorde Martin, *Wind Farms and NIMBYs*, 20 FORDHAM ENVTL. L. REV. 427, 427 (Winter 2010).

zone. Projects may also interfere with the operation of ports and shipping or with commercial and recreational fishing. Through the federal consistency provisions of the CZMA,[129] Florida can have a significant role in the creation of standards for and the siting of ORE facilities, but its role will be effective only if the State has adequately considered the benefits and consequences of such development.

Capture of ocean kinetic energy by means of turbines placed in the Gulf Stream may be the first ORE project in federal waters off Florida's coast. Florida Atlantic University's Southeast National Marine Renewable Energy Center (SNMREC) (formerly the Center for Ocean Energy Technology) has been designated a national center for ocean energy research and development by the United States Department of Energy (DOE).[130] In collaboration with industry partners, Florida Atlantic University (FAU) intends to install a small test turbine in the Gulf Stream off the coast of Florida to assess energy output potential and monitor environmental effects.[131] SNMREC has already placed acoustic Doppler current profilers to measure the current velocity throughout the water column[132] and identify the most viable sites for the turbine.[133] This pilot project is the first to apply for a Bureau of Ocean Energy Management (BOEM) lease to install, op-

129. 16 U.S.C. § 1456 (2012); *supra* text accompanying notes 26–34.

130. Press Release from Fla. Atl. Univ., *United States Department of Energy Designates FAU's Center for Ocean Energy Technology as a New National Marine Renewable Energy Center*, (Aug. 5, 2010) (on file with Author), *available at* http://www.fau.edu/mediarelations/Releases0810/081004.php.

131. F. R. Driscoll et al., *A 20 KW Open Ocean Current Test Turbine*, OCEANS 2008, Sept. 2008.

132. Andrew, *Florida Atlantic's National Marine Renewable Energy Center Applies to Test Marine Turbines in the Gulf Stream*, CLEANTECHNICA (Apr. 26, 2012), http://cleantechnica.com/2012/04/26/florida-atlantics-national-marine-renewable-energy-center-applies-to-test-marine-turbines-in-the-gulf-stream/.

133. Determining a viable spot within the Gulf Stream may present a challenge because the Gulf Stream has a tendency to drift east and west. *See* William E. Johns & Friedrich Schott, *Meandering and Transport Variations of the Florida Current*, 17 J. OF PHYSICAL OCEANOGRAPHY 1128, 1128 (1986) (finding that the Florida Current meandered up to 340 kilometers during twelve days between 1984 and 1985). To compensate for the dynamic current, Center for Ocean Energy Technology will likely have to position turbines in the most consistent areas of the Gulf Stream, but the turbines will have to have the potential to seek out the strongest parts of the current. James Kirley, *Local Scientists Building Ocean Test Bed to Tap Gulf Stream's Power*, TCPALM.COM (Oct. 16, 2011), http://www.tcpalm.com/news/2011/oct/16/local-scientists-building-ocean-test-bed-to-tap/?print=1. The meandering Gulf Stream could also lead to federal–state jurisdictional problems.

erate, and monitor offshore experimental marine turbines.[134] BOEM's final Environmental Assessment has found the project will have no significant impact,[135] opening the way for the research turbine, designed and built at FAU, to be deployed.[136] The data gathered from the project will be shared with researchers, academics, and industry to facilitate further energy development from the Gulf Stream.[137]

FAU is also conducting research on the use of ocean thermal energy conversion (OTEC) to produce electricity from the temperature gradients in the ocean between warm, surface seawater and the cold water near the ocean bottom.[138] Results from initial measurements suggest that temperature stratification in waters off southern Florida may provide the potential for OTEC development.[139]

Wave energy may also be harnessed to produce energy. Wave energy prototype turbines were deployed outside of St. Petersburg, Florida, in 2007.[140] Additionally, Dr. Stephen Wood and students from the Florida Institute of Technology have developed and are testing an experimental wave energy turbine designed to avoid harming marine life outside of Fort Pierce, Florida.[141]

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134. Andrew, *supra* note 132; Kirley, *supra* note 133; Susan Salisbury, *FAU's Proposed Project to Harness Gulf Stream's Energy Reaches Milestone*, PALM BEACH POST (Aug. 13, 2013, 4:57 PM), http://www.mypalmbeachpost.com/news/business/faus-proposed-project-to-harness-gulf-streams-ener/nZNTh/.

135. Environmental Assessment for Potential Lease Issuance and Marine Hydrokinetic Technology Testing Offshore Florida, 78 Fed. Reg. 49,287, 49,287 (Aug. 13, 2013); Press Release from Fla. Atl. Univ., *FAU's Southeast National Marine Renewable Energy Center Celebrates Key Milestone to Establish the World's First Offshore Test Site to Capture Ocean Current Energy* (Aug. 12, 2013) (on file with Author), *available at* http://snmrec.fau.edu/news/fau%E2%80%99s-southeast-national-marine-renewable-energy-center-celebrates-key-milestone-establish.

136. BUREAU OF OCEAN ENERGY MGMT. OFFICE OF RENEWABLE ENERGY PROGRAMS, LEASE ISSUANCE FOR MARINE HYDROKINETIC TECHNOLOGY TESTING ON THE OUTER CONTINENTAL SHELF OFFSHORE FLORIDA: REVISED ENVIRONMENTAL ASSESSMENT iii (2013), *available at* http://www.boem.gov/Florida-Revised-EA-FONSI-August2013/.

137. Andrew, *supra* note 132.

138. Greg Allen, *Harnessing the Power of the Gulf Stream*, NPR (Dec. 3, 2007, 12:01 AM), http://www.npr.org/templates/story/story.php?storyId=16713781; Press Release from Fla. Atl. Univ., *supra* note 130.

139. *Ocean Thermal Measurement*, FLA. ATL. UNIV., http://snmrec.fau.edu/resource-measurement-modeling/ocean-thermal-measurement (last visited Apr. 13, 2015).

140. *Wave-Powered Generators Deployed off Florida Coast*, RENEWABLE ENERGY WORLD (Aug. 7, 2007), http://www.renewableenergyworld.com/rea/news/article/2007/08/wave-powered-generators-deployed-off-florida-coast-49562.

141. Billy Wells & Stephen Wood, *Wave Energy Technology Becoming a Reality at Florida Institute of Technology*, FLORIDA TECH BLOG (June 18, 2012), http://blogs

In addition to being a potential source of renewable energy, the seas off Florida's coasts may also be the site for other renewable energy development. Florida, while not known for its wind potential onshore, potentially has strong enough sea breezes to make offshore wind farms both practicable and effective.[142] Florida State University's Center for Ocean-Atmospheric Prediction Studies (COAPS) and Institute for Energy Systems, Economics, and Sustainability (IESES) have recently conducted a joint pilot study to investigate wind resources at towers and buoys in eight locations off Florida's coasts.[143] The offshore wind resource measurements indicate that at several different offshore sites in Florida the capacity factor[144] is high enough to be economically viable.[145] The Department of Interior's BOEM has given a great deal of attention to clarifying authorities and streamlining processes to accommodate offshore leasing for wind farms to facilitate and expedite development.[146] Although it may take as long as ten years to fully research and develop Florida's offshore wind capacity, the federal framework and processes will be in place to eliminate barriers to investment and development that existed

.fit.edu/blog/academics/marine-environmental/wave-energy-technology-becoming-a-reality-at-florida-institute-of-technology/#.UlhRVRC_uoE.

142. Sarah Mueller, *Wind of Opportunity Blows for Jacksonville Shipyard*, JACKSONVILLE BUS. J. (Dec. 23, 2011, 6:00 AM EST), http://www.bizjournals.com/jacksonville/print-edition/2011/12/23/wind-of-opportunity-blows-for.html?page=all.

143. CTR. FOR OCEAN-ATMOSPHERIC PREDICTION STUDIES, THE POWER OF WIND: INVESTIGATIONS INTO THE VIABILITY OF HARNESSING OFFSHORE WIND ENERGY FOR FLORIDA, *available at* http://coaps.fsu.edu/docs/offshorewindenergyfactsheet.pdf.

144. Capacity factor equals the energy output at observed conditions compared to maximum output under optimal conditions. *Id.*

145. *See id.* (showing a chart with preliminary results from the study that indicate several of the locations researched are near or exceed a thirty percent capacity factor and thus are economically viable).

146. *See Regulatory Framework and Guidelines*, BUREAU OF OCEAN ENERGY MGMT., http://www.boem.gov/Regulatory-Development-Policy-and-Guidelines/ (last visited Apr. 13, 2015) (providing resources that describe, clarify, and interpret regulations related to the OCS Renewable Energy Program). The first licensed offshore wind project, the Cape Wind Project, took nearly a decade to receive approval because of lack of clear federal policies and problems concerning jurisdiction. UNITED STATES DEP'T OF INTERIOR MINERALS MGMT. SERV., RECORD OF DECISION: CAPE WIND ENERGY PROJECT 2–6 (2010), *available at* http://www.boem.gov/uploadedFiles/BOEM/Renewable_Energy_Program/Studies/CapeWindROD.pdf (describing the approval process of the Cape Wind Project); *Cape Wind*, BUREAU OF OCEAN ENERGY MGMT., http://www.boem.gov/RenewableEnergyProgram/Studies/Cape-Wind.aspx (last visited Apr. 13, 2015). Current policies and regulations clarify the jurisdiction and processes for offshore renewable energy projects.

earlier because of the lack of a clear federal leasing and regulatory regime.[147]

C. The Imminent Arrival of Post-Panamax Ships

Since opening in 1914,[148] the Panama Canal has modified world trade routes and changed the world economy by introducing the shortest trade route between the Pacific and Atlantic Oceans.[149] In the last decades, however, the Panama Canal began to reach its capacity both in terms of the number of ships it could accommodate and its ability to handle newer, larger cargo and tanker vessels—the so-called post-Panamax ships.[150] In order to stay competitive, Panama began expansion of the canal in 2007,[151] and new canal locks are projected to open in 2015.[152] This new capacity will again create a dramatic transformation in the world's trade patterns and potentially invigorate the economy of ports on the East Coast of the United States.[153]

President Obama has preemptively addressed the need for United States East Coast ports to deepen channels and improve their infrastructure in response to the Panama Canal expansion. In October 2011, the president announced the "We Can't Wait" initiative,[154] which was followed by an Executive Order in July

147. *See Regulatory Development, Policy and Guidelines*, *supra* note 146 (providing the BOEM's guidelines for offshore renewable energy development).

148. Sujit Canaga Retna, *2013 Update on the Panama Canal Expansion and Ports in the Atlantic and Gulf States*, ISSUE ALERTS (S. Legis. Conf. of Council St. Gov'ts), March 2013, at 1, *available at* http://www.slcatlanta.org/Publications/EconDev/2013panamacanalweb.pdf.

149. *Id.*

150. *Id.* at 2–3. Vessels that can currently pass through the Panama Canal's 110-foot width are referred to as Panamax vessels, which carry a maximum load of 4,800 TEUs (Twenty-foot Equivalent Units, a unit of cargo capacity). *Id.* at 2. Vessels that cannot be accommodated by the Panama Canal's current width are referred to as Post-Panamax vessels. *Id.* Post-Panamax vessels "will be [forty] percent longer, [sixty-four] percent wider and require a [fifty]-foot draft to transit the Canal." *Id.* at 3. Post-Panamax vessels also can carry a load of around 10,000 TEUs. *Id.*

151. *Id.* at 3; CANAL DE PANAMA, Panama Canal Expansion Program (2012), *available at* http://www.pancanal.com/eng/expansion/rpts/informes-de-avance/expansion-report-201210.pdf.

152. Retna, *supra* note 148; Kevin Gale, *When Will the Panama Canal Expansion Really Be Done?*, S. FLA. BUS. J. (July 17, 2013) http://www.bizjournals.com/southflorida/blog/2013/07/when-will-the-panama-canal-expansion.html?page=all.

153. *Id.*

154. Mark Memmott, *'We Can't Wait,' Obama Says as He Unveils New Economic Initiatives*, NPR (Oct. 24, 2011, 9:40 AM), http://www.npr.org/blogs/thetwo-way/2011/10/24/141648718/we-cant-wait-obama-will-say-hell-unveil-new-economic-initiatives.

2012 expediting permitting for the modernization of five East Coast ports, including Miami and Jacksonville.[155] While the economic and environmental impacts of the deepening of channels and development of these ports is being extensively studied,[156] planning studies for the port expansion and development are not being conducted in the broader context of comprehensive state ocean planning that takes into account, for example, the increase in traffic by the enormous post-Panamax ships along Florida's coasts and how to manage the use conflicts and risks created by their navigation of Florida waters. It is also possible that the expedited process used for the expansion of ports led to missing or minimizing certain effects of the port projects. Monitoring the effects of port expansion in the context of comprehensive ocean planning could provide the basis for further mitigation and adaptive management.

D. Effects of Climate Change on the Oceans

The most direct effects of climate change and sea level rise on the coastline are relatively obvious: sea level rise causes the retreat of shorelines.[157] The effects of climate change on the coastal oceans may be less obvious. The widespread consequences of warming ocean temperatures and ocean acidification are only

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155. Improving Performance of Federal Permitting and Review of Infrastructure Projects, Exec. Order No. 13,604, 3 C.F.R. 237, 239–40 § 3 (2013); Press Release from White House Office Press Sec'y, *We Can't Wait: Obama Administration Announces 5 Major Port Projects to be Expedited* (July 19, 2012) (on file with Author), *available at* http://www.whitehouse.gov/the-press-office/2012/07/19/we-can-t-wait-obama-administration-announces-5-major-port-projects-be-ex. Port Canaveral has also begun expansion of its shipping terminals and has purchased two new post-Panamax ship-to-shore cranes. Carolina Bolado, *Port Canaveral Board OKs New $80M Cruise Terminal*, LAW 360 (Nov. 8, 2013, 1:50 PM), http://www.law360.com/articles/487485.

156. *E.g.*, UNITED STATES ARMY CORP. OF ENG'RS, MIAMI HARBOR MIAMI-DADE COUNTY, FLORIDA NAVIGATION STUDY: FINAL GENERAL EVALUATION REPORT AND ENVIRONMENTAL IMPACT STATEMENT (2004), *available at* http://www.saj.usace.army.mil/Portals/44/docs/Planning/EnvironmentalBranch/EnvironmentalDocs/Miami%20Harbor%20GRR%20Phase%20III%2001%20Feasibility%20Study%20and%20EIS_Vol_1.pdf; UNITED STATES ARMY CORP. OF ENG'RS, JACKSONVILLE HARBOR NAVIGATION STUDY: DRAFT INTEGRATED GENERAL REEVALUATION REPORT II AND SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT (2013), *available at* http://www.saj.usace.army.mil/Portals/44/docs/Planning/EnvironmentalBranch/EnvironmentalDocs/JAXDGRR2_01_DRAFT_GRRII_SEIS.pdf.

157. Donna R. Christie, *Of Beaches, Boundaries and SOBs*, 25 J. Land Use & Envtl. L. 19, 25 (2010).

beginning to be understood and will result in significant changes to the ocean environment.

Increasing surface temperatures have caused die-offs of sponges, reef fish, and seagrasses,[158] and stimulated toxic algal blooms and red tides that required closures of fisheries and beaches.[159] Warmer ocean surface temperatures have also led to bleaching of corals and makes coral more vulnerable to pathogens and, consequently, more susceptible to disease.[160] Studies have already linked thermal stress over the past century, exacerbated by anthropogenic pressure, to a substantial increase of coral diseases in the Florida Keys.[161] Global climate models predict that the rates of sea-surface temperature change will lead to more

158. FLA. OCEANS & COASTAL COUNCIL, THE EFFECTS OF CLIMATE CHANGE ON FLORIDA'S OCEAN AND COASTAL RESOURCES 16 (2009), [hereinafter COASTAL COUNCIL], *available at* http://www.floridaoceanscouncil.org/reports/Climate_Change_Report.pdf; GLOBAL CORAL REEF MONITORING NETWORK, STATUS OF CARIBBEAN CORAL REEFS AFTER BLEACHING AND HURRICANES IN 2005 at 62, 85 (Clive Wilkinson & David Souter eds., 2008), *available at* http://www.coris.noaa.gov/activities/caribbean_rpt/SCRBH2005_rpt.pdf ("Hundreds of large sponges disintegrated during a month when extraordinarily warm waters flowed from the Gulf of Mexico across the reefs." Additionally, outbreaks of fish diseases were reported in the Florida Keys.).

159. NRDC, GLOBAL WARMING'S EFFECTS ON FLORIDA'S OCEANS AND COASTS DEMAND IMMEDIATE ACTION 1 (2007), *available at* http://www.nrdc.org/oceans/files/flgw.pdf.

160. C. Drew Harvell et al., *Climate Warming and Disease Risks for Terrestrial and Marine Biota*, 296 SCI. 2158, 2158 (2002) (finding that "[c]limate warming can increase pathogen development and survival rates, disease transmission, and host susceptibility. Although most host-parasite systems are predicted to experience more frequent or severe disease impacts with warming, a subset of pathogens might decline with warming, releasing hosts from disease. Recently, changes in El Niño-Southern Oscillation events have had a detectable influence on marine and terrestrial pathogens, including coral diseases . . . ."); Kim B. Ritchie, *Regulation of Marine Microbes by Coral Surface Mucus and Mucus-Associated Bacteria*, 322 MARINE ECOLOGY PROGRESS SERIES 1, 1 (2006), *available at* http://www.int-res.com/articles/feature/m322p001.pdf (finding that "Caribbean populations of the elkhorn coral *Acropora palmata* have declined due to environmental stress, bleaching, and disease. Potential sources of coral mortality include invasive microbes that become trapped in the surface mucus and thrive under conditions of increased coral stress." The study indicated "an environmental shift from beneficial bacteria, and variability in the protective qualities of coral mucus, which may lead to an overgrowth of opportunistic microbes when temperatures increase. Finally, coral mucus inhibited antibiotic activity and pigment production in a potentially invasive bacterium, illustrating that coral mucus may inactivate mechanisms used for bacterial niche establishment."); COASTAL COUNCIL, *supra* note 158, at 15.

161. GLOBAL CORAL REEF MONITORING NETWORK, *supra* note 158, at 43 ("Outbreaks of coral disease have been linked to periods of thermal stress. As such, the prevalence of disease often increases following bleaching events, as already stressed corals are more susceptible to infections. As temperatures return below stressful levels, disease progression frequently slows.").

frequent and severe coral bleaching events;[162] some coral species will not be able to adapt to these circumstances.[163]

Increased temperature may also have some direct physical effects on the ocean environment. Ocean currents may change position, size, or intensity, which has implications for ORE development.[164] Sea level rise attributable to ocean temperature rise will affect estuaries (salinity, depth, etc.) and subsume coastal wetlands, destroying crucial coastal habitats that provide nurseries for major commercial and recreational fisheries.[165]

Ocean acidification, attributable to absorption by the seas of carbon dioxide produced by fossil fuels,[166] has increased by thirty percent.[167] Increased acidification of the ocean affects organisms like coral, clams, and some planktons—animals with calcium carbonate shells or skeletons—by inhibiting or slowing down

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162. *Id.* at 22 ("The rates of sea temperature changes predicted by models of global climate change indicate that coral bleaching will be more frequent and severe in the future. Bleaching was virtually unheard of 30 years ago; now bleaching occurs in some places as frequently as every 3–4 years and could become an annual event in the near future."); COASTAL COUNCIL, *supra* note 158, at 15.

163. *Id.*; J.A. KLEYPAS ET AL., IMPACTS OF OCEAN ACIDIFICATION ON CORAL REEFS AND OTHER MARINE CALCIFIERS: A GUIDE FOR FUTURE RESEARCH 69 (2006), *available at* http://www.isse.ucar.edu/florida/report/Ocean_acidification_res_guide_compressed.pdf (discussing decreased calcification of corals because of ocean acidification and concluding that "[c]oral reef organisms have not demonstrated an ability to adapt to decreasing carbonate saturation state, but experiments so far have been relatively short-term (hours to months). Some planktonic organisms, particularly those with rapid generation times, may be able to adapt to lowered saturation state via natural selection. Planktonic calcifiers that cannot adapt to future changes in seawater chemistry are likely to experience reductions in their geographic ranges, or latitudinal shifts. Decreased calcification in marine organisms is likely to impact marine food webs and, combined with other climatic changes in temperature, salinity, and nutrients, could substantially alter the biodiversity and productivity of the ocean.").

164. COASTAL COUNCIL, *supra* note 158, at 14; *see* GLOBAL CORAL REEF MONITORING NETWORK, *supra* note 158, at 26 ("Changing climate conditions may cause oceanic currents to slow or even change direction; and large scale events such as the El Niño Southern Oscillation may change in frequency and/or intensity. Given that currents connect coral reefs to other coral reefs and related marine ecosystems, these changes could have profound effects on the sustainability and management of coral reef ecosystems.").

165. Christopher D. G. Harley et al., *The Impacts of Climate Change in Coastal Marine Systems*, 9 ECOLOGY LETTERS 228, 231–33 (2006).

166. INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2007: THE PHYSICAL SCIENCE BASIS 529 (Susan Solomon et al. eds., 2007) [hereinafter IPCC], *available at* http://www.ipcc.ch/pdf/assessment-report/ar4/wg1/ar4_wg1_full_report.pdf (discussing how the ocean takes up carbon dioxide past its buffering capacity and how this results in the formation of carbonic acid and increases the pH).

167. PMEL Carbon Program, *A Primer on pH*, NAT'L OCEANIC AND ATMOSPHERIC ADMIN. http://pmel.noaa.gov/co2/story/A+primer+on+pH (last visited Apr. 13, 2015).

their production.[168] Declining, or even disappearing coral reefs due to acidification will result in loss of fisheries habitat,[169] as well as loss of reef structures that protect coastlines and infrastructure from storms and erosion.[170] Ecosystems, such as mangroves and seagrass beds that are influenced by the reef structure or dependent on reef sediment production, will also be affected.[171] One scenario even concludes that eventually coral reefs will switch from being a sink for carbon to being a source of additional carbon in the ocean.[172]

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168. IPCC, *supra* note 166, at 529. Additionally, the process decreases the amount of carbonate in the ocean, reducing the saturation state of calcium carbonate. Less calcium carbonate in the ocean will affect corals and other calcifying organisms by inhibiting or slowing down their production, as well as increase the rate at which existing calcium carbonate is dissolved. *Id.*

169. COASTAL COUNCIL, *supra* note 158, at 10; *see* KLEYPAS, *supra* note 163, at 27 (The report discusses the various factors that will determine coral reefs' responses to a change in marine chemistry: "The net response of coral reef calcification to changing seawater chemistry will be the sum of many interrelated processes such as (1) the response of calcifying organisms, (2) changes in inorganic processes of carbonate precipitation and dissolution, and (3) the response of bioeroders to changes in community structure and perhaps in cementation patterns. To predict how rates of reef building will change in the future, the calcium carbonate budgets of coral reefs, particularly across environmental gradients, need to be better quantified.").

170. *See* THE ROYAL SOC'Y, OCEAN ACIDIFICATION DUE TO INCREASING ATMOSPHERIC CARBON DIOXIDE 25 (2005), *available at* http://royalsociety.org/uploadedFiles/Royal_Society_Content/policy/publications/2005/9634.pdf (concluding that "[t]he synergistic interaction of elevated sea temperature and atmospheric CO_2 is likely to produce major changes to coral reefs over the next few decades and centuries. Under most IPCC emission scenarios, corals are unlikely to remain abundant on reefs and could be rare on tropical and subtropical reefs by the middle of this century if CO_2 doubles or triples above present levels. Over longer timescales, reef frameworks that are critical for the protection of coastlines across tropical and subtropical regions may start to disappear as the rate of erosion starts to exceed calcification rates . . . ." (internal citations omitted)).

171. *See* GLOBAL CORAL REEF MONITORING NETWORK, *supra* note 158, at 28 (stating that "[c]limate change also affects coral reefs in another, fundamental way that is unique to this ecosystem; that is the effects on the geological reef structure itself. Reduced coral cover (e.g. from coral bleaching) coupled with lowered calcification rates and increased dissolution rates (ocean acidification) will reduce the net calcium carbonate production rates on reefs. By the end of this century, the overall balance of carbonate production on many reefs is expected to decline to the point where reef-building may cease or reverse. In addition, any ecosystems that are influenced by the reef structure and reef sediment production will also be affected. These could include mangroves, seagrass beds, and low-lying coral cays. It might also have significant implications for human infrastructure on coastlines protected by coral reefs.").

172. *See* KLEYPAS, *supra* note 163, at 35 ("With increased pCO_2, net calcification rates on coral reefs are likely to decline, partly due to slower calcification rates and partly due to faster dissolution. At some point in time and space, we can expect that some reef systems will shift from net calcification to net dissolution; i.e., shift from being a sink to a source of alkalinity to the surrounding ocean . . . .").

Climate change will therefore lead to substantial changes in biodiversity and ocean ecosystems. While certain species that cannot adapt to the changed circumstances will be lost, other marine communities will potentially migrate northward.[173] In some cases, it may be too late for planning or management to change these consequences because "interactions among communities with new species compositions cannot be predicted."[174] Ocean planning and management for the most certain effects of climate change should be proactive (e.g., managing coastlines to allow landward migration of coastal wetlands), while uncertainty should be dealt with by adaptive management strategies.

E. Federal Ocean Policy Development

1. The Origins of National Ocean Policy Development

The Stratton Commission Report recommendations that led to the enactment of the CZMA[175] and the creation of NOAA[176] were intended to address ocean governance issues by coordinating federal and state efforts in the coastal zone and by creating a federal agency that would prioritize, carry out, and coordinate a program for marine science and technology development to facilitate the effective use of the coasts and oceans.[177] While the Stratton Commission awakened the public's awareness of the role of

173. K.M. Brander, *Global Fish Production and Climate Change*, 104 PROC. OF THE NAT'L ACAD. OF SCI. OF THE U.S. OF AM. 19709, 19711 (2007), *available at* http://www.pnas.org/content/104/50/19709.full.pdf+html; COASTAL COUNCIL, *supra* note 158, at 17; John J. Stachowicz et al., *Linking Climate Change and Biological Invasions: Ocean Warming Facilitates Nonindigenous Species Invasions*, 99 PROC. OF THE NAT'L ACAD. OF SCI. OF THE U.S. OF AM. 15497, 15497 (2002), *available at* http://www.pnas.org/content/99/24/15497.full.pdf+html ("Climatic warming on the time scale of decades also may alter the composition of the resident biota by facilitating the poleward spread of species characteristic of warmer temperature regimes. However, it is also possible that climate change could facilitate quantum leaps in the range of species across ocean basins or continents. Humans already inadvertently transport countless species around the globe, and, although many of these inoculations presumably fail because of inhospitable climate in the recipient region, global warming may relax this constraint." (internal citations omitted)). *See* Kaustuv Roy et al., *Climate Change, Species Range Limits and Body Size in Marine Bivalves*, 4 ECOLOGY LETTERS 366, 366–70 (2001), for a case study of nonnative bivalves outcompeting native bivalves due in part to an increase in sea surface temperatures.

174. COASTAL COUNCIL, *supra* note 158, at 17.

175. William J. Merrell et al., *The Stratton Commission: A Model for a Sea Change in National Marine Policy*, 14 OCEANOGRAPHY no. 2, 2001, at 11, 16.

176. *Id.* at 15.

177. *Id.* at 14–16.

the oceans in the life and economy of our nation, thirty years later, two separate commissions, the Pew Oceans Commission[178] and the United States Commission on Ocean Policy (USCOP),[179] played similar roles in making the nation aware of threats to our oceans and how those threats affect our nation's welfare and economy. In May 2003, the Pew Oceans Commission released an independent report, *America's Living Oceans: Charting a Course for Sea Change*,[180] and a year later, USCOP, a body appointed by President Bush pursuant to the Oceans Act of 2000,[181] published *An Ocean Blueprint for the 21st Century*.[182] These commissions came to fundamentally consistent conclusions that human activities have severely stressed ocean systems and that major changes in ocean management are needed to stop the degradation of ocean resources and to restore and protect the oceans for future generations.[183] The commissions further concurred in finding that ocean management must be based on principles of sustainability and stewardship and policies directed to preservation of marine biodiversity, an ecosystem-based approach to management, and a governance structure aligned with ecosystem boundaries.[184] In 2005, members of the two commissions formed a bipartisan successor to these commissions—the Joint Ocean Commission Initiative (JOCI)—to catalyze ocean policy reform.[185] JOCI produced an

178. *See Pew Oceans Commission*, PEW CHARITABLE TR., http://www.pewtrusts.org/en/topics/oceans (last visited Apr. 13, 2015) (describing the environmental conditions that precipitated the Pew Oceans Commission's report).

179. *See* U.S. Comm'n on Ocean Policy, GOVINFO.LIBRARY.UNT.EDU (Feb. 18, 2005), http://govinfo.library.unt.edu/oceancommission/ (introducing the mandate the U.S. Commission on Ocean Policy was presented with and the result of its efforts to fulfill that mandate).

180. PEW OCEANS COMM'N, AMERICA'S LIVING OCEANS: CHARTING A COURSE FOR SEA CHANGE (2003), [hereinafter PEW REPORT], *available at* http://calost.org/pdf/about/skyli-qa/Report_PewOcean.pdf.

181. Oceans Act of 2000, Pub. L. No. 106-256, § 2, 114 Stat. 644, 644 (2000).

182. UNITED STATES COMM'N ON OCEAN POLICY, AN OCEAN BLUEPRINT FOR THE 21ST CENTURY (2004), [hereinafter USCOP REPORT], *available at* http://www.opc.ca.gov/webmaster/ftp/pdf/docs/Documents_Page/Reports/U.S.%20Ocean%20Comm%20Report/FinalReport.pdf.

183. PEW REPORT, *supra* note 180, at 97–98; USCOP REPORT, *supra* note 182, at 1–4; Donna R. Christie, *Implementing an Ecosystem Approach to Ocean Management: An Assessment of Current Regional Governance Models*, 16 DUKE ENVTL. L. & POL'Y F. 117, 117 (2006).

184. PEW REPORT, *supra* note 180, at 103–06; USCOP REPORT, *supra* note 182, at 5–9.

185. JOINT OCEAN COMM'N INITIATIVE, FROM SEA TO SHINING SEA: PRIORITIES FOR OCEAN POLICY REFORM 7 (2006), *available at* http://www.jointoceancommission.org/resource-center/1-Reports/2006-06-13_Sea_to_Shining_Sea_Report_to_Senate.pdf.

initial report, *From Sea to Shining Sea: Priorities for Ocean Policy Reform*,[186] providing Congress with priorities for implementation of the hundreds of recommendations of the Pew Commission and USCOP.[187] JOCI also issued a report in April 2009, *Changing Oceans, Changing World*,[188] identifying ocean priorities for the Obama Administration and Congress.[189] The most recent JOCI report, *Charting the Course: Securing the Future of America's Oceans*,[190] outlines the commission's most recent recommendations for immediate implementation, including: enhancing the resilience of coastal communities, promoting renewable ocean energy development, and supporting state and regional ocean and coastal priorities.[191]

2. First Steps in Implementing a National Ocean Policy

The Oceans Act of 2000[192] required that USCOP's report be submitted to Congress and the President,[193] and that the President submit his response regarding the report's ocean policy recommendations to Congress within 120 days.[194] President Bush's response took the form of the United States Ocean Action Plan.[195] The Ocean Action Plan provided for greater visibility of ocean issues and for coordination of ocean-related matters by creating a Cabinet-level Committee on Ocean Policy.[196] The Committee on Ocean Policy (COP) was established by Executive Order[197] in December 2004 with the Chairman of the Council on Environ-

186. *Id.*
187. *Id.*
188. JOINT OCEAN COMM'N INITIATIVE, CHANGING OCEANS, CHANGING WORLD: OCEAN PRIORITIES FOR THE OBAMA ADMINISTRATION AND CONGRESS (2009), *available at* http://www.jointoceancommission.org/resource-center/1-Reports/2009-04-07_JOCI_Changing_Oceans,_Changing_World.pdf.
189. *Id.* at 11.
190. JOINT OCEAN COMM'N INITIATIVE, CHARTING THE COURSE: SECURING THE FUTURE OF AMERICA'S OCEANS (2013), *available at* http://www.virginia.edu/colp/pdf/joint-ocean-commission-initiative-2013.pdf.
191. *Id.* at 4–5.
192. Oceans Act of 2000, Pub. L. No. 106-256, 114 Stat. 644 (2000).
193. *Id.* § 3(f)(1), 114 Stat. at 647.
194. *Id.* § 4(a), 114 Stat. at 648.
195. U.S. OCEAN ACTION PLAN: THE BUSH ADMINISTRATION'S RESPONSE TO THE U.S. COMMISSION ON OCEAN POLICY (2004), [hereinafter U.S. OCEAN ACTION PLAN], *available at* http://www.cmts.gov/downloads/US_ocean_action_plan.pdf.
196. *Id.* at 6.
197. Committee on Ocean Policy, Exec. Order No. 13,366, 3 C.F.R. 244, 244 § 3 (2005).

mental Quality (CEQ) designated as chair of the committee.[198] The COP and its several subsidiary bodies,[199] the existing National Security Council Policy Coordinating Committee, and an expanded Ocean Research Advisory Panel formed a new ocean governance structure within the executive branch.[200] Although the COP was given responsibility to "coordinate the activities of executive departments and agencies regarding ocean-related matters in an integrated and effective manner to advance the environmental, economic, and security interests of present and future generations of Americans,"[201] it was not authorized to establish national ocean policy goals for federal agencies.[202]

The COP was further directed to assist and advise in regard to a second national policy announced in Executive Order 13,366 to "facilitate, as appropriate, coordination and consultation regarding ocean-related matters among Federal, State, tribal, and local governments, the private sector, foreign governments, and international organizations."[203] The COP was given the responsibility to "provide and obtain information and advice to facilitate . . . *voluntary* regional approaches with respect to ocean-related matters."[204] The Great Lakes Interagency Task Force, the Great Lakes Regional Collaboration, the Gulf of Mexico Alliance, and regional fisheries management commissions were identified as programs moving in the direction supported by federal policy.[205]

198. *Id.* at 245 § 3(b)(i).

199. Consistent with the Ocean Action Plan and the Executive Order, the COP created the Interagency Committee on Ocean Science and Resource Management Integration, the NSTC Joint Subcommittee on Ocean Science and Technology, and the Subcommittee on Integrated Management of Ocean Resources. U.S. OCEAN ACTION PLAN, *supra* note 195, at 7–9 (detailing the functions of the subsidiary bodies established by the COP); *About the Committee on Ocean Policy*, OCEAN.CEQ.GOV, http://archive.is/thFGo (last visited Apr. 13, 2015).

200. U.S. OCEAN ACTION PLAN, *supra* note 195, at 7, 10.

201. Exec. Order No. 13,366, 3 C.F.R. at 244 § 1(a).

202. *Id.* at 246 § 7(a)(i).

203. *Id.* at 244 § 1(b).

204. *Id.* at 246 § 4(d)(ii) (emphasis added).

205. *Ocean and Great Lakes Resources: Case Studies*, NOAA, http://coastalmanagement.noaa.gov/issues/or_casestudies.html (last visited Apr. 13, 2015). Regional initiatives now include the Northeast Regional Ocean Council (NROC), the West Coast Governors Alliance (WCGA), the Gulf of Mexico Alliance (GOMA), the Mid-Atlantic Regional Council on the Ocean (MARCO), the South Atlantic Alliance (SAA), and the Gulf of Maine Council on the Marine Environment (GOMC). *Regional Alliances*, MID-ATLANTIC SEA GRANT, http://www.midatlanticoceanresearchplan.org/regional-alliances (last visited Apr. 13, 2015).

3. National Ocean Policy and the Obama Administration

On June 12, 2009, the Obama White House issued a memorandum creating an Interagency Ocean Policy Task Force.[206] The Task Force was charged to make recommendations with appropriate public engagement on the articulation of a national ocean policy, a framework for policy coordination, and an implementation strategy.[207] The final recommendations of the Interagency Policy Task Force[208] were adopted by President Obama in Executive Order 13,547,[209] which also formally adopted a national ocean policy embracing stewardship of oceans.[210] The recommendations

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206. Memorandum from President Barack Obama to Heads of Exec. Dep'ts & Agencies, *National Policy for the Oceans, Our Coasts, and the Great Lakes* (June 12, 2009), *in* THE WHITE HOUSE COUNCIL ON ENVTL. QUALITY, FINAL RECOMMENDATIONS OF THE INTERAGENCY OCEAN POLICY TASK FORCE app. A (2010), *available at* http://www.whitehouse.gov/files/documents/OPTF_FinalRecs.pdf. The Task Force comprised twenty-four senior policy-level officials from executive departments, agencies, and offices and was chaired by the Chair of the Council on Environmental Quality (CEQ). The Task Force established a Working Committee which created five subgroups: Policy, Coordination Framework, Implementation Strategy, Public Engagement, and Coastal and Marine Spatial Planning. THE WHITE HOUSE COUNCIL ON ENVTL. QUALITY, FINAL RECOMMENDATIONS OF THE INTERAGENCY OCEAN POLICY TASK FORCE 1 (2010) [hereinafter RECOMMENDATIONS], *available at* http://www.whitehouse.gov/files/documents/OPTF_FinalRecs.pdf.

207. Specifically, the Task Force was instructed to develop recommendations on:

> (a) A national policy that ensures the protection, maintenance, and restoration of the health of ocean, coastal, and Great Lakes ecosystems and resources, enhances the sustainability of ocean and coastal economies, preserves our maritime heritage, provides for adaptive management to enhance our understanding of and capacity to respond to climate change, and is coordinated with our national security and foreign policy interests.
>
> (b) A United States framework for policy coordination of efforts to improve stewardship of the oceans, our coasts, and the Great Lakes.
>
> (c) An implementation strategy that identifies and prioritizes a set of objectives the United States should pursue to meet the objectives of a national policy for the oceans, our coasts, and the Great Lakes.

RECOMMENDATIONS, *supra* note 206, at app. A.

208. *Id.*

209. Stewardship of the Ocean, Our Coasts, and the Great Lakes, Exec. Order No. 13,547, 3 C.F.R. 227, 227 § 1 (July 19, 2010).

210. The Executive Order articulated the United States national ocean policy as follows:

> Sec. 2. *Policy*. (a) To achieve an America whose stewardship ensures that the ocean, our coasts, and the Great Lakes are healthy and resilient, safe and productive, and understood and treasured so as to promote the well-being, prosperity, and security of present and future generations, it is the policy of the United States to:
>
> (i) protect, maintain, and restore the health and biological diversity of ocean, coastal, and Great Lakes ecosystems and resources;

of the Task Force focused on five priority areas or "areas of special emphasis"—"resiliency and adaptation to climate change and ocean acidification"; "regional ecosystem protection and restoration"; "water quality and sustainable practices on land"; "changing conditions in the Arctic"; and "ocean, coastal, and Great Lakes observations, mapping, and infrastructure"—to provide for better-informed decisions, improved understanding and coordination, and support of federal, state, tribal, local, and regional management of the oceans and coasts.[211] The Task Force recommendations for stewardship of the oceans are to be implemented through comprehensive, integrated, coordinated ocean management, utilizing the best science and coastal and marine spatial planning on an eco-regional basis.[212] The national ocean policy divides United States marine waters into nine planning regions based on large marine ecosystems.[213] The geographic

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(ii) improve the resiliency of ocean, coastal, and Great Lakes ecosystems, communities, and economies;

(iii) bolster the conservation and sustainable uses of land in ways that will improve the health of ocean, coastal, and Great Lakes ecosystems;

(iv) use the best available science and knowledge to inform decisions affecting the ocean, our coasts, and the Great Lakes, and enhance humanity's capacity to understand, respond, and adapt to a changing global environment;

(v) support sustainable, safe, secure, and productive access to, and uses of the ocean, our coasts, and the Great Lakes;

(vi) respect and preserve our Nation's maritime heritage, including our social, cultural, recreational, and historical values;

(vii) exercise rights and jurisdiction and perform duties in accordance with applicable international law, including respect for and preservation of navigational rights and freedoms, which are essential for the global economy and international peace and security;

(viii) increase scientific understanding of ocean, coastal, and Great Lakes ecosystems as part of the global interconnected systems of air, land, ice, and water, including their relationships to humans and their activities;

(ix) improve our understanding and awareness of changing environmental conditions, trends, and their causes, and of human activities taking place in ocean, coastal, and Great Lakes waters; and

(x) foster a public understanding of the value of the ocean, our coasts, and the Great Lakes to build a foundation for improved stewardship.

Id. at 227–28 § 2.

211. RECOMMENDATIONS, *supra* note 206, at 28.

212. *Id.* The five areas of special emphasis and four methodologies for addressing these areas were designated "National Priority Objectives." *Id.*

213. *Id.* at 52–53.

scope of the planning area for coastal and marine spatial planning envisioned by the Task Force incorporates not only the federal EEZ and continental shelf, but also the territorial sea, encompassing state waters landward to the mean high-water line, including inland bays and estuaries.[214] There is no legislative mandate for implementing a national ocean policy,[215] so ocean planning must be based on existing authorities at both the federal and state levels. Regional planning bodies composed of federal, state, and tribal authorities will be responsible for development of regional plans.[216] State participation on regional planning bodies will have to be voluntary, but the Task Force identified substantial incentives for state participation, as follows:

> The ability for States and tribes to participate in the CMSP process for areas within and beyond their respective jurisdictions can afford the following potential opportunities and incentives:
>
> - Encourage and inform the Federal government to better manage resources or address processes that transcend jurisdictional boundaries;

> CMSP would be developed and implemented using a regional approach to allow for the variability of economic, environmental, and social aspects among different areas of the United States. . . . Given the importance of conducting CMSP from an ecosystem-based perspective, combined with the likely involvement of existing regional governance structures in developing plans, a consistent planning scale with which to initiate CMSP is at the large marine ecosystem (LME) scale.

Id. at 51 (footnote omitted). The large marine ecosystem regional planning areas are Alaska/Arctic, Pacific Islands, Caribbean, West Coast, Gulf of Mexico, Southeast, Mid-Atlantic, Northeast and Great Lakes. NOAA, *NOAA's Role*, COASTAL & MARINE SPATIAL PLANNING, http://www.msp.noaa.gov/role/index.html (last visited Apr. 13, 2015) (providing contact information for each region's NOAA representative).

214. RECOMMENDATIONS, *supra* note 206, at 49. For management to take an ecosystem-based approach, the resources and activities addressed must "transcend jurisdictional boundaries." *Id.* at 46.

215. Legislation introduced in the House of Representatives and the Senate to implement national ocean policy failed to go forward. Oceans Conservation, Education, and National Strategy for the 21st Century Act, H.R. 2939, 109th Cong. (2005); National Oceans Protection Act of 2005, S. 1224, 109th Cong. (2005). *See also* Christie, *supra* note 183, at 118 (citing the proposed legislation as evidence that a general understanding of the necessity of regional oceans governance has still not resulted in comprehensive, cohesive policy-making).

216. RECOMMENDATIONS, *supra* note 206, at 47.

- Define local and regional objectives and develop and implement CMSP in a way that is meaningful to regionally specific concerns;
- Leverage, strengthen, and magnify local planning objectives through integration with regional and national planning efforts;
- Proactively address concerns over proposed activities impacting State and tribal interests and minimize use conflicts before they escalate;
- Leverage support from the Federal government to build CMSP capacity, access CMSP data, and acquire scientific, technical, and financial assistance;
- Access data through CMSP portal(s) and utilize science tools developed, established, and maintained for CMSP efforts;
- Benefit from sustained Federal participation on the regional planning bodies that consist of representatives empowered to make decisions and commitments on behalf of their respective agencies, in turn helping to integrate and improve decision-making;
- Provide a clearer and easier point of access for all Federal agencies with regard to ocean, coastal, and Great Lakes issues; and
- Achieve regulatory efficiencies, reduction in administrative delays, and cost savings.[217]

The Task Force Recommendations report makes numerous references to the intent to take into account and build upon state ocean planning efforts in regional ocean planning efforts.[218] This leads to the conclusion that states that have lagged in ocean poli-

217. *Id.* at 46.

218. *Id.* "Many States and regional governance structures have already engaged in some form of comprehensive marine planning and CMSP would build upon and incorporate these efforts." *Id.* "CMSP would take into account and build upon the existing marine spatial planning efforts at the regional, State, tribal, and local level." *Id.* at 48. "The regional planning body would identify existing efforts (e.g., State and Federal ocean plans, data management efforts, and CMSP decision products) that would allow the regional plan to build on existing work." *Id.* at 55.

cy development will have less influence on development of regional plans.

The Task Force recommendations discuss that regional plans will not create any new authorities or create an independent regulatory regime—the plans can only be implemented through existing statutory authorities. President Obama's Executive Order requires, however, that executive departments and federal agencies and offices implement the national ocean policy and CMSP.[219] Like participation in development of regional ocean plans, implementation of regional plans will be voluntary on the part of the states. To attempt to ensure implementation and compliance, the Task Force recommends that states sign a CMSP Development Agreement to commit to good faith development and implementation of regional ocean plans[220] and that states provide notice and justifications when they intend to deviate from the regional plan.[221] The plans would not be specifically enforceable, however.

Through Executive Order 13,547, President Obama also implemented the Task Force recommendation to reorganize the national ocean policy administration at the executive level.[222] The National Ocean Council (NOC), a body of twenty-seven federal agencies, departments, and offices co-chaired by the chair of the Council on Environmental Quality and the director of the Office of Science and Technology Policy, was established to advise the president and provide guidance to agencies on implementation of national ocean policy.[223] In April 2013, the NOC released its Na-

219. Exec. Order No. 13, 547, 3 C.F.R. at 230 § 6(a)(i)–(ii). Before implementation of a regional ocean plan, the plan must be certified by the National Ocean Council "to ensure it is consistent with the National Policy, CMSP goals and principles as provided in this framework, any national objectives, performance measures, or guidance the NOC has articulated, and any other relevant national priorities." RECOMMENDATIONS, *supra* note 206, at 63. The Marine Planning Handbook issued by the NOC in 2013 uses slightly different language, providing that the NOC "will review and concur that the marine plan is consistent." NAT'L OCEAN COUNCIL, MARINE PLANNING HANDBOOK 17 (2013), [hereinafter HANDBOOK], *available at* http://www.whitehouse.gov//sites/default/files/final_marine_planning_handbook.pdf.

220. RECOMMENDATIONS, *supra* note 206, at 54.

221. *Id.* at 65.

222. Exec. Order No. 13,547, 3 C.F.R. at 229–30 § 4; RECOMMENDATIONS, *supra* note 206, at 19.

223. Exec. Order No. 13,547, 3 C.F.R. at 229–30 § 4. The Executive Order also created the Governance Coordinating Committee, consisting of eighteen officials from state, tribal, and local governments to provide for "greater collaboration and diversity of views." *Id.* at 231 § 7. The Regional Advisory Committees, composed of the lead federal department,

tional Ocean Policy Implementation Plan to "translate the goals of the National Ocean Policy into on-the-ground change"[224] and provide "clear direction" for federal agencies, partners, and stakeholders.[225] During the two years that the NOC was developing the Implementation Plan, significant opposition grew to the President's national ocean policy, in particular, to the coastal and marine spatial planning aspects.[226] The NOC responded to this political pressure in the focus of the Implementation Plan. While the Task Force Recommendations report put primary emphasis on ocean stewardship implemented through coastal marine spatial planning, the Implementation Plan emphasized the ocean economies and security as well as the resilience of coastal communities and the oceans.[227] The Plan minimized discussion of CMSP; in fact, the terms "CMSP" and "spatial planning" are conspicuously absent from the Implementation Plan.[228] Ocean plan-

agency, or office for each regional planning body established for the development of regional coastal and marine spatial plans, are also to be created as "necessary to provide information and to advise the regional planning body on the development of regional coastal and marine spatial plans." *Id.* at 231 § 8.

224. NAT'L OCEAN COUNCIL, NATIONAL OCEAN POLICY: IMPLEMENTATION PLAN 3 (2013), [hereinafter IMPLEMENTATION PLAN], *available at* http://www.whitehouse.gov/sites/default/files/national_ocean_policy_implementation_plan.pdf.

225. *Id.* at 2.

226. *See, e.g.*, *The President's New National Ocean Policy—a Plan for Further Restrictions on Ocean, Coastal and Inland Activities: Oversight Hearing Before the H. Comm. on Natural Res.*, 112th Cong. (2011), *available at* http://naturalresources.house.gov/calendar/eventsingle.aspx?EventID=261864 (providing the full transcript of the hearing); Press Release from Chairman Doc Hastings, H.R. Natural Res. Comm'n, *Chairman Hastings' Statement on President Obama's Final Plan to Zone the Oceans* (Apr. 16, 2013), *available at* http://naturalresources.house.gov/news/documentsingle.aspx?DocumentID=329247 (claiming that the plan "raises more questions than answers" about national ocean policy); Richard Norman "Doc" Hastings, *Obama's National Ocean Policy Threatens Jobs and Economic Activities Onshore and Off*, FOXNEWS.COM (June 19, 2012), http://www.foxnews.com/opinion/2012/06/19/obama-national-ocean-policy-threatens-jobs-and-economic-activites-onshore-and/ (arguing that, with the plan, the President fashions the ocean into a "regulatory weapon"); Megan Herzog, *Obama Administration Releases National Ocean Policy Implementation Plan*, LEGALPLANET (Apr. 17, 2013), http://legal-planet.org/2013/04/17/obama-administration-releases-national-ocean-policy-implementation-plan/ (identifying Rep. Hastings as the chief opponent of the plan).

227. IMPLEMENTATION PLAN, *supra* note 224, at 5–17.

228. Interestingly, CMSP and spatial planning *are* included in the Appendix to the Implementation Plan, published separately as NAT'L OCEAN COUNCIL, NATIONAL OCEAN POLICY IMPLEMENTATION PLAN APPENDIX (2013) [hereinafter APPENDIX], *available at* http://www.whitehouse.gov//sites/default/files/national_ocean_policy_ip_appendix.pdf. The Appendix provides an action plan and time table that "encompass[es] and further[s] the nine National Priority Objectives of the National Ocean Policy" identified in the Task Force Recommendations and which include CMSP. *Id.* at 1; *see also* RECOMMENDATIONS, *supra* note 206, at 51 (identifying coastal marine spatial planning as integral to an effec-

ning is discussed primarily in the context of federal support for regional planning processes that will address regionally established priorities.[229]

The NOC did, however, issue a guidance document, the Marine Planning Handbook,[230] in July 2013, which set out the current vision of regional ocean planning and redirected the focus from compliance with a national ocean policy to marine plans whose "scope, scale, and content . . . are defined by the regions themselves."[231] The Handbook states that in addition to developing place-based regional ocean goals and objectives, regional goals "should be consistent with the national goals."[232] Once a regional plan is developed, the NOC will "review and concur that the marine plan is consistent with the substantive and procedural

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tive "ecosystem-based perspective"). Actions are cross-referenced in the Appendix to the achievement of individual National Priority Objectives. APPENDIX, *supra* note 228, at 1.

229. IMPLEMENTATION PLAN, *supra* note 224, at 20–23.

230. HANDBOOK, *supra* note 219.

231. *Id.* at 1. The Handbook provides that

> [m]arine planning is a science- and information-based tool that can help advance local and regional interests, such as management challenges associated with the multiple uses of the ocean, economic and energy development priorities, and conservation objectives. . . . The scope, scale, and content of marine plans are defined by the regions themselves, to solve problems that regions care about in ways that reflect their unique interests, capacity to participate, and ways of doing business. Marine planning should build on and complement existing programs, partnerships, and initiatives. This flexible approach ensures that each region can determine the benefits it wants to achieve and the process by which it does so.

Id.

232. The NOC reiterates the goals of the national ocean policy as:

- Support sustainable, safe, secure, efficient, and productive uses of the ocean, our coasts, and the Great Lakes, including those that contribute to the economy, commerce, recreation, conservation, homeland and national security, human health, safety, and welfare;
- Protect, maintain, and restore the Nation's ocean, coastal, and Great Lakes resources and ensure resilient ecosystems and their ability to provide sustained delivery of ecosystem services;
- Provide for and maintain public access to the ocean, coasts, and Great Lakes;
- Promote compatibility among uses and reduce user conflicts and environmental impacts;
- Improve the coherence, efficiency, and consistency of decision-making and regulatory processes;
- Increase certainty and predictability in planning for and implementing new investments for ocean, coastal, and Great Lakes uses; and
- Enhance interagency, intergovernmental, and international communication and collaboration.

Id. at 14–15.

standards described in the regional participation and marine planning sections" of the Handbook.[233] The NOC notes the incentive that "[b]y their concurrence, [f]ederal agencies agree that they will use the marine plan to inform and guide their actions in the region consistent with their existing missions and authorities."[234] While this provision creates no specifically enforceable rights for the states or others and certainly does not have the force of the federal consistency provision of the CZMA,[235] it provides some leverage for the states and other participants in the process to assure that their efforts will have a direct effect on federal actions and federally approved activities in their regions.

Notably, the NOC's position is not only that participation in regional ocean planning is voluntary on the part of states,[236] but that the failure of a single state in a region to participate can defeat the entire process. The Implementation Plan states: "Should all [s]tates within a region choose not to participate in a regional planning body within their region, *a regional planning body will not be established.*"[237] This has had immediate consequences in the case of Alaska, which has opted out of regional planning.[238] But because Alaska is the only state in the ecoregion, the State's failure to participate does not inequitably affect other states. Other regions, however, are already making progress in the establishment of regional planning bodies (RPBs).[239] The Northeast RPB,[240] the Mid-Atlantic RPB,[241] and the Pacific Islands RPB[242] have already been created, and the

233. *Id.* at 17.

234. *Id.*

235. Coastal Zone Management Act of 1972, 16 U.S.C. § 1456(c) (2012).

236. HANDBOOK, *supra* note 219, at 1; IMPLEMENTATION PLAN, *supra* note 224, at 22.

237. IMPLEMENTATION PLAN, *supra* note 224, at 22 (emphasis added).

238. H.R.J. Res. 16, 28th Leg., 1st Sess. 2 (Alaska 2013) ("[T]he Alaska State Legislature opposes and declines to recognize, participate in, or enforce the National Ocean Policy Final Implementation Plan and the coastal and marine spatial planning process as it applies to the Alaska and Arctic regions.").

239. For an overview of activities at the regional ocean level, see *Regional Activities*, NOAA, http://www.msp.noaa.gov/activities/index.html (last visited Apr. 13, 2015).

240. *Northeast Regional Planning Body*, NE. REG'L OCEAN COUNCIL, http://northeastoceancouncil.org (last visited Apr. 13, 2015).

241. *Mid-Atlantic Regional Planning Body (MidA RPB)*, BUREAU OF OCEAN ENERGY MGMT., http://www.boem.gov/Mid-Atlantic-Regional-Planning-Body/ (last visited Apr. 13, 2015); *Mid-Atlantic Regional Planning Body*, MERIDIAN INST., http://merid.org/en/Content/Projects/Mid-Atlantic_Regional_Planning_Body.aspx (last visited Apr. 13, 2015).

242. *Home page*, PAC. ISLANDS REG'L PLANNING BODY, http://pacificislandsrpb.org/ (last visited Apr. 13, 2015).

West Coast is in the process of developing an RPB.[243] Like the Northeast, Mid-Atlantic, and West Coast regions, the South Atlantic[244] and Gulf of Mexico[245] already have regional ocean partnerships[246] in which Florida participates and which may support or evolve into RPBs.[247] The requirement that all states in a region must participate may prove politically problematic, however, in spite of the fact that the NOC has considerably adapted the implementation of national ocean policy and regional planning to emphasize "local choices"[248] and provided an opportunity for important state input into federal planning. The *Implementation Plan* makes it clear that even if an RPB is not established to generate a regional ocean plan, federal agencies are still bound under Executive Order 13547 to proceed with implementation of national ocean policy and the Task Force recommendations.[249] Although federal agencies will continue to coordinate with states and other non-federal authorities and stakeholders under those circumstances,[250] it will not be within the framework designed to make states partners in the process.

V. SUPPORT FOR STATE OCEAN POLICY AND CMSP

In each year since its 2011–2012 Annual Research Plan, the Florida Oceans and Coastal Council[251] has recommended marine spatial planning as part of the State's research priorities to

243. *Regional Activities: West Coast Governors Alliance on Ocean Health*, NOAA, http://www.cmsp.noaa.gov/activities/wcga.html (last visited Apr. 13, 2015).

244. *Home page*, GOVERNORS' S. ATL. ALLIANCE, http://www.southatlanticalliance.org/ (last visited Apr. 13, 2015).

245. *Home page*, GULF OF MEX. ALLIANCE, http://www.gulfofmexicoalliance.org/ (last visited Apr. 13, 2015). The Gulf of Mexico Alliance is currently evaluating the need for marine planning. *Marine Planning Meeting*, GULF OF MEX. ALLIANCE (Feb. 11, 2014), *available at* http://www.gulfofmexicoalliance.org/wp-content/uploads/2013/10/1075Marine_Planning_Meeting_Web_Details32.pdf.

246. Regional ocean partnerships are voluntary agreements among the governors of a region designed to address ocean issues of common concern. GOVERNORS' PAC. REG'L OCEAN P'SHIP, GOVERNORS' PACIFIC REGIONAL OCEAN PARTNERSHIP ESTABLISHMENT 1 (2012), *available at* http://governor.hawaii.gov/wp-content/uploads/2012/08/PROP_signed_082212.pdf.

247. *Policy: USA—Regions*, MARINE PLANNING, http://www.marineplanning.org/Policy/USA_Regions.html (last visited Apr. 13, 2015); *Regional Activities*, *supra* note 243.

248. IMPLEMENTATION PLAN, *supra* note 224, at 19–20.

249. *Id.* at 22.

250. *Id.*

251. *Supra* notes 96–97.

achieve ecosystem-based management.[252] The Council's observations concerning marine spatial planning are insightful:

> While sectoral planning has been used in the ocean for many years, comprehensive planning is unprecedented. Several features are important to note. Planning in the ocean is flexible because private ownership is not a factor. Plans may be created for specified uses and periods and allowed to lapse or turn over to other uses. Finally, planning is an adaptive process as performance must be monitored and evaluated against the goals that are established at the outset.[253]

The Council notes the important factor that the oceans and its resources are public resources—not private property. While input from the public and shareholders is an essential element in managing a public resource, the state, which holds ocean resources and lands under the sea in the public trust,[254] ultimately has broad authority to protect, preserve, and allocate those resources. As the Council suggests, this not only provides great latitude for the state in development of ocean governance policy and planning, but also great flexibility for adaptive management to respond to changes in ocean uses and the ocean environment, or the failure of a strategy to meet the goals of an ocean policy or plan.

Recently, the Florida Coastal and Ocean Coalition and the Florida Ocean Alliance have called for Florida to re-envision ocean governance and participate in ocean planning. The Florida Coastal and Ocean Coalition, a consortium of public interest organizations working "to conserve, protect and restore Florida's coastal and marine environments,"[255] states that "it is imperative

252. FLA. OCEANS & COASTAL COUNCIL, ANNUAL SCIENCE RESEARCH PLAN (2013–2014), *available at* http://www.floridaoceanscouncil.org/reports/Research_Plan_FY13-14.pdf; FLA. OCEANS & COASTAL COUNCIL, ANNUAL SCIENCE RESEARCH PLAN (2012–2013), *available at* http://www.floridaoceanscouncil.org/reports/Research_Plan_FY12-13.pdf; FLA. OCEANS & COASTAL COUNCIL, ANNUAL SCIENCE RESEARCH PLAN (2011–2012), *available at* http://www.floridaoceanscouncil.org/reports/Research_Plan_FY11-12.pdf.

253. RESEARCH PLAN (2013–2014), *supra* note 252, at 5.

254. FLA. CONST. art. X, § 11.

255. FLA. COASTAL & OCEAN COAL., FLORIDA'S COASTAL AND OCEAN FUTURE: AN UPDATED BLUEPRINT FOR ECONOMIC AND ENVIRONMENTAL LEADERSHIP 2 (2012) [hereinafter COALITION], *available at* http://flcoastalandocean.org/fcoc/wp-content/uploads/2011/12/Blueprint-FINAL-Web-Version.pdf. The Coalition Steering Committee is made up of Conservancy of Southwest Florida, 1000 Friends of Florida, Gulf Restoration Network, Indian Riverkeeper, Natural Resources Defense Council, Reef Relief, Sea Turtle Conservancy, Surfrider Foundation, and The Nature Conservancy. *Id.* at 2.

that Florida protect and sustain those [ocean and coastal resources on which its economy heavily depends], while planning for new coastal and ocean uses."[256] The Florida Ocean Alliance (FOA), an "organization dedicated to bringing together the private sector, academia, and nonprofit research organizations in Florida to protect and enhance Florida's coastal and ocean resources for continued social and economic benefits,"[257] has taken a strong position supporting CMSP in Florida waters, stating that:

> [t]he state needs a Coastal and Marine Spatial Plan to guide the prioritization of resources in state waters and to help direct activity in federal waters. Coastal and marine spatial planning is critical to adequately address and protect Florida's resources, stakeholder needs, potential stakeholder conflicts, the risks involved and emergency response actions for the state and its citizens.[258]

The Florida Oceans and Coastal Council, the Florida Coastal and Ocean Coalition, and the Florida Ocean Alliance have all also

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256. *Id.* at 30. The Coalition recommends that :

> Florida should develop a comprehensive, science- and ecosystem-based planning process that: (1) articulates a longterm vision to protect the state's coastal and marine environments; (2) contains clearly defined goals; (3) addresses environmental, economic and social issues; and (4) is developed in consultation with stakeholders and the general public.

Id.

257. FLA. OCEAN ALLIANCE, OCEANS OF OPPORTUNITY: MANAGING FUTURE USES OF FLORIDA'S OCEAN SPACES preface (2011). The group was formed in 1999 "and evolved from the members participating in the Florida Governor's Ocean Committee." *Id.* FAO membership includes Port Everglades, Aquafiber Technologies, Florida Ports Council, Florida Sea Grant College Program, Florida Power & Light, Mote Marine Laboratory, South Florida Regional Planning Council, The Nature Conservancy, Florida Chapter, Ocean Renewable Power Company LLC, Acme Sponge & Chamois Co., The International Sea-Keepers Society, Nova Southeastern University, Audubon of Florida, Florida Shore & Beach Preservation Association, Florida Fish & Wildlife Conservation Commission, Marine Industries Association of South Florida, Wards Marine Electric, Carnival Cruise Lines, Florida Institute of Oceanography, International Game Fish Association, Harbor Branch Oceanographic Institution, Florida Atlantic University, Marine & Environmental Systems, Florida Institute of Technology, Earth2Ocean, Inc., Royal Caribbean Cruises, Ltd., Roffer's Ocean Fishing Forecasting Service, Inc., Organized Fishermen of Florida, Inc., Walt Disney Parks & Resorts, and Hubbs-Sea World Research Institute. *Florida Ocean Alliance Member Organizations*, FLA. OCEAN ALLIANCE, http://www.floridaoceanalliance.org/foa_members.html (last visited Apr. 13, 2015).

258. *Oceans Generate Jobs for Florida's Economy: The Case for Ocean Management in Florida*, FLA. OCEAN ALLIANCE 3, http://www.floridaoceanalliance.org/documents/Ex.%20Summary%20Oceans%20of%20Opporutnity%20June%202011.pdf (last visited Apr. 13, 2015).

contributed to the public awareness of the plight of Florida's oceans,[259] the importance of the oceans to the state's economy, and the development of information essential to ocean governance and marine planning. For example, in addition to developing the extremely important Marine Spatial Planning Map,[260] the Florida Oceans and Coastal Council has prepared a series of reports on Florida's coastal economies[261] as well as reports on ocean and coastal observation systems, resource assessments, and effects of climate change;[262] the Coalition has published *Florida's Coastal and Ocean Future: An Updated Blueprint for Economic and Environmental Leadership*,[263] and the Florida Ocean Alliance has produced reports providing important background for marine planning, including most recently *Final Report Florida's Oceans and Coasts: An Economic and Cluster Analysis*[264] and *Oceans of Opportunity: Managing Future Uses of Florida's Ocean Spaces*.[265] These efforts contribute significantly to the resource base required for improved ocean governance and marine planning.

In sum, development of ocean governance and marine spatial planning has broad support from the science community, environmental groups, and a broad range of stakeholders. What is lacking seems to be the political will of the legislature to make

259. For example, the FOA has sponsored Oceans Day at the state Capitol, hosting booths and exhibits and presenting programs and workshops to introduce ocean issues and solutions to the public and the legislature. *Florida Oceans Day*, FLA. OCEAN ALLIANCE, http://www.floridaoceanalliance.org/oceans_day_conference.html (last visited Apr. 13, 2015).

260. *See Coastal and Marine Resources Assessment System*, *supra* note 92 (describing the development of the map-based application).

261. *E.g.*, JUDITH KILDOW, PHASE 1: FLORIDA'S OCEAN AND COASTAL ECONOMIES REPORT (2006), *available at* http://www.floridaoceanscouncil.org/reports/Florida_Ocean_&_Coastal_Eco.pdf.

262. *E.g.*, FLA. OCEANS & COASTAL COUNCIL, THE EFFECTS OF CLIMATE CHANGE ON FLORIDA'S OCEAN AND COASTAL RESOURCES 16 (2009), [hereinafter COASTAL COUNCIL], *available at* www.floridaoceanscouncil.org/reports/climate_change_report.pdf; FLA. COOS CONSORTIUM, A STRATEGIC IMPLEMENTATION PLAN FOR FLORIDA COOS: 2008–2010 3 (2008), *available at* http://www.floridaoceanscouncil.org/reports/FLCOOSPlan_July08.pdf; FLA. COASTAL MONITORING INTERAGENCY TECHNICAL ADVISORY GRP., A FRAMEWORK FOR COASTAL WATER RESOURCE MONITORING IN FLORIDA 2 (2006), *available at* http://www.dep.state.fl.us/water/monitoring/council/docs/FL_Coastal_Water_Resource_Monitoring_Framework.pdf.

263. COALITION, *supra* note 255.

264. FLA. OCEAN ALLIANCE, FLORIDA'S OCEANS AND COASTS: AN ECONOMIC AND CLUSTER ANALYSIS (2013), *available at* http://www.floridaoceanalliance.org/documents/OceansDay2013/FLORIDAS_OCEANS_AND_COASTS_AN_ECONOMIC_AND_CLUSTER_ANALYSIS.pdf [hereinafter FOA Economic Analysis].

265. OCEANS OF OPPORTUNITY, *supra* note 257.

the long-term commitment necessary to protect the oceans and the economy of a state that depends on the oceans.[266]

VI. THE SCOPE AND GOALS OF OCEAN POLICY AND PLANNING

In *An Ocean Blueprint for the 21st Century*,[267] the United States Commission on Ocean Policy adopted thirteen guiding principles[268] that have been adapted below to provide a useful framework for considering the scope and goals of ocean policy and planning in Florida.

Stewardship and Sustainability: Ocean stewardship involves ensuring that the ocean and our coasts "are healthy and resilient, safe and productive, and understood and treasured so as to promote the well-being, prosperity, and security of present and future generations."[269] Sustainability means meeting the needs "of the present generation without compromising the ability of future generations to meet their needs."[270] The principles of stewardship and sustainability are inextricably linked. But in the case of Florida's oceans, these principles should not be considered merely guiding principles or goals, but constitutional responsibilities of the legislature and governor. Section 11 of Article X of the Florida Constitution provides that "title to lands under navigable waters, within the boundaries of the [S]tate, which have not been alienated, including beaches below mean high water lines, is held by the state, by virtue of its sovereignty, *in trust for all the people*."[271] This provision "constitutionalizes" the public trust doctrine, discussed more fully in the next Part, for the citizens of Florida. Further, Section 17(a) of Article X specifically extends

266. *See, e.g.*, FOA Economic Analysis, *supra* note 264, at 3 (providing the ocean's economic impact on Florida).

> Economic activity directly created by Florida's ocean resources amounted to $17.5 billion in 2011. Of this, $8 billion was created by out of state ocean-oriented tourism, $6.3 billion was created by seaports/ocean transportation and its supporting activities, $1.8 billion was created by the marine industry, $1.1 billion was created by ocean-oriented recreation and $0.4 billion was created by the harvest, processing and distribution of the ocean's fishing/living resources.

Id.

267. USCOP REPORT, *supra* note 182.

268. *Id.* at 6.

269. Exec. Order No. 13,547, 3 C.F.R. at 227 § 2(a).

270. *See* USCOP REPORT, *supra* note 182, at 6.

271. FLA. CONST. art. X, § 11 (emphasis added).

the State's obligation beyond short-term management goals by stating: "[t]he marine resources of the State of Florida belong to all of the people of the state and should be conserved and managed *for the benefit of the state, its people, and future generations.*"[272] And more generally, Section 7 of Article II creates a "policy of the state to conserve and protect its natural resources and scenic beauty."[273] Article X, Section 11, when read together with Section 17 and Section 7 of Article II, provides strong evidence that the public trust should not be read as simply a limitation on government, but as a duty to manage ocean resources for the benefit of the people and future generations. Without effective ocean governance and planning, the State is failing in its responsibility by disregarding these constitutional obligations.

Multiple Use Management: More intense ocean uses and new ocean uses, as well as changes in the physical environment, create the need for more sophisticated ocean governance and ocean planning. The public trust doctrine does not inherently prohibit or limit new ocean uses and economic opportunities even if the activities negatively affect the ocean environment.[274] The public trust doctrine protects a wide range of the public's interests in the ocean.[275] Traditionally the doctrine applied to the triad of commerce, navigation, and fishing,[276] but the doctrine has evolved to reflect the public's contemporary interests in the ocean and other navigable waters, including recreational uses and protection of the environment.[277] The State finds itself in the position of trustee of the oceans for a broad array of public interests and uses in ocean waters, and it should be apparent that many of the protected uses can conflict with one another. The public trust

272. FLA. CONST. art. X, § 17(a) (emphasis added).

273. FLA. CONST. art. II, § 7.

274. JACK H. ARCHER ET AL., THE PUBLIC TRUST DOCTRINE AND THE MANAGEMENT OF AMERICA'S COASTS 23–25 (1994).

275. *Id.*

276. *See* Shively v. Bowlby, 152 U.S. 1, 49 (1894) (discussing that the public trust doctrine applies to commerce, navigation and fishing); *see also* State v. Black River Phosphate Co., 13 So. 640, 656 (Fla. 1893); State v. Gerbing, 47 So. 353, 355 (Fla. 1908); Broward v. Mabry, 50 So. 826, 829–30. (Fla. 1909).

277. *See* ARCHER ET AL., *supra* note 274; *see also* White v. Hughes, 190 So. 446, 450 (Fla. 1939) (extending Florida's public trust doctrine to bathing and recreational uses); Donna R. Christie, *Marine Reserves, the Public Trust Doctrine and Intergenerational Equity*, 19 J. LAND USE & ENVTL. L. 427, 432–34 (2004) [hereinafter MARINE RESERVES] (discussing that the public trust doctrine's ambit has been expanded to also include recreational uses and environmental protections).

doctrine, however, creates no specific hierarchy of uses.[278] The public trust doctrine and multi-use management principles[279] impose on state legislatures and agencies, then, the responsibility to "balance competing interests based on the appropriateness of the use to the particular area of the ocean" and on preservation of the overall health and integrity of ocean and coastal systems.[280]

Ecosystem-Based Management (incorporating principles of *Best Available Science and Information; Preservation of Marine Biodiversity, Ocean–Land–Atmosphere Connections*, and *Adaptive Management)*: The Florida Oceans and Coastal Council defines ecosystem-based management as:

> an integrated and adaptive approach that considers the entire ecosystem—the organisms, their interactions, and the chemical, physical, and human social environment that surrounds and sustains them. The goal is to maintain healthy, productive and resilient ocean ecosystems that can sustainably provide the services human beings want and need today and in the future.[281]

Note that ecosystem-based management incorporates humans as part of the entire ecosystem and the goal of sustaining the services of the ocean ecosystems that sustain and support human needs. The definition inherently incorporates preservation and restoration of marine biodiversity, which is necessary to sustainably provide these services. By reference to the "entire ecosystem," the definition reflects the relationships of land, air, and the oceans: the "entire ecosystem" goes beyond ocean boundaries and must take into account activities on land and on the coasts that affect ocean ecosystems, including activities contributing to air pollution, climate change, and ocean acidification.

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278. *See, e.g.*, Weden v. San Juan Cnty., 958 P.2d 273, 282–83 (Wash. 1998) (upholding a county ordinance on the grounds that the public trust doctrine cannot support a recreational activity that harms the environment); *see generally* ARCHER ET AL., *supra* note 274, at 26–29 (discussing how courts have refrained from defining a hierarchy of uses, though some state agencies have, in fact, established such a system). It may be argued, however, that the protection of ecological values is fundamental to the enjoyment of all other public trust uses.

279. *See generally* ARCHER ET AL., *supra* note 274, at 27–29; USCOP REPORT, *supra* note 182, at 6 (describing multi-use management principles).

280. MARINE RESERVES, *supra* note 277, at 432.

281. RESEARCH PLAN (2013-2014), *supra* note 252, at 4.

That ecosystem-based management and planning for the oceans must be based on the best available science and information is a truism at this point. Politics and industry capture should not control decision-making for such vital public resources. But ecosystem-based management for the oceans does require large amounts of high-quality science on "the natural, social, and economic processes that affect ocean and coastal environments."[282] But how can there ever be enough information to understand and manage processes and relationships as complex as an ecosystem and that are subject to constant change?[283] Does this inability to ever have all the information that may be needed simply make ecosystem-based management merely aspirational? No. The requirement for basing management on the best available science is not intended to be restrictive, but rather facilitative.[284] The use of best scientific evidence goes hand-in-hand with use of a precautionary approach when there is a lack of scientific certainty but the risk of harm is substantial.[285] Using the best scientific evidence available is part of a process—not an end in itself. The process includes continued monitoring of activities and applying adaptive measures.

Participatory Governance (including *Transparency and Accountability, Understandable Laws and Clear Decisions*): The principles discussed in this Subpart fall generally under the somewhat elusive concept of "good governance." The principle of good governance developed primarily in the context of sustaina-

282. USCOP REPORT, *supra* note 182, at 6.

283. *See, e.g.*, Ecosystem Principles Advisory Panel, *Ecosystem-Based Fishery Management*, NOAA FISHERIES 10–11 (1999), http://www.nmfs.noaa.gov/sfa/EPAPrpt.pdf (addressing the issue whether ecosystem principles, goals, and policies can be applied to United States fisheries).

284. *See generally* Kristin Carden, *Bridging the Divide: The Role of Science in Species Conservation Law*, 30 HARV. ENVTL. L. REV. 165, 258–59 (2006) (arguing that by using this methodology scientists and legislators can work together to create an ecosystem-based conservatory scheme); Darren S. Ryder et al., *Defining and Using 'Best Available Science': A Policy Conundrum for the Management of Aquatic Ecosystems*, 616 MARINE & FRESHWATER RESEARCH 821, 821 (2010) (defining the attributes of best available science); P.J. Sullivan et al., *Defining and Implementing Best Available Science for Fisheries and Environmental Science, Policy, and Management*, 31 FISHERIES 460, 461 (2006) (applying best available science principles to fisheries).

285. United Nations, *The Rio Declaration on Environment and Development*, JUS.UIO.NO 3–4 (1992), http://www.jus.uio.no/lm/environmental.development.rio.declaration.1992/portrait.a4.pdf (stating as Principle 15 that "[w]here there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation").

ble development, and the United Nations Development Program's (UNDP) definition of good governance is perhaps the most widely accepted.[286] The UNDP identified eight characteristics of good governance that are inextricably related to each other: participation, rule of law, transparency, responsiveness, consensus orientation, equity, accountability, and strategic vision.[287]

Participation means assuring that all citizens have a voice in decision-making.[288] The participation of stakeholders is particularly vital for successful decision-making concerning ocean resources. That participation cannot be effectively exercised without transparency; that is, the provision of access to both the processes and information necessary to facilitate understanding and effective engagement.[289] Participation involving understanding and awareness of the basis for decisions concerning resource protection and allocation "contributes to credible, accepted rules that identify and assign the corresponding responsibilities appropriately."[290]

In the case of ocean policy development and ocean planning in the current context, participation and transparency are particularly important to establish the legitimacy of the process and its results. The federal ocean policy and planning mandate is being implemented through executive order; state participation in regional planning efforts is voluntary. The process is without legislative mandate at the federal level and, in the case of Florida, without legislative mandate or executive guidance at the state level. To ensure legitimacy, the process must be responsive to and accountable to a broad range of stakeholders.[291] Without equity

286. *See* James Gustave Speth & United Nations Dev. Programme, *Governance for Sustainable Human Development*, WORLD HEALTH ORG. 4–5 (1997), http://gis.emro.who.int/HealthSystemObservatory/Workshops/WorkshopDocuments/Reference%20reading%20material/Literature%20on%20Governance/GOVERN-2.PDF [hereinafter UNDP] (articulating the characteristics of good governance); *see also*, John Graham et al., POLICY BRIEF NO. 15: PRINCIPLES FOR GOOD GOVERNANCE IN THE 21ST CENTURY (2003), *available at* http://unpan1.un.org/intradoc/groups/public/documents/UNPAN/UNPAN011842.pdf (noting that the United Nations Development Program's definition is universally accepted).

287. UNDP, *supra* note 286, at 5.

288. *Id.*

289. *Id.* at 6.

290. Robert Costanza et al., *Principles for Sustainable Governance of the Oceans*, 281 SCI. 198, 198–99 (July 10, 1998), *available at* https://www.pdx.edu/sites/www.pdx.edu.sustainability/files/Costanza%20et%20al.%20Science%201998.pdf.

291. The term "stakeholders" should not be limited to persons who economically exploit ocean resources. When public resources of the oceans are involved, the members of the

and fair and impartial application of the rule of law in managing and allocating ocean resources and ocean space, ocean planning will not muster the consensus[292] needed to succeed in the absence of a clear legislative mandate. Failure to reach broad consensus will lead to a political failure of the process.

Regional Responsibility and Participation:[293] An ecosystem-based approach to management of ocean resources and activities obviously cannot be achieved by policies and management that extend solely to state waters. But, the costs and benefits of participation in regional ocean planning must be carefully assessed. The basic consideration should be: What is the "value added" by participating in ocean policy and planning at the regional level? Several of these benefits have already been noted, including enhancing the voice of the state in the development and implementation of ocean policy by the federal agencies both within and beyond state waters.[294] Federal activities can underscore or undermine the State's governance of its adjacent seas, making coordination and cooperation with the State crucial in the context of implementation of federal ocean policy. State policies that are reiterated and reinforced in regional planning efforts have even greater weight.

Florida already participates in two regional ocean initiatives that may be built upon for regional ocean planning. The Governor's South Atlantic Alliance was formed in 2009 and includes Florida, Georgia, South Carolina, and North Carolina.[295] The Gulf of Mexico (GOM) Alliance, created in 2004, includes all five states bordering the Gulf of Mexico.[296] Both Alliances have worked to

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public and even future generations are also stakeholders, especially in light of Florida's constitutional provisions.

292. UNDP describes "consensus orientation" as follows: "Good governance mediates differing interests to reach a broad consensus on what is in the best interests of the group and, where possible, on policies and procedures." UNDP, *supra* note 286, at 5.

293. In the USCOP Report, the final guiding principle was International Responsibility. USCOP REPORT, *supra* note 182. For purposes of this discussion, however, Regional Responsibility and Participation have been substituted.

294. *See supra* text accompanying notes 230–50 (discussing the NOC's position on regional ocean planning).

295. *About Us*, GOVERNORS' S. ATL. ALLIANCE, http://74.254.77.90/?page_id=10 (last visited Apr. 13, 2015).

296. *The History of the Gulf of Mexico Alliance*, GULF OF MEXICO ALLIANCE, http://www.gulfofmexicoalliance.org/about-us/goma-history/ (last visited Apr. 13, 2015); *State Partners*, GULF OF MEXICO ALLIANCE, http://www.gulfofmexicoalliance.org/about-us/alliance-partnerships/state-partners/ (last visited Apr. 13, 2015).

establish priority areas for collaborative research and action to address issues of shared, regional significance.[297] The GOM Alliance boasts an impressive record of accomplishing goals established for regional action.[298] Further, the GOM Alliance includes National Ocean Policy among its regional initiatives[299] and is currently making an assessment of the need for regional ocean planning in the Gulf of Mexico.[300] This assessment will undoubtedly consider whether creating a regional planning body and ocean spatial plan will provide a "value added" beyond what the GOM Alliance can already accomplish.

With Florida's regional efforts divided between two large marine ecosystems and two regional bodies, the state has potentially twice the costs that other states may accrue in participating in regional ocean planning. Participation in two regional planning bodies might also simply dilute the State's efforts and effectiveness. The question may arise then whether the "value added" by regional ocean planning is different in the South Atlantic and GOM regions. If resources dictate participation in only one regional planning body, which one would provide the greatest potential for extending the State's influence to activities beyond its waters and for affecting state natural and economic resources? The Deepwater Horizon oil spill accentuated the fact that the Gulf of Mexico is a semi-enclosed sea and that everything that occurs within its boundaries can affect the environment and

297. *See Our Priorities*, GULF OF MEXICO ALLIANCE, http://www.gulfofmexicoalliance.org/our-priorities/ (last visited Apr. 13, 2015) (identifying the Alliance's six priority issues as coastal community resilience, ecosystem integration and assessment, environmental education, habitat conservation and restoration, nutrient impact reduction to coastal ecosystems, and water quality for healthy beaches and seafood); *Priorities*, GOVERNORS' S. ATL. ALLIANCE, http://74.254.77.90/?page_id=12 (last visited Apr. 13, 2015) (describing the Alliance's four priority areas as healthy ecosystems, working waterfronts, clean coastal and ocean waters, and disaster resilient communities).

298. *The History of the Gulf of Mexico Alliance*, *supra* note 296.

> In 2006, on the heels of Hurricanes Katrina and Rita, the five Gulf State Governors signed the *Gulf of Mexico Alliance Governors' Action Plan for Healthy and Resilient Coasts*. Realizing that the mission could only be achieved by including as many Alliance Partners as possible, other organizations were recruited to join the effort, including academic organizations, non-profits, and business partners. Ninety-nine percent of the objectives of the *Action Plan* were realized in just three short years.

Id.

299. *Regional Initiatives*, GULF OF MEXICO ALLIANCE, http://www.gulfofmexicoalliance.org/about-us/regional-initiatives/ (last visited Apr. 13, 2015).

300. *Marine Planning Meeting*, *supra* note 245.

economies of all the surrounding states. In addition, the GOM Alliance has a well-developed administrative structure and well-established partnerships not only among the participating states and federal agencies, but also among universities, research organizations, the Gulf of Mexico Foundation, and stakeholders in the GOM Alliance represented by the Gulf of Mexico Alliance Business Advisory Council.[301] GOM Alliance members are also involved in the Gulf Coast Ecosystem Restoration Council,[302] established by the RESTORE the Gulf Coast States Act of 2011[303] to provide funds to restore and protect Gulf of Mexico ecosystems and economies.[304] If priorities for regional ocean planning must be established, the state arguably will receive the most "value added" from regional ocean planning in the Gulf of Mexico.

Florida's decision concerning participation in a regional ocean planning body also has political implications for the state in the regional context. As noted above, no regional planning body will be established unless all the states in the region participate.[305] Each state in a region must consider the consequences of its non-participation on political relations and the consequences of such action on effective management of the oceans beyond state waters.

VII. CONCLUSION

Development of comprehensive ocean policy and implementation through planning and management is a formidable undertaking because of the number of interests and stakeholders

301. *Other Partners*, GULF OF MEXICO ALLIANCE, http://www.gulfofmexicoalliance.org/about-us/alliance-partnerships/other-partners/ (last visited Apr. 13, 2015); *Power of Partnerships*, GULF OF MEXICO ALLIANCE, http://www.gulfofmexicoalliance.org/about-us/alliance-partnerships/ (last visited Apr. 13, 2015).

302. *Gulf Restoration*, GULF OF MEXICO ALLIANCE, http://www.gulfofmexicoalliance.org/learn-more/gulf-restoration/ (last visited Apr. 13, 2015) (explaining that the RESTORE Act established a Gulf Coast Ecosystem Restoration Council that includes governors from the five affected Gulf States, the Secretaries of the Departments of the Interior, Commerce, Agriculture, and Homeland Security as well as the Secretary of the Army and the Administrator of the U.S. Environmental Protection Agency).

303. Resources and Ecosystems Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast States Act of 2012, Pub. L. No. 112-141, 126 Stat. 588 (2012).

304. *Id.* at 588 (The RESTORE Act creates the Gulf Coast Restoration Trust Fund, funded by eighty percent of the civil penalties paid in connection with the Deepwater Horizon oil spill under the Federal Water Pollution Control Act after July 6, 2012.).

305. *See supra* text accompanying notes 236–37 (arguing that one state's lack of participation can defeat the entire process).

involved, the fragmented authorities and jurisdiction, and the difficulty in transcending sectoral management regimes that have evolved as governments have incrementally responded to conflicts and crises that have arisen in regard to ocean uses and ocean resources. Florida's first steps toward comprehensive ocean policy produced some notable achievements,[306] but failed to provide the "strategic vision" for sustained good governance of the oceans.[307] Florida's previous efforts suffered from a lack of commitment to implementation, generally because of the changes of administrations and priorities, but also quite likely because of a lack of a sense of urgency. Government responds to crises. But, by planning for the changes in the ocean environment, more intense ocean activities, and new uses of the oceans discussed in this Article, perhaps the next crisis can be averted and stewardship of the ocean, not just sectoral management of its uses and users in response to a crisis, might be achieved.

The United States Commission on Ocean Policy envisioned this future for our oceans:

> In the desirable future, the oceans and coasts would be clean, safe, and sustainably managed. The oceans would contain a high level of biodiversity and contribute significantly to the economy, supporting multiple beneficial uses, including food production, development of energy and mineral resources, recreation, transportation of goods and people, and the discovery of novel life-saving drugs and other useful products. The coasts would be attractive places to live, work, and play, with clean water and beaches, easy public access, vibrant economies, safe bustling harbors and ports, adequate roads and services, and special protection for sensitive habitats. Beach closings, toxic algal blooms, proliferation of invasive species, and vanishing native species would be rare. Better land use planning and improved predictions of severe weather and other natural hazards would save lives and money.
>
> In the desirable future, management of the oceans and coasts would follow ecosystem boundaries, looking at interactions among all elements of the system, rather than address-

306. *See supra* Part III (discussing the success of Florida's ocean-policy during the last twenty-five years).

307. Strategic vision is the final principle set out in the UNDP Principles on Good Governance. It requires leaders to have a "broad and long-term perspective" on what is needed for good governance of the oceans. UNDP, *supra* note 286, at 5.

> ing isolated areas or problems. In the face of scientific uncertainty, managers would balance competing considerations and proceed with caution. Ocean governance would be effective, participatory, and well coordinated among government agencies, the private sector, and the public.[308]

The federal government, many states, and now regional ocean planning bodies, are moving toward accomplishing those goals. Florida's stake in that future is far greater than most states—both in the geographic scope of the State's seas and coasts and the contribution the oceans make to its economy. Florida's commitment to achieving sustainable oceans should be commensurate with the importance of the oceans to the State. The State's ability to contribute to federal ocean policy, affect federal activities beyond State waters, and assure that State interests are adequately taken into account in regional ocean planning also requires the State to commit to clear principles of stewardship for the oceans and planning and priorities for the State's ocean waters. These principles and plans need to be translated into enforceable policies that can become part of the State's Coastal Management Program and subject to the federal consistency requirement.[309]

In short, Florida is quickly losing its strategic position to lead in ocean policy and planning. Further, if the State does not at least follow current developments in this area, the State's failure to adequately formulate its principles of stewardship or plans and priorities for state ocean waters could well mean being left behind in preparing for the challenges of assuring sustainable oceans in the twenty-first century.

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308. USCOP REPORT, *supra* note 182, at 60–61.

309. *See supra* text accompanying note 44 (explaining the federal consistency requirement of the CZMA).