

Building a National Ocean Policy Confronts Deconstruction of the Administrative State

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I. INTRODUCTION: A HAPPIER TIME

Legal literature records a positive time for ocean and coastal law. It was 2004 and the distinguished bipartisan U.S. Commission on Ocean Policy appointed by Republican President George W. Bush, under the Oceans Act of 2000, Public Law 106-256, had issued its Final Report titled *An Ocean Blueprint for the 21st Century*.¹ Its opening map showed that the United States governs the largest ocean area of any nation, extending out 200 miles seaward from all its coasts, exceeding in size the land area

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1. U.S. COMM’N ON OCEAN POLICY, AN OCEAN BLUEPRINT FOR THE 21ST CENTURY (Sept. 2004), https://govinfo.library.unt.edu/oceancommission/documents/full_color_rpt/000_ocean_full_report.pdf.

of the fifty states combined. The *Blueprint*'s recommendations described principles to establish a comprehensive and coordinated ocean policy for our nation.² Things were looking up. A central aim ever since has been to develop that national ocean policy (NOP) and properly manage the ocean resources.

The *Blueprint* recommended consolidating or coordinating ocean responsibilities from parts of the twenty federal departments and agencies that administer 140 federal statutes.³ Bills were introduced to give the proposed agency a statutory delegation.⁴ The approach was to have states join in regional planning and to assemble implementation councils for each of the nine geographic areas. States whose waters adjoin the federal waters offshore would have a federalism relationship for joint involvement. Principles would be used to guide NOP activities. Farther out from the 200-mile jurisdictional limit, the United States would join the world's nations on the deep seabed mining agreement of the United Nations Convention on the Law of the Sea.⁵ President Bush followed through with an executive order forming a cabinet-level council within the executive branch.⁶ Suggestions were made for Congress to pass an enabling act with broad objectives, funding sources, and a defined federal, state, and regional structure. It would have a framework similar to the federal Coastal Zone Management Act of 1972, which used a voluntary program with incentives to get states and regions involved.⁷ That Act eventually brought all coastal and Great Lakes states to make management plans for near-shore uplands and a few miles of adjacent waters. But then the whole NOP movement stalled.

Wars in the Middle East became a national focus. A recession ensued. A national debate over health care became a legislative priority. The bipartisan movement for a full-fledged National Ocean Policy withered as a sharp partisan divide came into being, at times anti- versus pro-regulatory in focus. Climate change became the dominant environmental debate. Since no legislation emerged, presidents from George W. Bush, to

2. *Id.* at 5, 61-63.

3. Angela T. Howe, *The U.S. National Ocean Policy: One Small Step for National Waters, but Will It Be the Giant Leap Needed for Our Blue Planet?*, 17 OCEAN & COASTAL L.J. 65, 66 (2011).

4. Robin Kundis Craig, *Progress Toward a Revised National Ocean Policy?*, 36 ABA TRENDS 4 (Mar./Apr. 2005).

5. *Id.*

6. Exec. Order No. 13,666, 69 Fed. Reg. 7658 (Dec. 17, 2004).

7. 16 U.S.C. §§ 1451-1465 (2006) (Supp. 2010); Marc J. Hershman & Craig W. Russell, *Regional Ocean Governance in the United States: Concept and Reality*, 16 DUKE ENVTL. L. POL'Y F. 227, 262 (2006).

Barack Obama, to Donald Trump turned to what can be called a “Plan B” for a NOP: use of a succession of executive orders. Perhaps the dream of a NOP died? Or will the executive orders prove to be a bridge between unfinished business from happier times? Many sources suggest the need and wisdom behind a full NOP. Examined here are the strands of coordinated ocean planning achieved by executive orders and the tasks left undone. Bearing heavily on this subject is the overlay of the Trump Administration’s efforts to deconstruct the administrative state and its regulatory programs.

With some clairvoyance, Angela T. Howe surveyed the scene as it stood in 2011 under the Obama executive order from 2010. Howe wrote, “[T]he longevity and success of the NOP executive order may depend on whether the order can be codified into law,”⁸ and that “history demonstrates the most successful executive orders are those that were subsequently codified to some extent by congressional action. However, given the current congressional atmosphere and unrelated pressure on our federal legislature, it may not come soon.”⁹

However, over a decade is long enough to wait out the stagnation. The subject matter is inherently bipartisan and involves not just a crisis, but how to deal with a lengthy set of disastrous ocean and coastal situations. Currently, we have lists of urgent governance needs in the national ocean, such as an Intergovernmental Panel on Climate Change (IPCC) report for policymakers on the ocean in a changing climate, a decade-long national ocean research program started, and significant experience in regional cooperative ocean management. Action is needed from stakeholders of economic, environmental, shipping, health, food, and energy viewpoints. A multitude of effects assail the people and places involved.

Happy days for passage of a statutory NOP might come soon. Gathered here are how the pieces might come together and replace the executive order era operating since 2004. Proposed is a revival of efforts for legislation that embraces regional ocean councils for governance and policies such as Ecosystem Based Management (EBM). The problems of the oceans have grown worse. Even Trump’s Decadal Vision for research on ocean science and technology is awash in listing the huge number of severe problems. “The problems we face today and the need for urgent action are greater, if anything, than when the two commissions did their

8. Howe, *supra* at note 3, at 95.

9. *Id.* at 80.

work,” and their call for “improved ocean stewardship rings as true today as a decade ago.”¹⁰

Described here are pieces of the NOP struggle: the commonalities and contrasts of three Presidents’ executive orders; the Special Report for policymakers from the IPCC on the ocean in a changing climate; the Trump-era deconstruction of administrative regulation viewed from the problems raised in the Special Report; an understanding of the effects on the ocean resources from deconstruction policies of the Trump administration; deconstruction directives on scientific methods and on structures of ocean regulatory agencies; oceanic science and technology data-gathering; and how regional collaboration fills in part of the policy void. The purpose of this Article is to offer updated background on the governance deficit for the nation’s surrounding ocean and to evaluate the prospects and potential for a National Ocean Policy.

II. EXECUTIVE ORDERS OF THREE PRESIDENTS AND STILL NO NATIONAL OCEAN POLICY

A. *President George W. Bush*

Two reports, one by the Pew Commission (Pew) (created by nonprofit foundation funding) and one by the U.S. Commission on Ocean Policy (USCOP) (created under the Oceans Act of 2000 with membership appointed by President Bush) laid the NOP groundwork.¹¹ Both reports state their concepts on Regional Ocean Governance (ROG). Their recommendations have been compared in the extensive work of Professors Marc Hershman and Craig Russell, and of Natural Resources Defense Council senior attorney Sarah Chasis.¹² Additional comparison is discussed below of the subsequent Presidents’ actions.

The Pew version proposed a federally driven approach, via national law and standards. It suggested ROG ecosystem-based management (EBM) plans for large marine ecosystems (LMEs) that the federal government will supply if the ROG does not. It uses marine zoning including water quality, habitat, and coastal development. It uses federal consistency and citizen suits for enforcement. It has a national council with

10. Sarah Chasis, *Reforms in U.S. Ocean Policy and Law in Response to Calls for Urgent Action*, in OCEAN AND COASTAL LAW AND POLICY 855 (Baur et al. eds., 2d ed. 2015).

11. PEW OCEANS COMM’N, AMERICA’S LIVING OCEANS, CHARTING A COURSE FOR SEA CHANGE (2003), https://www.pewtrusts.org/-/media/assets/2003/06/02/full_report.pdf; U.S. COMM’N ON OCEAN POLICY, *supra* note 1.

12. Hershman & Russell, *supra* note 7, at 233; Chasis, *supra* note 10, at 841 (detailing the two Commissions’ findings and recommendations).

federal, state, and tribal membership as well as nongovernmental interests on advisory groups.¹³

The USCOP version for ROG proposed a less-prescribed voluntary participation that Governors initiate. The National Ocean Council membership would involve all levels of government: the regions would identify the tasks and priorities, nongovernmental participation may come from either Council memberships or advisory groups, and EPA and NOAA would help assess regional ecosystems.¹⁴

President George W. Bush's 2004 U.S. Ocean Action Plan and Executive Order set up a Committee on Ocean Policy at the cabinet level to advise the President and agency heads on ocean matters. But his structure had "very little" reference to ecosystems nor any specific steps toward EBM.¹⁵

B. *President Obama*

The first ever national ocean policy was adopted under Executive Order of President Barack Obama on July 19, 2010.¹⁶ The Bush executive order was revoked by Obama's order, which remained in place until June 19, 2018, when an executive order by President Donald Trump, titled Ocean Policy to Advance the Economic, Security, and Environmental Interests of the United States expressly revoked and, to an extent, replaced the Obama structure with a committee that lacks standards or a policy to guide it.¹⁷ The Obama policy was a significant effort meriting examination.

Cooperative governance of coastal areas had been achieved by statutes since the Federal Coastal Zone Management Act of 1972 aided coastal land use planning through a federal-state cooperation mechanism where governmental powers overlap, and federal funding incentives helped states create their coastal zone management plans.¹⁸ The Magnuson-Stevens Sustainable Fisheries Act, starting in 1976, grouped states into regions for Fisheries Management Councils that set standards to prevent overfishing.¹⁹ The fisheries program is regarded as highly

13. Hershman & Russell, at 232-33.

14. *Id.*

15. Exec. Order No. 13,666, 69 Fed. Reg. 76,591 (Dec. 21, 2004); Donald C. Baur, Patrick A. Parenteau & Georgia Hancock Snusz, *Legal Authorities for Ecosystem-Based Management in Coastal and Ocean Areas*, in OCEAN AND COASTAL LAW AND POLICY, *supra* note 10, at 707.

16. Exec. Order No. 13,547, 75 Fed. Reg. 43,021 (July 19, 2010).

17. Exec. Order No. 13,840, 83 Fed. Reg. 29,431, 29,433 (June 19, 2018).

18. *See generally* 16 U.S.C.A. § 1451 (2018).

19. 16 U.S.C. § 1801(a)(6), (b)(5) (2018).

successful, and the Act was strengthened in 2006 to tailor catch amounts and methods very quickly based on science when overfishing of a species occurs.²⁰

President Obama began by directing the heads of executive departments and agencies to produce what came to be known as the Final Recommendations of the Interagency Ocean Policy Task Force.²¹ These Final Recommendations were expressly adopted in Executive Order 13,547 on July 19, 2010, which directed executive agencies to implement the recommendations “under the guidance of a National Ocean Council.”²² The Council’s National Ocean Policy Implementation Plan detailed the approaches.²³

Obama’s 2009 Memorandum required the Task Force to make recommendations within ninety days on

- (1) [a] national policy for the oceans, our coasts, and the Great Lakes; (2) a United States framework for policy coordination of efforts to improve stewardship” of those locations; and (3) an implementation strategy that “identifies and prioritizes a set of objectives the United States should pursue to meet the objectives of a national policy.²⁴

The Memorandum also directed the Task Force to use specific policy tools: coastal and marine spatial planning (CMSP) and ecosystem-based management (EBM). The CMSP was defined as “a comprehensive, integrated, ecosystem-based approach that addresses conservation, economic activity, user conflict, and sustainable use of ocean, coastal, and Great Lakes resources consistent with international law, including customary international law as reflected in the 1982 United Nations Convention on the Law of the Sea.”²⁵

The executive order accepted the Final Recommendations and declared that they set the first ever national ocean policy, a governance structure for “sustained, high-level, and coordinated attention” to the

20. BRAD SEWELL ET AL., R:13-01-A, BRINGING BACK THE FISH: AN EVALUATION OF THE U.S. FISHERIES REBUILDING UNDER THE MAGNUSON-STEVENS FISHERY CONSERVATION AND MANAGEMENT ACT 11 (2013), <https://www.nrdc.org/sites/default/files/rebuilding-fisheries-report.pdf>.

21. Memorandum by President Obama to the Heads of Executive Departments and Agencies (June 12, 2009), http://whitehouse.gov/sites/default/files/page/files/2009ocean_mem_rel.pdf.

22. Exec. Order No. 13,547, 75 Fed. Reg. 43,021, 43,023 (July 19, 2010).

23. See generally NAT’L OCEAN COUNCIL, NATIONAL OCEAN POLICY IMPLEMENTATION PLAN (Apr. 2013), https://obamawhitehouse.archives.gov/sites/default/files/national_ocean_policy_implementation_plan.pdf.

24. Memorandum by President Obama to the Heads of Executive Departments and Agencies, *supra* note 21.

25. *Id.*

issues, an implementation strategy that “identifies and prioritizes nine categories for action that the United States should pursue,” and a framework for CMSP.²⁶

EBM is one of the core policies advocated in a statutory NOP. As early as 2003, the Pew Commission recommended a NOP Act. Their proposal was to have Regional Ecosystem Councils, a national system of marine reserves for ecosystems, and the structure of an independent national oceans agency with a permanent interagency oceans council.²⁷ The result would be an enforceable Regional Ocean Plans derived from science and regarding ecosystem health. Stakeholders would be the federal government, states, tribes, and other advising stakeholders. There would be Coastal Zone Management Act type “consistency” included.²⁸

Comparatively, in 2004, the U.S. Commission on Ocean Policy proposed a national ocean policy framework with bottom-up regional processes, a national ocean council within the Executive Office of the President (thus an executive branch agency under control of the President, rather than the independent agency the Pew Commission put forward) and regional voluntary councils to address large marine ecosystems.²⁹

The United Nations definition of EBM is “an integrated approach to management that considers the entire ecosystem, including humans.”³⁰ The goal is “to maintain an ecosystem in a healthy, productive and resilient condition” to provide for goods and services.³¹ It differs from “single species, sector, activity or concern; it considers the cumulative impacts of different sectors.”³² Concepts applied are about ecosystem structures, interconnected systems, and place-based focus on specific ecosystems and activities that affect them.³³

26. Exec. Order No. 13,547, 75 Fed. Reg. 43,021, 43,023 (July 19, 2010); NAT'L OCEAN COUNCIL, *supra* note 23; THE WHITE HOUSE COUNCIL ON ENVIRONMENTAL QUALITY, FINAL RECOMMENDATIONS OF THE INTERAGENCY OCEAN POLICY TASK FORCE (2010), https://iocm.noaa.gov/reports/OPTF_FinalRecs.pdf; Emily Migliaccio, *The National Ocean Policy: Can It Reduce Marine Pollution and Streamline Our Ocean Bureaucracy?*, 15 VT. J. ENVTL. L. 629, 641 (2014); Memorandum by President Obama to the Heads of Executive Departments and Agencies, *supra* note 21.

27. PEW OCEANS COMM'N, *supra* note 11.

28. Donald C. Baur, Patrick A. Parenteau & Georgia Hancock Snusz, *Legal Authorities for Ecosystem-Based Management in Coastal and Ocean Areas*, in OCEAN AND COASTAL LAW AND POLICY, *supra* note 10, at 703, 705-06; *see also* Hershman & Russell, *supra* note 7.

29. Baur, Parenteau & Snusz, *supra* note 28, at 706.

30. *Id.* at 704.

31. *Id.*

32. *Id.*

33. *Id.*

The Obama plan on EBM was included in a memo to heads of executive department agencies in June 2009, stating that EBM would be carried out especially by the approach of CMSP, also known as Marine Planning. These features were included in Executive Order 13,547, pushing it forward as a central point for stewardship, and followed by a 2011 EBM Strategic Action Plan Outline of the NOC.³⁴ The approach uses the tools of EBM, CMSP, regional focus, and stakeholder engagement, with the precautionary approach: adaptively changing based on new data and integrated management to deal with ecosystems affected by human impacts. The issues faced include oil spills, “overfishing, destructive fishing gear, nutrient and chemical pollution, habitat loss,” introduced nonnative species, climate change, and ocean acidification.³⁵ Executive Order 13,547 targeted the methods and specific issues as parts of the NOP.

The feasibility of the EBM and CMSP features have been extensively evaluated by Professors Donald C. Baur, Patrick A. Parenteau, and Georgia Hancock Snusz as of 2015. They stress that the United States lacks “comprehensive ocean legislation that would include direct EBM authority.”³⁶ Projecting that a statute would not be enacted soon, these commenters suggest instead to “use current legal authorities and the National Oceans Council.”³⁷ They emphasize that the United States “does not provide any single or comprehensive source of authority for establishing an EBM program for the marine environment.”³⁸ According to Bair et al., due to “the lack of sufficient political capital to implement marine planning on a broad-scale basis, or any realistic prospect for new federal legislation,” EBM can only be implemented successfully if it is applied via currently existing laws.³⁹ And they describe the many existing laws that provide the legal framework to implement EBM even without new legislation, if stakeholders from various viewpoints see the benefits.⁴⁰ Efforts during the Obama administration implemented this non-legislative approach, particularly in ways discussed below, in Part VI, on regional ocean collaborations. The “realistic prospect” has waited for its moment

34. *Id.* at 704-705; NAT’L OCEAN COUNCIL, ECOSYSTEM-BASED MANAGEMENT STRATEGIC ACTION PLAN FULL CONTENT OUTLINE (June 2, 2011), https://obamawhitehouse.archives.gov/sites/default/files/microsites/ceq/sap_1_ebm_full_content_outline_06-02-11_clean.pdf.

35. Jane Lubchenco & Nancy Sutley, *Proposed U.S. Policy for Ocean, Coast, and Great Lakes Stewardship*, 328 SCIENCE 1485, 1485-86 (2010).

36. Baur, Parenteau & Snusz, *supra* note 28, at 711.

37. *Id.*

38. *Id.*

39. *Id.*

40. *Id.* at 743-46.

in time, and for the “sufficient political capital,” which is, suggested below, to be arriving or improving for a host of reasons.

Strengthening the regional ocean governance (ROG) approach to ocean and coastal resources means recognizing that EBM and governance is often a multi-state activity and also may involve adjacent nations. States may gain legal authority under the Public Trust Doctrine as they act as trustees in the use of EBM methods. For some states, there is authority in their constitutions and statutes that enable them to enter interstate compacts for regional governance compacts with adjacent states. There may need to be agreement from state legislatures, or congressional consent, for states to enter a ROG agreement. Even foreign powers like Canada or Mexico may be enabled to associate and share in ROG planning or management.⁴¹

The Obama administration had a full-fledged NOP in place, but its Achilles’ heel was that the policy lacked a statutory foundation.

C. *President Trump*

There are many important differences between the Obama approach and the Trump approach. Obama embraced the Final Recommendations of the Task Force he set up and adopted those policies via Executive Order 13,547. President Trump revoked Obama’s Executive Order 13,547 completely in Executive Order 13,840. Consequently, the Obama Task Force’s included Final Recommendations are eliminated, along with all the Obama Executive Order’s other provisions. The Trump action thus deconstructed Obama’s executive creation of the initial National Ocean Policy, its governance structure, and the heart of its policy: the nine National Priority Objectives.⁴² The policies enumerated by Obama disappeared, including the use of EBM and CMSP; improved public understanding for decisions; coordination of efforts; resiliency, adaptation to climate change, and ocean acidification; regional ecosystem protection and restoration; water quality and land-based practices; stewardship of the arctic; and data integration.⁴³ Gone is Obama’s support for the United States’ accession to the Law of the Sea Convention.

41. Kristen M. Fletcher, *Regional Ocean Governance: The Role of the Public Trust Doctrine*, 16 DUKE ENVTL. L. & POL’Y F. 187, 187 (2006); see also U.S. CONST. art. I, § 10, cl. 3.

42. Exec. Order No. 13,840, 83 Fed. Reg. 29,431, 29,433 (June 19, 2018).

43. David Malakoff, *Trump’s New Oceans Policy Washes Away Obama’s Emphasis on Conservation and Climate*, SCIENCE (June 19, 2018), <http://www.sciencemag.org/news/2018/06/trump-s-new-oceans-washes-away-obama-s-emphasis-conservation-and-climate>.

Rather than setting out federal policies for stewardship, section 2 of Executive Order 13,840 declares that the “policy of the United States” is to coordinate the executive departments and agencies regarding ocean-related matters, use best available ocean-related science, and facilitate collaboration with state, tribal, and local governments.⁴⁴

Executive Order 13,840 recasts who heads up the coordinated ocean policy and what they are to do. The National Ocean Council is changed to an Interagency Ocean Policy Committee (IOPC). The co-chairs are the Chairman of the Council on Environmental Policy (CEQ) and the Director of the Office of Science and Technology Policy (OSTP). Administration is by an Executive Director who is recommended by the co-chairs, along with other staff. The structure is to have about two dozen named agencies constitute the committee, which may then designate certain high-level persons within their department, agency, or office to perform their functions. The Committee held an initial meeting August 1, 2018. The co-chairs are to regularly convene the IOPC, determine its agenda, direct its work, and set out subcommittees.⁴⁵

An important feature of the Trump approach is found in section 1 of Executive Order 13,840, where it states an express purpose to include regional partnerships, declaring that to “advance these national interests, this order recognizes and supports Federal participation in *regional ocean partnerships*, to the extent appropriate and consistent with national security interests and statutory authority.”⁴⁶ From the start, unless agencies were pushed to prioritize regional collaborations, there was skepticism whether they would be effective. Importantly, Trump retains involvement in these partnerships.⁴⁷ The order defines “regional ocean partnership” as “a regional organization of coastal or Great Lakes States, territories, or possessions voluntarily convened by governors to address cross-jurisdictional ocean matters, or the functional equivalent of such regional organization designated by the governor or governors of a State or States.”⁴⁸ Therefore, if governors convene a regional partnership on cross-

44. Exec. Order No. 13,840, 83 Fed. Reg. 29,431 (June 19, 2018).

45. *Id.* The very next IOPC meeting was held on June 12, 2019. Ocean Policy Comm., Meeting Summary (June 12, 2019), <https://www.whitehouse.gov/wp-content/uploads/2017/11/20190916UPDATE-FINAL-OPC-June-12-Meeting-Summary-CLEAN.pdf>.

46. *Id.* (emphasis added).

47. On July 24, 2019, a Regional Ocean Partnership Act to formalize collaborative partnerships of states and federal agencies passed the U.S. Senate Commerce Committee. Regional Ocean Partnership Act, S. 2166, 116th Cong. (2019).

48. Exec. Order No. 13,840, 83 Fed. Reg. 29,431, § 3 (June 19, 2018).

jurisdictional matters, the Trump policy provides that federal agencies will participate.

Trump's Executive Order 13,840 lists activities for the IOPC, including to coordinate executive department and agency activities for future effective management, provide economic, security, and environmental benefits, promote use and economic growth of coastal communities;

promote ocean industries which employ millions of Americans, advance ocean science and technology, feed the American people, transport American goods, expand recreational opportunities, and enhance America's energy security; . . . ensure that Federal regulations and decisions do not prevent productive and sustainable use of the ocean, coastal, and Great Lakes waters, . . . modernize the acquisition, distribution, and use of the best available ocean-related science and knowledge

and facilitate coordination on ocean-related matters.⁴⁹ CMSP, adaptive management, EBM, and priority action on specific issues constituted policy that emerged under Obama's Task Force and Executive Order.⁵⁰ The Trump Executive Order lacks those types of specific stewardship principles and commitments.

III. IPCC'S 2019 SPECIAL REPORT ON THE OCEAN IN A CHANGING CLIMATE

On September 24, 2019, the Intergovernmental Panel on Climate Change (IPCC) provided a clearer understanding of the urgency of a multitude of ocean issues. In its Special Report, *The Ocean and Cryosphere in a Changing Climate*, it presented a lengthy "Summary for Policymakers."⁵¹ The cryosphere is by definition the frozen components of the earth system such as snow cover, glaciers, ice sheets, permafrost, and seasonally frozen ground. For both the ocean and frozen components, the Special Report has three sections to evaluate: (1) Observed changes and impacts, (2) Projected changes and risks, and (3) Implementing responses to the change.⁵²

Dozens of findings are made and assigned a level of confidence by qualifiers (italicized such as *very low* through *very high confidence*, and percentage of probability) and carried forward by models to project a

49. Exec. Order No. 13,840, 83 Fed. Reg. 29,431, § 3 (June 19, 2018).

50. Baur, Parenteau & Snusz, *supra* note 28, at 708-14.

51. HANS-OTTO PÖRTNER ET AL., IPCC, 2019: SUMMARY FOR POLICYMAKERS, IPCC SPECIAL REPORT ON THE OCEAN AND CRYOSPHERE IN A CHANGING CLIMATE, SPM-2 (2019).

52. *Id.* at SPM-1 n.1.

range of likely scenarios at future dates. This makes the Special Report helpful as a reference where particular conditions are being studied or causations are being explained, such as in an ecosystem-based management or regional marine spatial planning.

For instance, one portion is the explanation of Eastern Boundary Upwelling Systems. It states the upwelling systems are among the most productive ocean ecosystems. “Increasing ocean acidification and oxygen loss are negatively impacting two of the four major upwelling systems: the California Current and the Humboldt Current (*high confidence*).”⁵³ The California Current’s upwelling system has an “altered ecosystem structure, with direct negative impacts on biomass production and species composition (*medium confidence*).”⁵⁴

Observations and projections are made for a great many parameters. Ocean research describes, for instance, harmful algal blooms. Since the 1980s, these display expansion in range and frequency in coastal areas “in response to both climatic and non-climatic drivers,” which include “partly ocean warming effects, marine heatwaves, oxygen loss, eutrophication, and pollution (*high confidence*).”⁵⁵

Other changes explained in the Special Report that result from climate effects are spatial distribution of fish and shellfish stocks, risks to Arctic and coastal residents, change in geographical range of marine species (including poleward shifts), the global mean sea level rise, density stratification, the ocean uptake of anthropogenic carbon dioxide, the ocean warming trend, coral reef survival prospects, and the need for networks of protected areas to help marine ecosystem services.⁵⁶ For another evaluation of the changes, the Special Report states:

It is *virtually certain* that the global ocean has warmed unabated since 1970 and has taken up more than 90% of the excess heat in the climate system (*high confidence*). Since 1993, the rate of ocean warming has more than doubled (*likely*). Marine heatwaves have *very likely* doubled in frequency since 1982 and are increasing in intensity (*very high confidence*). By absorbing more CO₂, the ocean has undergone increasing surface

53. *Id.* at SPM-13.

54. *Id.*

55. *Id.* at SPM-18.

56. *Id.* at SPM-9-10, 12, 17-18, 21, 23, 29, 35 (the stocks are at page SPM-18, at item A8.1; Arctic and coastal at SPM-17, at A7.3 and A7.5; poleward at SPM-12, at A5.1; sea level at SPM-10 at A.3 and SPM-23 at B3.4; stratification at SPM-9 at A2.4; carbon dioxide at SPM-9 at A2.5; ocean warming at SPM-21 at B2.1; reefs at SPM-29 at B6.4; protected areas at SPM-35 at C2.1).

acidification (*virtually certain*). A loss of oxygen has occurred from the surface to 1000 m (*medium confidence*).⁵⁷

As to implementing responses, the Special Report addresses governance in ocean policy. “Governance arrangements (e.g. marine protected areas, spatial plans, and water management systems) are, in many contexts, too fragmented across administrative boundaries and sectors to provide integrated responses to the increasing and cascading risks from climate-related changes in the ocean and/or cryosphere (*high confidence*),” and rapid and robust response is needed to deter the impacts, though difficulties persist in coordination of adaptation responses.⁵⁸

Moreover, the Special Report identifies and describes how the observed climate change is linked to the changes of the ocean. The deconstruction under President Trump provides a regulatory change with consequences that change the ocean, and, if IPCC is correct, these are central concerns to ocean management. How much the deconstruction of regulatory programs affects ocean conditions is the next question.

IV. WHAT “DECONSTRUCTION OF THE ADMINISTRATIVE STATE” MEANS FOR MITIGATING OCEAN CHANGES

“Deconstruction of the administrative state” is a declared agenda for the Trump era.⁵⁹ Stephen K. Bannon, while the White House’s “chief strategist and the intellectual force behind Trump’s agenda,” coined the term “deconstruction” in his remarks on February 22, 2017, to the Conservative Political Action Conference.⁶⁰ *Washington Post* reporters covering the event related that deconstruction is an agenda intended to be an unending battle, a long period of conflict to transform Washington, and a daily fight. The administrative state, the reporters said, means “the system of taxes, regulations and trade pacts” blamed in the Trump agenda for harming “economic growth and U.S. sovereignty.”⁶¹ In Bannon’s terms, deconstruction addresses economic growth obstacles and asserts U.S. sovereignty via deregulation. The parameters of this deconstruction

57. *Id.* at SPM-8.

58. *Id.* at SPM-34.

59. Phillip Rucker & Robert Costa, *Bannon Vows a Daily Fight for “Deconstruction of the Administrative State,”* WASH. POST (Feb. 23, 2017), https://www.washingtonpost.com/politics/top-wh-strategist-vows-a-daily-fight-for-deconstruction-of-the-administrative-state/2017/02/23/03f6b8da-f9ea-11e6-bf01-d47f8cf9b643_story.html.

60. *Id.*

61. *Id.*; see also Gary Lawson, *The Rise and the Rise of the Administrative State*, 107 HARV. L. REV. 1231 (1994) (questioning the post-New Deal regulatory state under constitutional premises).

conflict with the regulatory or administrative state's approaches to national ocean and coastal law policy. A regulatory NOP brings sovereignty and productivity, addresses public resources, plans compatible uses, and promotes conservation but by management, not deregulation.

Deconstruction of policies or rules have indeed followed the Bannon pronouncement. The ocean policy consequences of the ongoing anti-regulatory activities are chronicled here: climate change in this Part, and in the next Part, attacks on science and on agencies via restructurings that diminish specific ocean programs. These issue groups are examples with which to see whether creating a NOP would be on a collision course with the deconstruction activity. It would be naïve to just assume that an administration that so emphatically deconstructs so much of the environmental regulatory structure would embrace a NOP, or that a pro-regulatory administration would prioritize NOP either. Rather, persuasion for a NOP must derive from the great benefits it brings to economic, employment, fisheries, water quality, shipping, and so many other concerns so that the legislative branch finds a need for the expanded governance it could offer. The NOP covers a unique publicly controlled geographic area. A NOP would bring coordinated and cooperative methods because it lacks the degree of natural enemies that beset terrestrial regulatory structures. On balance, it is also remarkable that the Exclusive Economic Zone offshore does not yet have a NOP in place.

How are the U.S. jurisdictional areas of the ocean faring in the global climate regulatory debate? In October 2017, President Trump announced the United States' plans to withdraw from its pledge to reduce the national quantity of emissions, made by President Obama at the 2015 meeting of the parties to the U.N. Framework Convention on Climate Change in Paris.⁶² The announced retraction of the United States from the Paris 2015 climate change accord combines in impact with the active deregulatory activities on emissions from U.S. coal-burning power plants, standards for internal combustion vehicles, and methane releases from natural gas operations. The Paris 2015 nonbinding plans (called Intended Nationally Determined Contributions, or, when ratified, NDCs) are submitted by each nation pledging a reduction in greenhouse gas emissions with a timetable.

62. Paris Agreement to the United Nations Framework Convention on Climate Change, Dec. 12, 2015, T.I.A.S. No. 16-1104; *see also Paris 2015: Tracking Country Climate Pledges*, CARBON BRIEF, <https://www.carbonbrief.org/paris-2015-tracking-country-climate-pledges> (last updated Feb. 6, 2017). Carbon Brief is a United Kingdom-based website that monitors developments in climate and energy policy in data-driven articles and graphics, funded by the European Climate Foundation. *Id.*

For the United States, the Clean Power regulatory plans for coal, and for car and truck carbon emission reductions, were President Obama's pledged strategy to overall reduce between 26% and 28% of U.S. greenhouse gas emissions by the year 2025 compared to a baseline set in 2005.⁶³ The European Union target is 40% lower emissions by 2030 as compared to a 1990 baseline. China would peak and then decline by 2030. Overall, 193 nations pledged actions by 2017.⁶⁴

On May 7, 2019, the U.S. House of Representatives passed the Climate Action Now Act, H.R. 9,⁶⁵ to direct the President to develop a plan to meet the Nationally Determined Contribution under the Paris Agreement. It has not been acted on in the Senate. States have also entered the action. New York passed the Climate Leadership and Community Protection Act, calling for the state to reduce greenhouse gas emissions by 2050 compared to 1990 levels. Other states that have committed to meet all their electricity needs from carbon-free sources by at least 2050 are California, Colorado, Nevada, New Mexico, and Washington.⁶⁶

The legal steps for the Trump administration to withdraw from the Paris Agreement require a three-year waiting period. The United States gave notice and its three years ended Nov. 4, 2019. The official pullout will be effective one year after the Nov. 4, 2019, period; it is an additional cooling off period in the process so it will take effect a year later, in early November 2020—coinciding with the next presidential election.⁶⁷

So, the piece of deconstruction that is poised to end the U.S. participation in the Paris 2015 agreement faces an uncertain future. How are the specific programs under Obama to reduce emissions of coal power plants and vehicles, which are also subject to deconstruction in the Trump administration, turning out? That debate is also controversial. The Obama-era EPA composed a program called the Clean Power Plan (CPP) to reduce the power generating sector's greenhouse gas emissions by 32% relative to 2005 levels by the year 2030, by addressing the existing coal power plant emissions.⁶⁸ Five weeks after the Bannon declaration of

63. *Paris 2015: Tracking Country Climate Pledges*, *supra* note 62.

64. *Id.*

65. Climate Action Now Act, H.R. 9, 116th Cong. (2019).

66. Jesse McKinley & Brad Plummer, *New York to Approve One of the World's Most Ambitious Climate Plans*, N.Y. TIMES (June 18, 2019), <https://www.nytimes.com/2019/06/18/ny-region/greenhouse-gases-ny.html>.

67. See Lisa Friedman, *Trump Serves Notice to Quit Paris Climate Agreement*, N.Y. TIMES (Nov. 4 2019), <https://www.nytimes.com/2019/11/04/climate/trump-paris-agreement-climate.html>. After the "yearlong countdown," the United States would be downgraded to observer status. *Id.*

68. Clean Power Plan Final Rule, Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 80 Fed. Reg. 64,661 (Oct. 23, 2015); see also

deconstruction, steps to reverse President Obama's CPP regulation began. The CPP had been created by Final Rule of October 23, 2015, the historic "first-ever plan to curb carbon pollution from U.S. power plants," particularly existing coal plants. The measure was strongly supported by environmental organizations.⁶⁹ It has been heralded as the centerpiece and signature action by the Obama administration to curb greenhouse gas emissions,⁷⁰ and it also afforded diplomatic gravitas to the United States for its successful leverage on China, the world's leading emitter of greenhouse gases, to join the Paris 2015 agreement.⁷¹

In March 2017, after the Supreme Court stayed the CPP implementation pending judicial review,⁷² President Trump directed EPA to review the CPP and the New Source Performance Standards for oil and gas, along with review by all agencies of existing regulations, orders, guidances, and policies "that potentially burden the development or use of domestically produced energy resources."⁷³

The resulting Final Report by EPA, published on October 25, 2017, is a package proposing alterations on regulation even beyond the CPP.⁷⁴ The Final Report described State guideline changes that EPA sent to OMB as a prelude to replacement of greenhouse gas emissions standards for existing power plants.⁷⁵ Whether the procedures that repeal the CPP and install its replacement, the Affordable Clean Energy (ACE) plan, will survive under the *State Farm* standards seems destined for litigation. The ACE lets States set their own standards to meet federal guidelines.⁷⁶ On August 13, 2019, twenty-one states plus the District of Columbia, six cities, as well as public health and environmental groups filed suit to block the ACE rule that would ease the CPP restrictions. Their claims attack the ACE rule as a violation of the Clean Air Act requirements that the EPA must use the best system of emissions reduction to control hazardous air

What Is the Clean Power Plan?, NAT'L RESOURCES DEF. COUNCIL (Sept. 29, 2017), <https://www.nrdc.org/stories/how-clean-power-plan-works-and-why-it-matters>.

69. See, e.g., *What Is the Clean Power Plan?*, *supra* note 68.

70. *What Is the Clean Power Plan, and How Can Trump Repeal It?*, N.Y. TIMES (Oct. 10, 2017), <https://www.nytimes.com/2017/10/10/climate/epa-clean-power-plan.html>.

71. *Id.*

72. *West Virginia v. EPA*, 136 S. Ct. 1000 (2016).

73. Exec. Order No. 13,783, 82 Fed. Reg. 16,093 (Mar. 31, 2017).

74. *Id.* See generally U.S. ENVTL. PROT. AGENCY, FINAL REPORT ON REVIEW OF AGENCY ACTIONS THAT POTENTIALLY BURDEN THE SAFE, EFFICIENT DEVELOPMENT OF DOMESTIC ENERGY RESOURCES UNDER EXECUTIVE ORDER 13783 (2017), <https://www.epa.gov/sites/production/files/2017-10/documents/eo-13783-final-report-10-25-2017.pdf>.

75. U.S. ENVTL. PROT. AGENCY, *supra* note 74.

76. See *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983).

pollutants, including carbon dioxide emissions of coal-burning power plants.⁷⁷

Economics of natural gas prices, renewable sources, plus energy conservation diminish the prospects that even regulatory change will be able to revive aging coal-electric power plants.⁷⁸ Since 2010, 40% of the 521 U.S. coal plants have closed or plan to do so. Aiming to close every remaining coal plant and to stop increased use of natural gas, former New York Mayor Michael R. Bloomberg has promised \$500 million for a campaign directed at state and local governments, especially in Texas, Florida, and Pennsylvania.⁷⁹ Defenders of deconstruction will undoubtedly reciprocate. For coal's fate, and its contribution to the ocean's fate, a lot is still in the mix.

In another deconstruction action, changes under President Trump include an attack on the famous California waiver under the Clean Air Act. The waiver addresses the EPA-DOT fuel economy rules after 2020 for cars and light trucks.⁸⁰ California's unique authority, derived from the Clean Air Act, allows California and other states that opt in to enact measures stronger than the EPA requires for vehicular fuel consumption.⁸¹

The Trump EPA labeled the Obama administration standards for light-duty vehicles as not appropriate and too stringent.⁸² Fuel efficiency requirements would use a thirty-seven-mile-per-gallon (mpg) fleet average, instead of increasing to over fifty mpg by 2025 as envisioned

77. Lisa Friedman, *States and Cities Sue Administration over Rollback of Limits on Coal*, N.Y. TIMES (Aug. 14, 2019), <https://www.nytimes.com/2019/08/13/climate/states-lawsuit-clean-power-acc.html>.

78. Eric Lipton, *E.P.A. Offers Lifeline to the Dirtiest Coal Plants*, N.Y. TIMES (Aug. 25, 2018), <https://www.nytimes.com/2018/08/24/climate/epa-coal-power-scrubbers.html>.

79. Lisa Friedman, *Bloomberg Promises \$500 Million to Help Close Every Coal Plant in U.S.*, N.Y. TIMES (June 8, 2019), <https://www.nytimes.com/2019/06/06/climate/bloomberg-climate-pledge-coal.html>.

80. Hiroko Tabuchi, *Quietly, White House and California Seek Deal on Car Emissions*, N.Y. TIMES (Apr. 6, 2018), <https://www.nytimes.com/2018/04/05/climate/trump-california-emissions.html>; but even the compromise potential dimmed quickly; see Coral Davenport, *E.P.A. Takes a Major Step to Roll Back Car Emissions Rules*, N.Y. TIMES (June 1, 2018), <https://www.nytimes.com/2018/05/31/climate/epa-car-pollution-rollback.html>.

81. EPA Mid-Term Evaluation of GHG Emission Standards for Model Year 2022-2025 Light-Duty Vehicles, 83 Fed. Reg. 16,077, 16,077 (Apr. 2, 2018); Brad Plumer, *There Was Change at Top but Agenda Is the Same*, N.Y. TIMES (July 7, 2018), <https://www.nytimes.com/2018/07/06/climate/pruitt-wheeler-epa.html> (two days after Scott Pruitt's resignation as Administrator of the EPA); Ryan Beene, John Lippert & Jennifer Dlohy, *EPA Said to Seek End of California's Authority over Car Rule*, BLOOMBERG (May 31, 2018), <https://www.bloomberg.com/news/articles/2018-05-31/white-house-reviewing-proposals-to-ease-auto-efficiency-rules>;

82. 83 Fed. Reg. at 16,077.

under the Obama standards.⁸³ Both a freeze on fuel efficiency at 2020 standards and an end of the California waiver were proposed. The changes would be Trump's "biggest regulatory rollback yet" and bring protracted litigation.⁸⁴ This stricter standard doubled vehicle fuel efficiency and "would be the country's most important climate achievement."⁸⁵

On June 6, 2019, seventeen carmakers (including Ford, General Motors, Toyota, and Volvo) signed a letter to President Trump opposing the weakening of tailpipe emission standards. The letter sought to negotiate the rollback, explaining that a bifurcated market would split the auto market in two resulting in "an extended period of litigation and instability" following a rollback of the standards.⁸⁶ On the other hand, a public records request to the EPA from the Sierra Club provided emails that "show how a coalition of groups that reject established climate science quickly muscled into the picture, urging the administration to go much further and roll back the rules entirely."⁸⁷

By August 21, 2019, the automakers sought to avoid a legal battle between California and thirteen other states against the federal government "that could upend their business by splitting the United States into two car markets, one with stricter emissions standards than the other." There are six car makers "that so far plan not to adhere to the new Trump rules" and these manufacturers account for over 40% of all cars sold in the United States.⁸⁸

As of September 20, 2019, the Trump administration had revoked the waiver. And California, with twenty-two other states plus the District of Columbia, Los Angeles, and New York City, had filed suit in the U.S. District Court for the District of Columbia to challenge the action.⁸⁹

83. *Id.*

84. Coral Davenport, *Pruitt Successor Tempers Mode for Dismantling E.P.A. Policies*, N.Y. TIMES (July 28, 2018), <https://www.nytimes.com/2018/07/27/climate/andrew-wheeler-epa.html>.

85. Jody Freeman, *The Auto Rule Rollback Only Trump Seems to Want*, N.Y. TIMES (Sept. 11, 2019).

86. Coral Davenport & Hiroko Tabuchi, *Carmakers' Pact to Cut Emissions Saps Trump Plan*, N.Y. TIMES (Aug. 21, 2019), <https://www.nytimes.com/2019/08/20/climate/trump-auto-emissions-rollback-disarray.html>.

87. Hiroko Tabuchi, *As Carmakers Balk, Warming Deniers Seek to Gut Emissions Rules*, N.Y. TIMES (July 3, 2019), <https://www.nytimes.com/2019/07/02/climate/climate-deniers-auto-emissions-rollback.html>.

88. Davenport & Tabuchi, *supra* note 86; *see also* Freeman, *supra* note 85.

89. Dino Grandoni & Juliet Eilperin, *California Sues Trump Administration over Revoking Authority to Limit Car Pollution*, WASH. POST (Sept. 20, 2019), <https://www.washingtonpost.com/climate-environment/2019/09/20/california-sues-trump-administration-after-revoking-authority-limit-car-pollution/>.

The sum of the Paris 2015 activity, the coal emission provisions, and the fuel economy standard very meaningfully impact mitigation of climate change, with large-scale effects on the ocean and cryosphere. These activities bring consequences that a NOP will have to address in the long view, and the deconstruction-or-not approaches are under challenge. The emission reduction debate, bring what it may, does not determine whether a NOP is needed. Rather, either consequential scenario is well served by implementing sensible governance to manage the immense area of the U.S. Exclusive Economic Zone jurisdiction through a NOP responsive to the climate change impacts.

V. OTHER “DECONSTRUCTIONS” IN SCIENCE AND OCEAN PROGRAMS

“The era of secret science at EPA is coming to an end” declared then-EPA Administrator Scott Pruitt in 2018.⁹⁰ The attack is said to center on “regulations that rely in whole or in part on data, information, or methods that are not publicly available or that are insufficiently transparent to meet the standard for reproducibility.”⁹¹ Under Mr. Pruitt’s successor at the EPA, Andrew Wheeler, a new draft is to be open for comments with finalization in 2020. Whether the new version is to apply retroactively has been under discussion in the drafting of these important provisions, which have drawn extensive commentary. The draft of revisions announced March 3, 2020, describes a preference for studies that use publicly available underlying data, rather than an outright exclusion, and set an additional comment period. Questions are raised over what applies to renewal of regulations, which can be tantamount to a retroactive application. A vast majority of the approximately 600,000 comments on the 2018 draft opposed the changes. All data and models used in studies coming under consideration at EPA are potentially to be impacted, as the proposal undergoes further drafting in 2020.⁹²

90. EPA Proposed Rule Strengthening Transparency in Regulatory Science, 83 Fed. Reg. 18,768 (Apr. 30, 2018); Press Release, Env’tl. Prot. Agency, Office of the Adm’r, EPA Administrator Pruitt Proposes Rule to Strengthen Science Used in EPA Regulations (Apr. 28, 2018).

91. Press Release, *supra* note 90.

92. Brady Dennis, *EPA Pushes Ahead with Effort to Restrict the Science It Uses to Craft Regulations*, WASH. POST (Nov. 12, 2019), <https://www.washingtonpost.com/climate-environment/2019/11/12/epa-pushes-ahead-with-effort-restrict-science-it-uses-craft-regulations/>; Lisa Friedman, *E.P.A. Updates Plan to Limit Science Used in Environmental Rules*, N.Y. TIMES (Mar. 4, 2020), https://www.nytimes.com/2020/03/04/climate/trump-science-epa.html?searchResultPosition=1&fbclid=IwAR09Uqlwk6cGs_A17Y22z7HgP1nu0XW4JpRo_vbfPFZcFOpoVkwv4a8Z7AM.

To protect the oceans, the quality of the climate science is a central concern. One angle of revising the approach of regulatory tradition questions the use of science by excluding studies made of subjects with privacy rights. Replacing the rejected data may leave EPA with only manufacturer-funded research—a far more likely biased source—to its conclusions of risks.⁹³ Data, like epidemiological studies that concern health, may include privacy information that may not be able to be transparently released, depending on the changes.⁹⁴

This controversy raises questions as to how reviews should be made of existing regulations that relied on health-based privacy data. A question is how this would work for the Clean Air Act's provision in section 109(b)(1) and how EPA must proceed.⁹⁵ There, EPA is to act on “a discrete set of pollutants and based on published air quality criteria that reflect the latest scientific knowledge. EPA must establish uniform national standards at a level that is requisite to protect public health from the pollutants in the ambient air.”⁹⁶ The EPA proposal could stop the way human studies are “used to justify regulating pesticides, lead and pollutants like soot, and undermine foundational research behind national air-quality rules.”⁹⁷

Changes of membership in EPA advisory committees in major aspects of regulation, such as airborne microscopic pollutants of health concern, have also drawn criticism.⁹⁸ For climate change, findings are contained in an Assessment updated regularly to supply the official projections about conditions.⁹⁹ These projections that the interagency task force compiles set out the National Climate Assessment¹⁰⁰ The findings of the Fourth National Climate Assessment express the upcoming dire climatic conditions, and what may occur to affect oceans is extensively portrayed.¹⁰¹

93. Danny Hakim & Eric Lipton, *Once-Trusted Studies Are Scorned by Trump's E.P.A.*, N.Y. TIMES (Aug. 26, 2018), <https://www.nytimes.com/2018/08/24/business/epa-pesticides-studies-epidemiology.html>.

94. Jeff Tollefson, *EPA Science Advisors Question “Secret Science” Rule on Data Transparency*, NATURE NEWS (June 1, 2018), <https://www.nature.com/articles/d41586-018-05319-2>.

95. Clean Air Act, 42 U.S.C. § 7401 (2012).

96. *Whitman v. Am. Trucking Ass'ns, Inc.*, 531 U.S. 457, 473 (2001).

97. Hakim & Lipton, *supra* note 93.

98. Lisa Friedman, *Opinion, E.P.A. to Disband a Key Scientific Review Panel on Air Pollution*, N.Y. TIMES (Oct. 11, 2018), <https://www.nytimes.com/2018/10/11/climate/epa-disbands-pollution-science-panel.html>.

99. U.S. GLOB. CHANGE RESEARCH PROGRAM, *FOURTH NATIONAL CLIMATE ASSESSMENT, VOLUME II, IMPACTS, RISKS, AND ADAPTATION IN THE UNITED STATES*, at iii (C.W. Avery et al. eds., 2018), https://nca2018.globalchange.gov/downloads/NCA4_2018_FullReport.pdf.

100. U.S. GLOB. CHANGE RESEARCH PROGRAM, *supra* note 99, at iii.

101. *Id.*

The next assessment is due in 2021 or 2022. But this time it will go silent on projections for the end of the century, cutting off projections past even the year 2040. This misses the change-of-rate of warming that has been projected to occur after about the year 2050, when carbon dioxide levels accumulate to cause a highly damaging level of impact.¹⁰² The administration's change avoids telling the full projection. The National Climate Assessments already indicate that, if continued, emissions will raise temperatures up to nine degrees Fahrenheit.¹⁰³ Absorbing carbon dioxide emitted from human activities makes the ocean both warmer and more acidic.¹⁰⁴

Similar wordsmithing occurs in the use of epidemiological studies of agrochemicals, in the proposed "Strengthening Transparency in Regulatory Science."¹⁰⁵ EPA labels such studies "secret science" by use of a technique utilized by tobacco companies, claiming privacy rights of participants in federally funded human health studies. This approach has affected the regulatory disputes regarding weed-killers atrazine and glyphosate, which include cancer concerns.¹⁰⁶

"Increasing sea surface temperatures, rising sea levels, and changing patterns of precipitation, winds, nutrients, and ocean circulation are contributing to overall declining oxygen concentrations in many areas."¹⁰⁷ But science of climate change tells of consequences of regulatory changes. Atmospheric pollutants, such as carbon dioxide and methane, trap more heat. Winds mix the stored solar heat to maximum depths of 100 meters, a small depth considering the 4000-meter average depth of the oceans. "Of the carbon added to the climate system by humans, just over half (55%) ends up in the atmosphere, 25-30% enters the surface ocean, and the rest enters the biosphere," such as land vegetation.¹⁰⁸ Effects of climate change on Florida's diverse marine habitats include "rise in sea level, warmer sea

102. Coral Davenport & Mark Landler, *Trump Administration Hardens Its Attack on Climate Science*, N.Y. TIMES (May 27, 2019), <https://www.nytimes.com/2019/05/27/us/politics/trump-climate-science.html> (addressing how the Trump administration's "prime target has been the National Climate Assessment," produced about every four years since 2000, has become the centerpiece of the climate science deconstruction).

103. Without significant greenhouse gas emission reduction, the increase in global annual temperature could reach nine degrees or more by the end of this century. U.S. GLOB. CHANGE RESEARCH PROGRAM, *supra* note 99, ch. 2.

104. *Id.*, ch. 2, Key Message 3.

105. Strengthening Transparency in Regulatory Sciences, 83 Fed. Reg. 18,768 (proposed Apr. 30, 2018) (to be codified at 40 C.F.R. 30).

106. Hakim & Lipton, *supra* note 93.

107. U.S. GLOB. CHANGE RESEARCH PROGRAM, *supra* note 99, ch. 2, Key Message 3.

108. WILLIAM F. RUDDIMAN, *EARTH'S CLIMATE PAST AND FUTURE* 39, 397 (2001).

surface temperatures, changes in coastal circulation impacting larval and nutrient transport, changes in marine biogeochemistry including ocean acidification, and loss of coastal wetlands and reefs that protect Florida's coastline."¹⁰⁹ Deconstruction of the science damages regulation of emissions with ocean and atmospheric consequence.

Principle 15 of the Rio Declaration states: "In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where 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."¹¹⁰ As such, Trump's attack on science contradicts Principle 15 by demanding full scientific certainty. Reportedly, the Trump focus includes the EPA's health-based standards for air and water and also climate change evaluations.¹¹¹ This wholesale attack on science is unprecedented. Given the threat of "serious or irreversible damage" menacing the oceans, Principle 15, although not binding, rejects the Trump administration's non-precautionary approach toward science.

Deregulation includes a range of methods, for which the Trump administration is essentially a textbook. Another major deregulation approach is President Trump's two-for-one requirement for proposed new regulations, Executive Order 13,771.¹¹² It "requires administrative agencies to eliminate two regulations for each new regulation proposal."¹¹³ Instead of a cost-benefit analysis, the executive order addresses "regulatory compliance costs that require the expenditure of private funds imposed by agencies through rulemaking."¹¹⁴ Costs in any amount make a regulatory action "significant," while by definition ones imposing negative costs are deregulatory under Executive Order 12,866, under an implementing guidance for Executive Order 13,771.¹¹⁵ A "significant"

109. Steven Morey et al., *Florida's Oceans and Marine Habitats in a Changing Climate*, in *FLORIDA'S CLIMATE: CHANGES, VARIATIONS & IMPACTS* 391 (Eric P. Chassignet et al. eds., 2017).

110. Rio Declaration on Environment and Development, June 14, 1992, 31 ILM 874, 879, U.N. Doc. A/CONF.151/26.

111. Lisa Friedman, Opinion, *E.P.A. to Limit Science Used to Write Public Health Rules*, N.Y. TIMES (Nov. 11, 2019), <https://www.nytimes.com/2019/11/11/climate/epa-science-trump.html>; Davenport & Landler, *supra* note 102.

112. Reducing Regulation and Controlling Regulatory Costs, Exec. Order No. 13,771, 82 Fed. Reg. 9339, 9339 (Jan. 30, 2017).

113. Holly L. Weaver, *One for the Price of Two: The Hidden Costs of Regulatory Reform Under Executive Order 13,771*, 70 ADMIN. L. REV. 491, 492 (2018).

114. *Id.* at 498.

115. Dominic J. Mancini, , Office of Mgmt. & Budget, Exec. Office of President, Guidance Implementing Exec. Order 13,771 (Apr. 5, 2017).

designation brings an action within the ambit of review by the Office of Information and Regulatory Affairs (OIRA), requiring details from the issuing agency.¹¹⁶ In sum, agencies are obliged by the regulatory budget to take deregulatory action as agencies “must still find regulations to repeal to meet budget demands.”¹¹⁷ Holly L. Weaver describes the requirement as imprudent deregulation, impeding agency ability to implement regulations, “leading to potentially dangerous consequences.”¹¹⁸ Two-for-one “effectively halts all proposed regulations that were not finalized before January 20, 2017, until two deregulatory offsets are identified.”¹¹⁹

The lawfulness of the two-for-one ratio has been questioned by three public interest organizations for its rationality and faces standing defenses.¹²⁰ Subsequently the attorneys general of California, Oregon, and Minnesota sued, claiming President Trump and the Office of Management and Budget acted beyond the scope of their authority and that the new rules would be delayed or not proposed at all because of the two-for-one requirement. They termed Executive Order 13,771 “illegal, juvenile” in their announcement of the suit, asserting it ignores the federal government’s responsibility to implement and enforce laws passed by Congress.¹²¹

In a further diminution effort aimed at regulations, Executive Order 13,777 backs up the two-for-one requirement by requiring most agencies to designate a Regulatory Reform Officer and establish a Regulatory Reform Task Force.¹²² The mission is to recommend to the agency head the repeal, replacement, or modification of regulations that fall into any of a list of categories. Categories include, of course, rules that are outdated, unnecessary, or ineffective. But also, the list is for regulations that eliminate jobs or have costs that exceed benefits.¹²³ This step is an additional overlay to rulemaking, in the dispiriting style of a “witch hunt.”

116. See Exec. Order 12,866, 58 Fed. Reg. 51,735 (Sept. 30, 1993); Weaver, *supra* note 113, at 499.

117. Weaver, *supra* note 113, at 500.

118. *Id.*

119. *Id.* at 506.

120. Pub. Citizen et al. v. Trump et al., 297 F. Supp. 3d 6, 6, (D.C. 2018); *Challengers Seek Partial Win Over Trump’s ‘2 For 1’ Order*, LAW 360 (June 18, 2019), <https://www.law360.com/articles/1170086/challengers-seek-partial-win-over-trump-s-2-for-1-order>.

121. Complaint at 1, 2, California v. Donald J. Trump et al., Case No. 1:19-cv-00960 (D.C. Cir. 2019), <https://oag.ca.gov/system/files/attachments/press-docs/complaint-re-e013771.filed.pdf>; see Hailey Konath, *AGs Protest Trump’s ‘Illegal, Juvenile’ ‘2-for-1’ Order* (Apr. 4, 2019), <https://www.law.360.com/articles/1146756/ags-protest-trump-s-illegal-juvenile-2-for-1-order>.

122. Enforcing the Regulatory Reform Agenda, Exec. Order 13,777, 82 Fed. Reg. 12,285, 12,285 (Mar. 1, 2017).

123. *Id.* at 12,286.

Deconstruction of relevance to the ocean include agency restructuring and re-budgeting. An evaluation of EPA budget history since 1990 shows it has generally been easier for Congress to reduce the resources in the EPA budget than to legislate changes to the programs. There is a complicated relationship between agency budget resources and the resulting environmental quality that the resources achieve. At times, agencies can achieve more due to technology advances despite dwindling resources. From 1990 to 2015, the number of sources EPA regulated and the cost of employees grew, yet total resources of EPA stayed about the same or slightly declined. The effect is reduction in real terms.¹²⁴

Several ocean-related particulars of the current Trump budget proposal stand out. For the National Oceanic and Atmospheric Administration, the February 2018 budget proposal of the Trump administration cuts more than a billion dollars. The Ocean Conservancy identifies the four biggest threats to oceans in that proposal. First, there is a zero-out of Sea Grant program funding and Coastal Management. Secondly, the proposal undercuts preparedness for wildlife rescue, tsunami warnings, and climate resilience. A third item cuts basic ocean science measurement relating to climate inquiries needed for policies on the Arctic and Great Lakes. Fourth, the proposal makes cuts in fishery enforcement needed for sustainable fisheries.¹²⁵

For EPA, the proposed budget was for a \$5.4 billion budget request, a 34% decrease as compared to the level enacted in 2017.¹²⁶ Proposed eliminations include Climate Research and Partnership Programs, Marine Pollution and National Estuary Programs, an Environmental Education Program, and the BEACH Program. Under the BEACH Act, from 2002 through 2018, EPA annually granted over \$9.3 million among thirty states, four tribes, and five territories for coastal recreational water quality monitoring and assessment.¹²⁷ “Climate change” is omitted in EPA’s Strategic Plan.¹²⁸

124. James Salzman, J.B. Ruhl & Jonathan Remy Nash, *Environmental Law in Austerity*, 32 PACE ENVTL. L. REV. 481, 482 (2015).

125. OFFICE OF MGMT. & BUDGET, (PROPOSED) BUDGET OF THE U.S. GOVERNMENT, FISCAL YEAR 2019 (Feb. 2018), <https://www.whitehouse.gov/wp-content/uploads/2018/02/budget-fy-2019.pdf>.

126. *Id.* at 67, 103.

127. *Beach Grants*, U.S. EPA, <https://www.epa.gov/beach-tech/beach-grants> (last visited Dec. 31, 2019).

128. U.S. ENVTL. PROT. AGENCY, FISCAL YEAR 2018-2022 EPA STRATEGIC PLAN (Feb. 2018), <https://www.epa.gov/sites/production/files/2018-02/documents/fy-2018-2022-epa-strategic-plan.pdf>.

A 16% reduction compared to the level enacted in 2017 is proposed for the Department of the Interior, resulting in a \$11.3 billion budget request. It includes steps to initiate oil and gas leasing in the coastal plain of the Arctic National Wildlife Refuge as “recently authorized by Congress.”¹²⁹ Further, the Interior budget requests new areas be available to onshore and offshore renewable energy development and that the department prioritize its permitting of these.

Joined with the budgetary reductions, the administration proposed major changes to environmental offices. The proposed moves involving pieces or subdivisions of departments—such as Commerce’s National Marine Fisheries Service (NMFS), Interior’s U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers, EPA, and others—would have many effects on offices administering the Endangered Species Act and Marine Mammal Protection Act.

On March 13, 2017, President Trump issued Executive Order 13,781 instructing the Director of the White House Office of Management and Budget to develop a plan to reorganize the Executive Branch.¹³⁰ The heads of each agency proposed the plan to the Director within six months to reorganize their agency to improve its efficiency, effectiveness, and accountability. From that came the “Reform Plan and Reorganization Solutions of the White House” on June 21, 2018.¹³¹ This Reform Plan covered many topics in social programs, such as merging the Department of Labor and the Department of Education.¹³² For dozens of regulatory agencies, several environmental ones included, changes were ordered. When it was announced, media focused on the fact that mergers and consolidations such as transfers of programs from one agency to another typically fail for lack of strong congressional support and lack of follow-up Presidential attention.¹³³ At the public announcement of the plan, press reports opined that the President is deeply disinterested in the details of domestic policy, and President Trump even joked about the re-do’s boring aspect.¹³⁴

129. OFFICE OF MGMT. & BUDGET, *supra* note 125, at 67-68.

130. Comprehensive Plan for Reorganizing the Executive Branch, Exec. Order 13,781, 82 Fed. Reg. 13,959, 13,959 (Mar. 13, 2007).

131. EXEC. OFFICE OF THE PRESIDENT OF THE U.S., DELIVERING GOVERNMENT SOLUTIONS IN THE 21ST CENTURY, REFORM PLAN AND REORGANIZATION SOLUTIONS 4 (June 21, 2018), <https://www.whitehouse.gov/wp-content/uploads/2018/06/Government-Reform-and-Reorg-Plan.pdf>.

132. Glenn Thrush & Erica L. Green, *Behind Trump’s Plan to Overhaul the Government: Scaling Back the Safety Net*, N.Y. TIMES (June 22, 2018), <https://www.nytimes.com/2018/06/21/us/politics/trump-government-overhaul-safety-net.html>.

133. *Id.*

134. *Id.*

Under this Reform Plan, several environmental agencies would undergo changes, notably including (1) a “merger” of the National Marine Fisheries Service (NMFS) with the U.S. Fish and Wildlife Service (FWS); (2) a “consolidation” of the civil works of the U.S. Army Corps of Engineers by transferring the Corps’ civil works to the Departments of Transportation (DOT) and Interior (DOI); and (3) “consolidation” of certain environmental cleanup programs.¹³⁵ The plan’s Appendix addressed reorganization of oversight and enforcement delegations by EPA to States.

The plan proposed to “merge the Department of Commerce’s (DOC) National Marine Fisheries Service with the Department of the Interior’s (DOI) U.S. Fish and Wildlife Service (FWS).”¹³⁶

This merger would consolidate the administration of the Endangered Species Act (ESA) and Marine Mammal Protection Act (MMPA) in one agency and combine the Services’ science and management capacity, resulting in more consistent Federal fisheries and wildlife policy and improved service to stakeholders and the public, particularly on infrastructure permitting.¹³⁷

Due to dilemmas in coordination and overlaps, this proposal “would seek to address these concerns by merging NMFS with FWS in DOI, simplifying the administration of the ESA and MMPA, and coordinating fish and wildlife science and related resource management capacity in one bureau within DOI.”¹³⁸

In the second proposal,

Corps navigation would be transferred to DOT and the remaining Corps civil works missions (flood and storm damage reduction, aquatic ecosystem restoration, regulatory, and all other activities) would be moved to DOI, where those activities could be integrated and aligned with complementary programs focused on issues like water management, ecosystem restoration, and recreation.¹³⁹

The plan stated, “The transfer of certain Corps programs to DOI—particularly when coupled with the other proposal in this Volume that would move the National Marine Fisheries Service to DOI—consolidates most major land and water resource management programs in the Federal

135. EXEC. OFFICE OF THE PRESIDENT OF THE U.S., *supra* note 131, at 21. The Reform Plan details taking the Army Corps maritime transportation authority away and moving it to the Department of Transportation. *Id.*

136. *Id.* at 37.

137. *Id.*

138. *Id.*

139. *Id.* at 30.

Government in one department.”¹⁴⁰ The scope of the transfer was also notable: “Moving regulatory responsibilities, including those related to the Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act, within DOI’s existing permitting programs would produce administrative efficiencies and opportunities for simplified interaction with stakeholders.”¹⁴¹ A third specific proposal involved consolidating three environmental agencies with responsibilities for hazardous materials.¹⁴²

The wisdom of changing these environmental programs in view of their constituencies is a large problem. Peter Frumkin’s prominent study of public sector mergers and consolidations advises that targets should be chosen wisely: “Not all public agencies with overlapping responsibilities are ripe for merger or consolidation. . . . Public sector mergers are only successful if they satisfy or exceed expectations of the constituencies that are served by the agencies under consideration.”¹⁴³ The Trump administration deconstruction of so many other programs and anti-environmental positions offends a large constituency. These include those who accept the warnings of the National Climate Assessment and the IPCC Special Report on the Ocean in a Changing Climate.¹⁴⁴ These constituencies are likely prepared to be suspicious and distrustful that ulterior motives exist, and to view as pretexts the claimed justifications of government efficiency or cost savings. Deconstruction by shifting parts of these environmental programs through mergers generally seems unlikely to gain traction.

An environmentally important deconstruction method described in the Appendix to the Reform Plan would devolve EPA enforcement and weaken EPA oversight in programs EPA delegated to the States.¹⁴⁵ The EPA provision includes a paragraph headlined “Tailoring State Oversight” which indicates the EPA

will recalibrate resources devoted to oversight of State-delegated programs, including the role of EPA National Programs and Regions, and their respective levels of effort. EPA will recognize States as the primary implementers and enforcement authorities where States have authorized

140. *Id.* at 37

141. *Id.* at 31.

142. *Id.* at 39-40.

143. PETER FRUMKIN, IBM CTR. FOR THE BUS. OF GOV’T, MAKING PUBLIC SECTOR MERGERS WORK: LESSONS LEARNED 1, 4 (Aug. 2003), <http://www.businessofgovernment.org/sites/default/files/PublicSectorMergers.pdf>.

144. *See, e.g., supra* notes 51 and 99.

145. EXEC. OFFICE OF THE PRESIDENT OF THE U.S., *supra* note 131, at 126.

delegation of Federal environmental programs. With input from the Environmental Council of the States (ECOS) and the States, EPA will streamline, reduce, and tailor its oversight activities to focus on national consistency and technical assistance to States as needed.¹⁴⁶

This oversight devolution is highly deferential to States, as it is a transfer of authority that weakens oversight and enforcement, placing States in a race to the bottom. Competition to attract polluting sources by lessening enforcement of pollution limits is contrary to the purpose of uniform national standards. EPA wants to keep vehicle emissions standards away from the thirteen states who seek stricter rules, but here, EPA supports handing off for self-oversight of programs to states.¹⁴⁷ At the same time, the replacement of the Obama CPP by the Trump ACE proposes to devolve to states the selection of standards for carbon dioxide emissions from the coal-powered electrical generation that the administration promotes.¹⁴⁸ There is also an EPA proposal for a “vast overhaul of climate change regulations that would allow individual states to decide how or even whether, to curb carbon dioxide emissions from coal plants.”¹⁴⁹ And a memo from then-Administrator Scott Pruitt of EPA proposed to develop rulemaking that would eliminate preemptive and retroactive veto authority oversight of the Clean Water Act section 404 permits.¹⁵⁰

Deconstruction is also directed at specific agency programs. President Trump’s Executive Order 13,778 directed EPA and Army Corps of Engineers to review the August 28, 2015, rule defining the extent of the “waters of the United States,” abbreviated WOTUS.¹⁵¹ The definition is necessary because the Clean Water Act prohibits discharge of pollutants, such as dredge and fill sediment from a point source, into “navigable

146. *Id.*

147. Tabuchi, *supra* note 80; see Mid Term Evaluation of Greenhouse Gas Emission Standards for Model Year 2022-2025 Light-Duty Vehicles, 83 Fed. Reg. 16,077 (Apr. 13, 2018); Beene, Lippert & Dlohy, *supra* note 81; Davenport, *supra* note 80.

148. Emission Guidelines for Greenhouse Gas Emissions from Existing Electric Utility Generating Units, 83 Fed. Reg. 44,746 (Aug. 31, 2018).

149. Lisa Friedman, *Trump’s Plan for Coal Emissions: Let Coal States Regulate Them*, N.Y. TIMES (Aug. 18, 2018), <https://www.nytimes.com/2018/08/17/climate/trump-clean-power-rollback.html>.

150. Press Release, Env’tl. Prot. Agency, Administrator Pruitt Issues Memo to Increase Regulatory Certainty in Permitting Process (June 27, 2018), reprinted in *Administrator Pruitt Issues Memo to Increase Regulatory Certainty in Permitting Process*, NAT’L L. REV. (June 27, 2018), <https://www.natlawreview.com/article/administrator-pruitt-issues-memo-to-increase-regulatory-certainty-permitting-process>.

151. Restoring the Rule of Law, Federalism, and Economic Growth by Reviewing the “Waters of the United States” Rule, Exec. Order No. 13,778, 82 Fed. Reg. 12,497 (Mar. 3, 2017).

waters” without a permit.¹⁵² But the Act does not define what constitutes “waters of the United States,” so the agencies by rulemaking have over time offered rules on how the limit of federal jurisdiction is to be determined.¹⁵³

The current controversy is over the Trump administration’s February 6, 2018 suspension of the Obama-era 2015 rule until 2020. This left the 1980s version in place in the two-year interim. However, the District Court of South Carolina ruled that the suspension violated the Administrative Procedure Act, 5 U.S.C. § 553, by failing to publish adequate notice of the suspension rule in enough detail of its content, basis in law, and evidence to allow for meaningful and informed comment.¹⁵⁴ The District Court in *South Carolina Coastal Conservation League* quoted *State Farm*: “An agency’s view . . . may change. . . . But an agency changing its course must supply a reasoned analysis.”¹⁵⁵ The District Court has issued a nationwide injunction on the delay of the 2015 Clean Water Rule.¹⁵⁶ However, there are several pending cases at various stages. The “nonstop legal twists” and the efforts by the administration to repeal and replace the Obama-vintage rule are ongoing through rulemaking.¹⁵⁷ Essential concerns of ocean policy will be affected by this process. These concerns include coastal water quality and the wetlands that serve as nursery and habitat for fisheries, and coastal development and agricultural drainage interests.

The Trump administration’s Interior and Commerce Departments rolled out a major deconstructive type of regulatory attack on the Endangered Species Act (ESA), as two dozen ESA-diminishing, nearly synchronous legislative and other proposals emerged from Congress and

152. *Id.*

153. See 33 U.S.C. § 1362(7) (defining “navigable waters” as “waters of the United States, including the territorial seas”); see also *S.C. Coastal Conservation League v. Pruitt*, 318 F. Supp. 3d 959, 961 (D.S.C. 2018) (Order granting nationwide injunction). This Order grants a nationwide injunction of the Feb. 6, 2018, Suspension Rule of the EPA and Corps, the effect of which was to delay the Aug. 28, 2015, WOTUS rule of the Obama Administration until 2020 and leave in effect instead the regulations adopted in the 1980s. *Id.* at 961-62. The Order relies further on *North Carolina Growers’ Ass’n, Inc. v. United Farm Workers*, 702 F.3d 755 (4th Cir. 2012), which held the agency involved could not satisfy rulemaking requirements by only accepting comments on the suspension of a rule itself as opposed to the substantive merits of the regulations being suspended and the ones the agency thereby was reinstating. *Id.* at 964.

154. *S.C. Coastal Conservation League*, 318 F. Supp. 3d at 961.

155. *Id.* at 967 (quoting *Motor Vehicle Mfrs. Ass’n of U.S., Inc. v. State Farm Auto Ins. Co.*, 463 U.S. 29, 57 (1983)).

156. *Id.* at 969.

157. Ellen M. Gilmer & Ariel Wittenberg, *Court Sides with WOTUS Foes as Legal Fight Gets Messier*, E & E NEWS (May 29, 2019), eenews.net/stories/1060425141.

the administration.¹⁵⁸ The main objective is to allow economic consequences to be considered for decisions. If the economic consequences of listing a species or its critical habitat designations become part of the formulation of the standard of the 1973 ESA, the program would be deconstructed, both for new listings and for attempts to remove an existing endangered species from a listing. On August 12, 2019, the Trump administration announced new rules, effective beginning September 2019, that changed how the ESA is applied. The new rules lessened the protective aspects on threatened or endangered species. These changes constitute the first time that economic assessments will affect whether a species qualifies for protection. Reporting of the changes states the listing decisions are currently made “without reference to possible economic or other impacts of determination.”¹⁵⁹ But the phrase is no longer to be included. Another change limits the consideration of climate change in listing assessments. Discretion of the government is expanded in construing the term “foreseeable future.”¹⁶⁰ Advocates of these changes include oil and gas, mining, water management companies, farmers, ranchers, libertarians, and land developers. The assault on the ESA has been ongoing for two years but apparently has little chance of passage in the House.¹⁶¹

The Marine Mammal Protection Act lists species under a different system than the ESA, and the two Act’s resulting protections are different. Many species listed by the MMPA have additional protection by being listed by the ESA.¹⁶²

Will deconstruction long endure, or will a collapse of deconstruction bring back a pre-deconstruction type of regulatory administrative state? Others have postulated future scenarios.¹⁶³ While the answer is blowing in the wind, scientific observation accumulates, and the list of crisis issues of

158. Coral Davenport & Lisa Friedman, *Lawmakers, Lobbyists and the Administration Join Forces to Overhaul the Endangered Species Act*, N.Y. TIMES (July 22, 2018), <https://www.nytimes.com/2018/07/22/climate/endangered-species-act-trump-administration.html>.

159. Lisa Friedman, *U.S. Significantly Weakens Endangered Species Act*, N.Y. TIMES (Aug. 12, 2019), <https://www.nytimes.com/2019/08/12/climate/endangered-species-act-changes.html>.

160. *Id.*; see also Endangered and Threatened Wildlife and Plants, Regulations for Listing Species and Designating Critical Habitat, 84 FR 45,020-21, 45,025-34 (Aug. 27, 2019) (Final Rule).

161. Friedman, *supra* note 159.

162. LLOYD LOWRY, DAVID W. LAIST & ELIZABETH TAYLOR, MARINE MAMMAL COMM’N, ENDANGERED, THREATENED, AND DEPLETED MARINE MAMMALS IN U.S. WATERS, at vi (2007), mmc.gov/wp-content/uploads/etdmarinemammals.pdf.

163. Joel Mintz, *The Coming Decline of Anti-Regulatory Conservatism*, REG. REV. (July 22, 2019), <https://www.theregreview.org/2019/07/22/mintz-coming-decline-anti-regulatory-conservatism/>.

the oceans will be compelling pressures. Deregulation of the administrative state has not been a push-over as far as ocean administration, and it has made for awareness of how fragmented and unattended the ocean policies are. Much litigation is pending over basics of the wide-ranging attack on agency regulation. Better organization of national policies and effective implementation may come from this, as is seemingly inevitable for a changing world ocean.

VI. A DECADAL VISION TENTATIVELY LIFTS OCEAN RESEARCH AND LISTS THE ISSUES

Despite the disparagement of science in the regulatory deconstruction, there is now underway an extensive data gathering within a Decadal Vision. Shortly after President Trump's Executive Order 13,840, the White House Office of Science and Technology Policy (OSTP) released its "Draft for Public Comment" of a report titled "Science and Technology for America's Oceans: A Decadal Vision."¹⁶⁴ The final report references a history of prior reports and was issued in November 2018.¹⁶⁵

The twenty or so federal agencies administering approximately 140 statutes that concern the ocean and coasts of the United States face dozens of significant problems. A sample of these identified by the Decadal Vision include the Arctic's changing condition and loss of sea ice; oil spill measures for the Arctic; the changes to the Southern Ocean; ocean acidification; biodiversity; bycatch; aquaculture and mariculture; adaptive management; cumulative impacts; ocean warming; ocean noise affecting marine mammals; air pollution at ports; illegal, unregulated, and unreported (IUU) fishing; marine debris, especially plastics and microplastics; sea level rise effects; commercial fish landings data; pathogens; water pollution; wetland functions as nurseries for fisheries; offshore minerals; harmful algal blooms; climate change; extreme weather; resilience; and marine invasive species.¹⁶⁶

164. SUBCOMM. ON OCEAN SCI. & TECH. & COMM. ON ENV'T, NAT'L SCI. & TECH. COUNCIL, DRAFT FOR PUBLIC COMMENT: SCIENCE AND TECHNOLOGY FOR AMERICA'S OCEANS: A DECADAL VISION (June 22, 2018), <http://www.noaa.gov/sites/default/files/atoms/files/Science%20and%20Technology%20for%20Americas%20Oceans%20A%20Decadal%20Vision.pdf>.

165. SUBCOMM. ON OCEAN SCI. & TECH. & COMM. ON ENV'T, NAT'L SCI. & TECH. COUNCIL, SCIENCE AND TECHNOLOGY FOR AMERICA'S OCEANS: A DECADAL VISION (Nov. 2018) [hereinafter DECADAL VISION], <https://www.whitehouse.gov/wp-content/uploads/2018/11/Science-and-Technology-for-Americas-Oceans-A-Decadal-Vision.pdf>.

166. *Id.*

In addition, the Decadal Vision topics of commercial and military issues needing policies and implementation include ship and boat building; marine construction; critical minerals and impacts of ocean mining; the need for educated and trained work forces; human migration; smuggling, including of weapons; many types of military operations; global trade; cargo; criminal activity; Arctic sea routes; the vessel identification system; and port infrastructures.¹⁶⁷ It is hard to believe that the Trump administration, as author of the Vision, or later administrations who may endorse it, would disregard the concerns of the Vision when crafting ocean policy.

The Decadal Vision disclaims being a policy. Rather, it “identifies research priorities and areas of opportunity within the ocean science and technology enterprise for the coming decade, 2018-2028.”¹⁶⁸

The aim of this document is *not to prescribe policies*, but to provide guidance for U.S. Federal agencies and non-Federal sectors to align their resources and areas of expertise, further build the scientific and technological foundation that will improve our knowledge and stewardship of the ocean, address issues of national and global importance, and inform decision-making for the coming decade.¹⁶⁹

However, the Decadal Vision is for long-term observation, not management and implementation. In many places, it describes priorities, such as to “(s)upport development of next-generation biodegradable plastics to reduce marine debris impacts on marine life and coastal communities.”¹⁷⁰ These sidebars are commentaries, not adopted policies or standards. The effort to obtain a NOP is, in a sense, part of a widespread effort to create policy on many of the dozens of significant ocean issues.

Take for instance, aquaculture or mariculture. Suggestions are on a parallel track with NOP for a statute. Proponents urge much the same structure as the NOP effort. The aquaculture proposal’s statutory framework is for an advisory board within NOAA, whose members are a variety of agency officials and stakeholder representatives. They address environmental impact studies for offshore aquaculture; handle a program of permits, regulations, and research programs; coordinate with regional fisheries management councils and other NOAA departments; and have education and outreach purposes as well.

167. *Id.*

168. *Id.* at 4.

169. *Id.* (emphasis added).

170. *Id.* at 37.

For aquaculture, the plea is for a renewed push by Congress to supplement the fragments of aquaculture policy that exist. The vehicle is the proposed National Sustainable Offshore Aquaculture Act of 2011.¹⁷¹ Offshore, the open ocean aquaculture should be brought current with experiences and changes in the industry since the 1980s. At that time, it was a fledgling and only nearshore, state-jurisdiction business. Now it is becoming a massive and open ocean activity. The goal is to build a “bipartisan, comprehensive national framework to govern aquaculture in the U.S. EEZ [Exclusive Economic Zone].”¹⁷² There are strong economic reasons to support offshore aquaculture, but also the need to manage environmental problems created by it. The regional structure of the 2011 proposal includes regional environmental impact statements.¹⁷³

For aquaculture, as for regional ocean policy, States are proposed to be active participants. States are attempting to bring standards into the expanding new endeavor of raising finfish, shellfish, and marine algae within their jurisdictional near-shore waters. The potential for pollution effects for the concentrated aquatic animal feeding operations is illustrated by a large-scale event. In Norway, about 8 million farmed salmon suffocated during an algae bloom, suggested to be aggravated by climate change-related warming waters. The estimated loss was \$82 million.¹⁷⁴

Aquaculture should not be considered in isolation; protection of water quality extends to larger problems. In 2018 “nearly 150 dead dolphins turned up in Florida waters after a widespread red tide along the Gulf Coast coincided with freshwater blue-green algae washing down the Caloosahatchee River.”¹⁷⁵ This event was one of many enormous toxic blooms of microorganisms that massively killed sea turtles and fish, even closing beaches on much of the west coast.¹⁷⁶ The cause of the disaster appears to be nutrients such as nitrogen and phosphorus. The problematic

171. H.R. 2373, 112th Cong. (2011); see Alexandra Carter & Miriam Goldstein, *American Aquaculture*, CTR. FOR AM. PROGRESS (May 13, 2019), <https://www.americanprogress.org/issues/green/reports/2019/05/13/469730/american-aquaculture/> (summary of the unsuccessful attempts to pass an effective federal statute).

172. Colby Stewart, *A Current Affair: Ensuring Sustainable Aquaculture in the U.S. Exclusive Economic Zone*, 20 VT. J. ENVTL. L. 70, 73 (2019).

173. H.R. 2373, § 4, 112th Cong. (2011); Stewart, *supra* note 172, at 88.

174. Iliana Magra, *Millions of Salmon in Norway Killed by Algae Bloom*, N.Y. TIMES (May 24, 2019), <https://www.nytimes.com/2019/05/23/world/europe/salmon-norway-algae-bloom.html>.

175. Jenny Staletovich, *Dolphins Poisoned by Algae Showed Signs of Alzheimer’s-Like Disease*, MIAMI HERALD (Mar. 20, 2019), <https://www.miamiherald.com/news/local/environment/article228126094.html>.

176. Jenny Staletovich, *Massive and Toxic Algae Bloom Threatens Florida Coasts with Another Lost Summer*, MIAMI HERALD (July 1, 2018), <https://www.miamiherald.com/news/local/environment/article213849429.html>.

blooms of various kinds plague areas such as the Great Lakes and a huge “dead zone” off the Mississippi delta that perpetually harms marine life.

Many variations of aquaculture regulations have been adopted in several states for their nearshore permits. For instance, states address escapees from the pens that may introduce non-native (including genetically modified) species into wild populations. Concentrated operations are a source of diseases that also affect native fish. Siting controls protect wildlife and other fisheries. Other controls address drugs, chemicals, antibiotics, and use of genetically modified fish. In California, the Division of Fish and Wildlife has an aquaculture program and a state statute required a programmatic environmental impact report addressing its regulations and permits.¹⁷⁷

However, federal approaches to NOP are presently minimal. By executive order, there is a council in the executive branch consisting of the main agencies involved. Regional ocean planning organizations have been started in states and serve as forums in which the federal agencies assist. There is no set national policy from the executive, no agency in charge to implement policy, no enabling statute with policies Congress establishes. This is a piecemeal approach. This is a weak showing for the subject area, given its extent (4.38 million square miles), economic significance (80% of global trade by volume is transported across the oceans, plus the fisheries value), resources, and populations involved.¹⁷⁸

A NOP might be centered upon a statute; have an agency to implement policies; set out legislatively the principles, including regional approaches, and have sub-divisions; and provide for international cooperation based on the Paris Agreement of 2015. In addition, it could address climate change mitigations, join the United States in the deep seabed mining provisions of UNCLOS, and tackle the accumulation of specific ocean issues.

These reforms take time. They respond to pressures. Great advance in U.S. marine fisheries management was made when initial legislation in 1976 was revised in 1996 and 2006, and the revisions brought tremendous progress. The Magnuson-Stevens Sustainable Fisheries Act finally required Fisheries Management Plans to be put in place by the Regional Fisheries Management Councils based on an action level. When scientific methods demonstrate a fish stock is overfished, there must be prompt action to rebuild.¹⁷⁹ The Plans must provide for restrictions on catch that

177. Sustainable Oceans Act, 2006 Cal. Legis. Serv. ch. 36 (West).

178. DECADAL VISION, *supra* note 165, at 18, 28.

179. 16 U.S.C. § 1854 (2006).

will result in sustainable levels, reached within short periods of time. The NRDC concludes this is a successful formulation that has gotten almost all the stocks to have a plan, and to have delivered the sustainable catch milestone.¹⁸⁰ Further work can expand the best ways ecosystems can be managed, but the big advance is exemplary.¹⁸¹

While the Decadal Vision is beneficial to policymaking, it is a great disappointment that it is not expressly accompanied by a policy or implementation program. The Decadal Vision foreseeably will be where the administrations come out on many contours of national activity affecting ocean policy. In the present administration, the Director of OSTP is co-chair of the IOPC (Interagency Ocean Policy Committee). The relevant federal agencies and departments are on the IOPC. But the ocean observations should be incorporated into a policy-making structure.

The five chapters of the Decadal Vision elicit the conclusion that, while the research is a compilation to update the federal technology and research options of the ten years 2018-2028, it is not a substitute for the revoked Obama-era policies addressed toward needed actions. The policy presumably will arise when the co-chairs and members of IOPC need to give shape to governance. What arises from the interactions presumably will shape the (perhaps deconstructed or not) national policy for coming years. But why does the policy formulation get off to such a delayed and uncertain implementation?

The Decadal Vision's five goals show the need for a policy. Goal 1 of the Trump Decadal Vision focuses on many technological methods for generating data to "Understand the Ocean in the Earth System."¹⁸² "This first goal seeks to improve the foundational understanding of the global ocean, which is paramount to achieving the other four goals highlighted in this document."¹⁸³ "The infrastructure and technology necessary for successful ocean research includes ships, submersibles, aircraft, satellites, land-based radar, moorings and cabled buoys, and various unmanned underwater, surface, and airborne vehicles."¹⁸⁴ The Goal urges modernization of research and development infrastructure for ocean and atmospheric research.

Goal 2 of the Decadal Vision raises many policy issues with particulars of the inquiries to be done. Its aim is to "Promote Economic

180. SEWELL ET AL, *supra* note 20, at 16.

181. *Id.* at 17.

182. DECADAL VISION, *supra* note 165, at 6.

183. *Id.*

184. *Id.* at 7.

Prosperity.”¹⁸⁵ The six sectors of the U.S. ocean economy that contribute over \$320 billion and support 3.2 million jobs include “living resources, marine construction, offshore mineral extraction, tourism and recreation, ship and boat building, and marine transportation.”¹⁸⁶ Many aspects described in the Goal are borderline policy remarks on legal and policy needs relating to ocean resources.

The federal government is mapping the Exclusive Economic Zone of the United States for cascading benefits for fisheries, mineral extraction, and other reasons. The minerals aspect furthers Executive Order 13,817 (December 20, 2017), A Federal Strategy to Ensure Secure and Reliable Supplies of Critical Minerals.¹⁸⁷ Mineral exploration mentioned in the Decadal Vision is to involve manganese nodules, cobalt-rich crusts, and polymetallic sulfides, to be actively evaluated at all levels of the supply chain. These are present on the outer continental shelf, abyssal plains, and the hydrothermal vents and seamounts of the mid-ocean ridges. The assessment is focused on the list of critical minerals of the Department of the Interior.¹⁸⁸

Support is also addressed for new technologies to quantify long-term trends in underwater noise levels and acoustic conditions: deep seabed data collection on effects on marine ecosystems and documentation of deep seabed scale and extent of environmental impacts, like sediment plumes, noise, and biodiversity loss. Continued involvement in the International Seabed Authority is mentioned, without reference to the Obama Executive Order that had proposed in section 2 Policy at (b) iii “pursuing the United States’ accession to the Law of the Sea Convention.”¹⁸⁹

Among the Goal 2 efforts are topics absent from or downplayed by the deconstruction but put forth in the Vision as important. The goal researches the principle of adaptive management of marine resources, understanding of cumulative impacts, characterizing changes in ocean acidification, and assessing impacts of sea level rise on ocean resources, eutrophication, marine debris, and ocean noise.

The ports fuels Vision in Goal 2 is to “[e]xplore low impact, alternative fuel sources for maritime and port-related uses, balancing stewardship with energy efficiency, cost-effectiveness, and marine

185. *Id.* at 17.

186. *Id.*

187. 82 Fed. Reg. 60,835 (2017).

188. Final List of Critical Minerals, 83 Fed. Reg. 23,295 (2018).

189. DECADAL VISION, *supra* note 165, at 23.

safety.”¹⁹⁰ As part of the effort to create an ocean-literate society, the goal for all education levels contains an education and training component. Such education and training places an emphasis on science, technology, engineering, and math (STEM) for an “ocean workforce” and sets priorities for particular marine occupations, such as marine forecasters, ocean instrument technicians, and underwater Remotely Operated Vehicle (ROV) developers. Note, there is already a sizeable employment in the U.S. ocean economy estimated to support 3.2 million jobs directly.¹⁹¹

Goal 3 is to “Ensure Maritime Security.”¹⁹² This Goal of the Trump Decadal Vision and the technologies to be used abound with linking explanations on the security to many of the resource policies and implementation issues addressed by ocean policy generally: ocean acidification, ocean noise, illegal and unreported fishing, ocean warming, human migration, smuggling, and quite a list of other concerns. The data gathering and analysis serves military operations and maritime security. Maritime security ensures national economic prosperity and U.S. global leadership. “Approximately 80% of global trade by volume is transported across the ocean,” the Goal relates.¹⁹³

The goal makes strong statements about the illegal, unregulated, and unreported (IUU) fishing as a risk to marine species and ecosystems that undermines sound management of sustainable fisheries and poses significant commercial, humanitarian, and security risks.

The maritime security goal contains a subsection on understanding a changing Arctic.¹⁹⁴ There is a need for improved observations and integrated models inclusive of ocean, ice, and atmosphere. Forecasts need accurate environmental content about the extent, area, thickness, and volume of sea ice and about the surface wind and wave conditions. The defense and commercial interest in safe and effective operations based on the models is shared with other nations, which is addressed in collaboration with the Interagency Arctic Research Policy Committee (IARPC). The vision is to improve the models of conditions. Three Arctic sea routes (Northwest Passage, Northern Sea Route, and a “potential transpolar route”) are in the discussion.¹⁹⁵ One specific priority is to study “the use of dispersants and the impacts of petrochemicals and other

190. *Id.* at 25.

191. *Id.* at 25-26.

192. *Id.* at 28.

193. *Id.*

194. *Id.* at 31.

195. *Id.*

hazardous materials in order to provide better oil spill response options and protection of Arctic native communities, sea life, and migratory marine mammals.”

Goal 4 of the Trump Decadal Vision is titled “Safeguard Human Health.”¹⁹⁶ Miscellaneous topics are described where science and technology are to be investigated this decade. For example, on the sub-topic “Prevent and Reduce Plastic Pollution,” the sources of plastics and effects of it along with other marine debris are specified, “more than half the plastic in the global ocean originates from five countries (China, Indonesia, Philippines, Vietnam, and Sri Lanka).”¹⁹⁷ A priority for work is to support “development of next-generation biodegradable plastics,” and another is to make risk estimates associated with microplastic exposure from commercial seafood resources and humans” to address health concerns.¹⁹⁸

Concerning harmful algal blooms (HABs), the Goal includes to develop “guidelines, testing methods, and rapid response strategies for accurate assessment and mitigation of pathogens, eutrophying chemicals, toxic chemicals, and algal toxins.”¹⁹⁹ The Vision explains that HABs are “created by a small subset of naturally occurring microscopic or larger plant-like cyanobacteria or algal species” and “over the past several years in particular,” their blooms have become more prevalent and severe.²⁰⁰ Reasons are myriad “and may include changes in water temperature, extreme weather events, and precipitation patterns due to climatic changes; runoff and pollution from wastewater systems, urban areas, and agricultural sites; and invasive organisms.”²⁰¹ This is another massive problem with which ocean policy must cope.

Further health-related parts of the Vision point out patent applications for marine genetic material are increasing and patents now address over 5000 genes.²⁰² Eighty percent of the compounds approved by the Food and Drug Administration target various cancers. Over 28,000 biochemicals have been isolated from marine species.

Goal 5 of the Decadal Vision is to “Develop Resilient Coastal Communities.”²⁰³ Citing the 2017 damage of \$285 billion, including \$125

196. *Id.* at 35.

197. *Id.* at 36-38.

198. *Id.* at 37.

199. *Id.* at 40-41.

200. *Id.* at 40.

201. *Id.*

202. *Id.* at 43.

203. *Id.*

billion from Hurricane Harvey, this Goal is a very short summary of the need to have science-based information and tools to help coastal communities respond and adapt to a changing ocean.²⁰⁴

In sum, the Decadal Vision needs a companion vision on how all this is to be implemented. It relates, “No single discipline can comprehensively address the complex and pressing problems facing the ocean,” and it “recognizes the connections among the ocean, land, ice, and atmosphere” and states humans are an important element as agents of change to Earth system processes.²⁰⁵ We clearly know the issues from the convincing ocean research tasks the Decadal Vision spells out. Legislation has been offered but none of the bills have been enacted into law.²⁰⁶ We are faced with overwhelming issues. In a word, where are the *policies*?

VII. REGIONAL OCEAN COLLABORATIONS BRING HOPE IN THE POLICY VOID

Prior to the repeal of Obama’s executive order by Trump, the states in some regions stepped up to implement collaborations. Strong state and territory commitment is needed to lead the way to a revival of NOP. The NOAA collaboration with the regions included setting out methods such as Coastal and Marine Spatial Planning.²⁰⁷ The planning areas are Northeast, Mid-Atlantic, South Atlantic, Great Lakes, Caribbean, Gulf of Mexico, West Coast, Pacific Islands, and Alaska/Arctic. Benefits NOAA listed include a “[s]tronger voice for states and tribes—regional marine plans provide a new opportunity to influence federal management and decision-making in areas subject to federal jurisdiction.”²⁰⁸

The Northeast Regional Ocean Plan is the first completed in the United States.²⁰⁹ The planning it contains describes the enormous economic consequences and benefits at stake. The plan does not impose new regulations.²¹⁰ The sales impact from the commercial and recreational fishing from the 2012 figures amounts to \$13 billion and also addressed are valuable wind energy potential, national security aspects, and maritime

204. *Id.* at 44.

205. *Id.* at 3.

206. *See* Chasis, *supra* note 10, at 854-56.

207. *Coastal and Marine Spatial Planning National Framework*, NOAA (Jan. 7, 2020), <https://oceanservice.noaa.gov/cwo2010/cmosp.html>.

208. *Id.*

209. *About*, NORTHEAST OCEAN PLANNING, <https://neocanplanning.org/about/> (last visited Apr. 5, 2020).

210. NE. OCEAN PLANNING, NORTHEAST OCEAN PLAN ch. 1, at 8 (2018), <https://neocanplanning.org/plan/>.

transportation.²¹¹ The area involved is from the coastline seaward to 200 nautical miles offshore, of which the states there have title and jurisdiction to the portion of submerged lands and natural resources out to three nautical miles and federal jurisdictional waters extend through the Exclusive Economic Zone.²¹² The Northeast Regional Ocean Council (NROC) plan puts forward Ecosystem Based Management and adaptive management.²¹³

Regional Activities are “a bottom-up, science-based tool that regions can use to address specific ocean management challenges,” economic development, and conservation, with regionally determined priorities. Partnership websites and Data Portal of the Regional Planning Body (RPB) for all the regions except the Great Lakes and Alaska/Arctic are assisted.²¹⁴

Three key parts of regional ocean governance are changing the institutions, ecosystem-based management, and regional stewards who organize professional participant involvement. The institutions are for regional ocean governance (ROGs). The EBM is an approach to management “that looks comprehensively at ocean issues connected to one another by the ecosystem inhabitants and processes.”²¹⁵ The stewards are catalysts to increase interactions and communications and benefit by use of professional associations.²¹⁶

The still-continuing Northeast Regional Ocean Council (NROC) has had regional coordination and continued regional planning even before the Obama NOP.²¹⁷ Also completing plan creation in 2016 is the Mid-Atlantic Regional Council on the Ocean (MARCO).²¹⁸ American Samoa made the first-ever ocean plan for a U.S. territory in the Pacific Ocean.²¹⁹ In the NROC, the partnership began in 2005, and from 2012 to 2016, supported the development of the ocean plan. The partnership was originated via the

211. *Id.* at 9.

212. Matthew H. Armsby, Jocelyn B. G. Herbert & Michael A. Mantell, *Role of the States, in OCEAN AND COASTAL LAW AND POLICY*, *supra* note 10, at 76-80.

213. *About*, *supra* note 209, at 143.

214. *Regional Activities*, NOAA, <https://cmsp.noaa.gov/activities/index.html> (last visited Nov. 25, 2019).

215. Hershman & Russell, *supra* note 7, at 228-29, 257, 261-64.

216. *Id.* at 247 (describing the stewards).

217. *About*, *supra* note 209.

218. Baur, Parenteau & Snusz, *supra* note 28 at 71; *Overview*, MID-ATLANTIC REGIONAL COUNCIL ON OCEAN, <https://www.midatlanticocean.org/about/marco-overview/> (last visited Apr. 5, 2020).

219. *See Marine Conservation Plan for American Samoa*, NOAA FISHERIES (July 25, 2018), www.fisheries.noaa.gov/action/marine-conservation-plan-american-samoa.

governors of the six New England states and subsequently grew to include federal agencies. NROC describes its role as a voluntary forum “to coordinate and collaborate on regional approaches that support balanced uses and conservation” of the region’s ocean and coastal resources.²²⁰

Notably, Trump Executive Order 13,840 “recognizes Regional Ocean Partnerships as the primary vehicle for ocean planning activities throughout the nation,” but with few policy statements and a differently constituted federal Ocean Policy Committee in place of the Obama-era Council.²²¹ The resulting Northeast regional ocean plan was certified as consistent with the NOP by the Obama-era National Ocean Council in December 2016. On January 17, 2017, six states, six federally recognized Tribes, nine federal agencies, and the New England Fisheries Management Council signed off on it as well. Canada and New York are *ex officio* included.²²²

The portal of NROC displays each aspect of the planning, such as the marine transit routes; hazards and specific lanes; top ten ocean resource areas; maps of individual species abundant across the area; fish stocks; vessel activity locations with comparison to offshore wind proposed locations where there may be conflict; marine transportation considerations of the twenty-five or so federal agencies with direct or indirect regulation in them; military and Coast Guard within the areas; the finfish, shellfish, and kelp aquaculture-suitable sites; and how Coastal Zone Management enables state inputs to applicable federal activities.²²³

There are critiques as to whether reinstating the NOP from the Obama era will have significant changes. The need for a federal statute, for a coordinating agency, and for regional approaches is not new, but was stirring in 2004.²²⁴ Regions, states, and territories have so much at stake that their activism for a federal statute would seem justified as highly in their own interest. Some suggestions are pertinent. For instance, Professor Michael Burger suggested in 2011 that three aspects of the regional approach of Obama seem achievable and sound: using marine spatial planning, ecosystem-based ocean management, and a regional approach

220. *About*, *supra* note 209.

221. Exec. Order No. 13,840, 83 Fed. Reg. 29,431 (June 19, 2018).

222. NE. OCEAN PLANNING, *supra* note 210, ch. 2, at 24.

223. NORTHEAST OCEAN DATA, <https://www.northeastoceandata.org> (last visited July 23, 2019).

224. Craig, *supra* note 4, at 4.

as included in the Obama effort.²²⁵ But the Obama strategy's shortcoming is its dependence on the cooperation of multiple entities.

Burger describes a federalism strategy to enable state planning further offshore, into federal waters beyond the usual three-nautical-mile state jurisdiction.²²⁶ It is viewed as necessary to avoid conflicts in the use of ocean space, potentially including extension of state zoning into the adjacent federal waters. Burger explains the suggested change in the regulatory control in terms of Rhode Island's model that would fit this need with a strong states-rights solution.²²⁷ The offshore federal jurisdiction in the areas now involved in offshore wind energy development is for instance connected with onshore impacts. Ecosystems and projects should be managed together. In his view, it strengthens the Coastal Zone Management Act's cooperative planning mechanism and consistency review approach that gives a limited waiver of federal supremacy and authority.²²⁸ Not all states have good records for their approaches, and Federalism is a struggle, capable of giving a voice or power inappropriately. Actions should occur only where there is agreement from a strong federal and strong states perspective, set out with controlling policies and standards.

Marine Protected Areas (MPAs) deserve some rethinking because they can fall short in their designated uses or due to a mistaken assumption that bigger is necessarily better. Support to preserve, not merely conserve, marine areas is urged by Professor Mahaney, in a call for statutory strengthening: "[M]arine resource protection statutes [are] available to either conserve or preserve resources."²²⁹ The six major legislative pieces addressed to marine areas lack a comprehensive system of Marine Protected Areas to distinguish and apply the difference.²³⁰ Suggestion is made that by statute, a mandate should be made for a "minimum amount of preservation-oriented area" for strict protection for sensitive resources, and to accommodate users in other areas.²³¹ The aim is to "prevent areas available for sensitive resource preservation from dwindling" as the effect

225. Michael Burger, *Consistency Conflicts and Federalism Choice: Marine Spatial Planning Beyond the States' Territorial Seas*, 41 ENVTL. L. REP. NEWS & ANALYSIS 10,602, 10,602-03, 10614 (2011).

226. *Id.* at 10,603-04.

227. *Id.* at 10,614.

228. *Id.*

229. Allison R. Mahaney, *Charting Off Course: National Marine Planning Without Legal Authority to Preserve Marine Resources*, 23 N.Y.U. ENVTL. L.J. 1, 19-31 (2015).

230. *Id.*

231. *Id.* at 33.

of regional planning “reduces the number of prospective areas available for sensitive resource preservation due to allocation of alternative uses.”²³² Once locations are set out as alternative use, it is hard to do rezoning when needed for the objective of adaptive management. Marine ecosystems need preservation areas, and regional management should require them.

More precise, rather than just larger, MPAs are suggested by marine conservationist, Luis A. Rocha.²³³ Rocha is a well-known expert in Biology, having a Ph.D. in Fisheries and Aquatic Sciences, as well as being an Associate Curator and Follett Chair of Ichthyology at the California Academy of Sciences. Priority for MPAs should generally focus on near-coast rather than open ocean sites. He prefers “more science-based conservation, not convenient conservation” where “highly diverse coastal habitats, spawning areas and feeding locales” are emphasized over what he terms a “just add water” large-area open ocean approach.²³⁴ Rocha cites Chile, where the 278,000 square miles around Easter Island allow fishing in the coastal waters.²³⁵ Brazil allows commercial and recreational fishing in a 400-mile-diameter MPA around islands “without protecting much of anything.”²³⁶ In Hawaii, the creation of the 140,000-square-mile Papahānaumokuākea National Monument created by President George W. Bush fully protected all coral reefs while its expansion by President Barack Obama quadrupled its size without adding to the critical reef protection, as it involved open ocean waters.²³⁷ In Honduras, the 2018 Tela Bay reserve in the Caribbean is comparatively very small, but the 300 square miles preserved is critically important.²³⁸

Collaboration has solved many seemingly intractable issues of ocean and coastal law. Examples abound of cooperative international organizations. For example, the International Convention for the Prevention of Pollution from Ships (MARPOL) set standards for oil transport that controlled tanker disasters.²³⁹ Recently, the high levels of air

232. *Id.* at 36.

233. Luis A. Rocha, Opinion, *Bigger Is Not Better for Ocean Conservation*, N.Y. TIMES (Mar. 21, 2018), <https://www.nytimes.com/2018/03/20/opinion/environment-ocean-conservation.html>.

234. *Id.*

235. *Id.*

236. *Id.*

237. *Id.*

238. *Id.*

239. Prevention of Pollution from Ships, 33 U.S.C. §§ 1901-1915 (2008) (implementing the International Convention for the Prevention of Pollution from Ships); see Aaron C. Courtney, Sloane A. Wildman & Sarah M. Reiter, *Ocean Dumping and Marine Pollution*, in OCEAN AND COASTAL LAW AND POLICY, *supra* note 10, at 285.

pollution at ports has been addressed in its Annex VI, which now sets standards to address air quality of ports faced with nitrogen oxide and sulfur levels that are substantial public health concerns.²⁴⁰ The ships commonly use low grade and hence low-cost bunker oil for fuel. With intense urbanization at ports and the huge world shipping commerce, the concern for port air pollution is significant and needs scientifically rigorous management. Of all U.S. international trade, 78% by weight is via the marine transportation system.²⁴¹

Worldwide there are about 53,000 merchant ships.²⁴² MARPOL now requires that sulfur content in fuel oil used by ships as of 2020 be reduced to a specified significantly lower level and also remain at even lower levels for designated control areas such as those in certain U.S. states and territories.²⁴³ One method for ships to meet the new limit is by adding scrubbers, and 983 vessels have either installed or ordered them.²⁴⁴ Others have chosen to use low sulfur fuel rather than scrub sulfur from the exhaust. The new limits went into effect January 1, 2020, and will alleviate port air pollution significantly. The international control of emissions from ships is an example of cooperation in ocean management resulting in a working ocean policy with stakeholder involvement.

Can we get a national ocean policy for the regional oceans of the United States to tackle our challengingly long crisis list? We seem poised to take the next step.

VIII. CONCLUSION: FEASIBILITY OR FUTILITY?

To sum up the reasons the NOP proposal should be seen as generally positive to goals of both deconstructive and pro-regulatory views for ocean governance, there is much to say. The United States has a vast area for governance, which is now handled by a piecemeal mix of twenty agencies handling 140 laws. In the nearshore waters, generally to three nautical miles of submerged lands and natural resources, states hold title

240. Prevention of Pollution from Ships, 33 U.S.C. § 1903 (2003).

241. U.S. COMM. ON THE MARINE TRANSP. SYS., THE U.S. MARINE TRANSPORTATION SYSTEM IN THE NATIONAL OCEAN POLICY: RESPONSE OF THE COMMITTEE ON THE MARINE TRANSPORTATION SYSTEM 1-2 (July 13, 2011).

242. Marine Flottenkommando, *Number of Ships in the World Merchant Fleet as of January 1, 2019, by Type*, STATISTA, www.statista.com/statistics/264024/number-of-merchant-ships-worldwide-by-type/ (last visited Nov. 27, 2019).

243. *Sulphur 2020—Cutting Sulphur Oxide Emissions*, IMO, <http://www.imo.org/en/MediaCentre/HotTopics/Pages/Sulphur-2020.aspx> (last visited April 5, 2020).

244. *IMO 2020: How Many Ships Have Scrubbers?*, SHIP & BUNKER WORLD NEWS (July 23, 2018) (based on a survey of the Exhaust Gas Cleaning Systems Association).

and jurisdiction, while the outer and much larger expanse reaching to 200 nautical miles offshore is federal.²⁴⁵ These state and federal waters and activities there interrelate and require far more structured cooperation and coordination. This cooperation in governance is a form of federalism and is accomplished for instance in regional fisheries management councils and in the coastal zone management programs of all the coastal states. Whether in a deconstructive era or a pro-regulatory one, there still are needed policies and structure for governance of these public waters and submerged seabed and sub-seabed. The legislative branch has adopted permanent renewal of the Land and Water Conservation Fund in 2019. There has been a bipartisan origin and history of the twenty-year proposal for a NOP.

Creation of a NOP statute will put the legislative branch into the role of adopting policies, rather than leaving the task to executive orders and agencies, which should please deconstructionists and make sense to regulatory administrative state proponents. The statutory basis would transform an executive branch council into a defined agency with structure. The specific issues in crisis now and in future times (aquaculture rights and responsibilities, toxic red tides and dead zones, invasive species, shipping needs, ocean debris and plastics, ocean noise, for instance) may no longer be orphaned as there will be leadership or participation. The massive economic benefit from fisheries, shipping, offshore wind and current energy, assisting coastal resiliency from storms, and other aspects will be of great benefit. And the regional ocean approach has been proving its worth in the plans in many areas already, where coordination and cooperation are flourishing.

Of the four broad categories of deconstruction, none on balance collide with the NOP proposal. The climate change mitigation, while vital in a literal sense to the health of oceans, is reposed in EPA rather than a function of a NOP. The attacks generally on regulatory processes of key agencies can be addressed with all those other affected agencies and the NOP can conform as well to the outcomes like other programs do. The third category of merging agencies and restructuring them, which has been hard to achieve, may be a beneficiary as a NOP is itself a restructuring opportunity. And the issue-based specific deregulations like those on the ESA or wetlands definitions rules disputes are directed at regulatory standards, whereas the NOP is less regulatory and more to identify and plan for the economic activities and functions of a unique area. And

245. Arnsby, Herbert & Mantell, *supra* note 212, at 78.

besides, rather than destroy the regional approach, President Trump made his executive order that has a council concerning the governance needs, expressly embracing regional cooperation with states.

A national ocean policy would be one of the hallmarks in United States marine resource stewardship. The size of the offshore jurisdiction and the growing expectations for the area require affirmative management. The opportunity to form a national ocean policy for this great heritage has ripened in the course of time and critical needs have piled up. The Trump executive order is a placeholder that supports regional ocean organizations initiated by coastal states. Times have changed since the original efforts twenty years ago. Advocacy for change comes from the Joint Ocean Commission Initiative, with nine action priorities.²⁴⁶ The Initiative is bipartisan and persistently addresses what two prestigious commissions sought. “Both Commissions found that a key source of our ocean’s trouble is an antiquated and vastly inadequate governance regime.”²⁴⁷

Many questions for debate exist. If the NOP is to be statutorily created, what policies will the enabling statute have? Is a new agency required, or will an existing one fit the need? Is the structure an independent or an executive agency? Should a single person or council form be designed to direct it?²⁴⁸ The NOP should take a bipartisan and state-federal partnership approach to create the initial statutory enabling act and expect to revise and adjust over decades of experience.

Parts of the Trump deconstruction are mired in contention and legal challenges, such as attempts to revive a coal economy or to weaken vehicle fuel efficiency proposals. Those outcomes will be gravely impactful on the ocean resources, as will results of the revisionist attacks on specific programs like the Endangered Species and the Marine Mammal Protection Acts, and on the Waters of the United States rule. Other aspects such as the downsizing of agency rules change the tone of agency activity. A pervasive influence in the deconstruction is that it is largely carried out by career anti-environmental appointees. The NOP, like the rest of federal government, would have to live within the parameters of the deregulatory or regulatory executive orders and appointees. A balance may be found if the role accorded to states has strength. Many states are showing fortitude on the carbon issues and offshore drilling.

246. *Policy Priorities*, JOINT OCEAN COMMISSION, <https://jointoceancommission.org/policy-priorities> (last visited Apr. 5, 2020).

247. Chasis, *supra* note 10, at 847.

248. Ganesh Sitaraman and Ariel Dobkin, *The Choice Between Single Director Agencies and Multi Member Commissions*, 71 ADMIN. L. REV. 719 (2019).

The Trump Administration's Decadal Vision sets out an extensive program for scientific ocean observation of interest to the marine transportation, military, environmental, fisheries, and many other stakeholders. However, a policy is needed. We need a way to implement what we learn during the decade. Large-scale rescue of this kind has been accomplished as recently as March 12, 2019. On that date, in the midst of the current deregulation frenzy, necessary bipartisan action occurred to permanently reauthorize the federal Land and Water Conservation Fund. The U.S. Senate voted 92-8 for the bill, the House voted 363-62, and the President signed it into law. The Fund pays for onshore conservation programs and derives its revenue, without tax dollars, from oil and gas drilling royalties in federal waters.²⁴⁹

Since the 2004 U.S. Commission on Ocean Policy, the NOP concept has been solidly bipartisan. In addition to the Land and Water Conservation Fund permanent reauthorization, several measures suggest the NOP renaissance is feasible. Regional planning for ocean resources in various ways for several of the nine ocean areas of the United States has been produced. It has a track record.

Experience also derives from management plans since 1976 for regional ocean fisheries. Today, the plans are in place for almost all commercial species. Revisions to the Magnuson-Stevens Sustainable Fisheries Management Act in 2006 implement prompt action when science determines overfishing of a species exists. The overfishing determination is the basis for catch limits, gear, and season restrictions to dramatically end unsustainable harvesting. And under the federal Coastal Zone Management Act, every coastal and Great Lakes state has planned for its nearshore land and jurisdictional water uses. These are cooperative federalism approaches. Similar cooperative and collaborative aspects of federalism should be applicable to a NOP created for the rest of the jurisdictional area.

U.S. jurisdiction for the area that is of greater extent than the area of all fifty states combined is devoid of a defined congressional policy. The regional oceans are in decline from a myriad of sources ranging from toxic algal blooms, to coral bleaching, to intensified hurricanes and coastal floods, to invasive species, to ocean plastics, to sea level rise from melting glaciers, to shark finning for soup, to (insert your issue here). Establishing a NOP, if we can, may be viewed as a victory for reconstituting

249. Coral Davenport, *Senate Passes a Sweeping Land Conservation Bill*, N.Y. TIMES (Feb. 13, 2019), <https://www.nytimes.com/2019/02/12/climate/senate-conservation-bill.html>.

government, in a sense a deconstruction of the system of piecemeal management of the vital economic and natural resources of the ocean adjacent to our coasts. Leaving its governance deconstructed contradicts the opportunity for greatness.

One thing came true. The “deconstruction of the administrative state” that strategist Stephen K. Bannon decreed is being implemented. Another truth is that the crisis of the ocean is getting overwhelming. We have to forge ahead and address this dilemma with the best national ocean policy possible. It is feasible now even if it was futile not long ago, due to the press of needs. Not long ago, we were in a period where passage was not realistic or lacked political capital.²⁵⁰ Periods like that have their moments, as do times for solutions. A National Ocean Policy needs the coastal states, territories, tribes, and stakeholders such as the shipping and port interests, fisheries commissions, environmental advocates, military, academics, and local governments to step up. They can do this, and what a wonderful achievement if they do.

250. Baur, Parenteau & Snusz, *supra* note 28, at 705-06.