

# FORWARD: CHANGING TIDES IN OCEAN MANAGEMENT

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Our oceans face a greater array of problems than ever before in our nation's history. The adverse impacts of often-faulty fishing practices and management, poorly planned development, and pollution that continues unabated despite well-intended laws, have all led to major challenges for our oceans such as the collapse of major fisheries in New England,<sup>1</sup> a dead zone covering thousands of square miles in the Gulf of Mexico,<sup>2</sup> and the tragic waste of millions of fish, mammals, and seabirds needlessly killed and discarded as unwanted bycatch every year.<sup>3</sup> Two-thirds of our coastal waters are degraded by pollution, mostly from excess nutrients in farm and urban runoff.<sup>4</sup> Scientists report that ninety percent of the large fish are gone from our oceans.<sup>5</sup> Tens of thousands of jobs in fishing, recreation, and tourism depend on coastal ecosystems that are collapsing under the weight of these threats.<sup>6</sup>

For centuries, people in the United States—and around the world—have treated our oceans as limitless and beyond our capacity to deplete or destroy. Such thinking and actions have resulted in oceans that are in an alarmingly poor state of health. In fact, our oceans have reached a state of crisis. Thirty years ago when most of the suite of ocean laws were enacted, we simply did not understand the important connections among living things within an ecosystem, between those living things and their environment, and between our activities on land and the health of marine ecosystems. The laws and policies that govern our use of oceans and coastal areas were never crafted as comprehensive policy, nor have they kept ahead of the mounting pressures of development, pollution, and exploitation. As Thomas Jefferson stated in a letter to a colleague in 1816 in regard to the reform of the Virginia Constitution,

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1. See PEW OCEANS COMM'N, AMERICA'S LIVING OCEANS: CHARTING A COURSE FOR SEA CHANGE 2 (2003), available at [http://www.pewoceans.org/oceans/downloads/oceans\\_report.pdf](http://www.pewoceans.org/oceans/downloads/oceans_report.pdf) [hereinafter AMERICA'S LIVING OCEANS] ("By 1989, New England cod, haddock, and yellowtail flounder had reached historic lows.").

2. *Id.* at vi.

3. *Id.* at 5.

4. See *id.* at 59 ("Two-thirds of our estuaries and bays are either moderately or severely degraded from eutrophication.").

5. Ransom A. Myers & Boris Worm, *Rapid Worldwide Depletion of Predatory Fish Communities*, 423 NATURE 280, 282 (2003).

6. AMERICA'S LIVING OCEANS, *supra* note 1, at v.

laws and institutions must go hand in hand with the progress of the human mind. As that becomes more developed, more enlightened, as new discoveries are made, new truths disclosed, and manners and opinions change with the change of circumstances, institutions must advance also, and keep pace with the times.<sup>7</sup>

While our practices are the proximate cause of our oceans' woes, it is the ad hoc legal and institutional structure currently in place that aids, abets, and perpetuates this unsustainable relationship with our seas. Indeed, ours is not a problem of too little law. There are more than 140 federal statutes on the books that affect our ocean resources—all responding to particular emergencies and needs.<sup>8</sup> What we lack is the recognition that the oceans, with us as a key component, are interconnected systems that deserve our utmost commitment of protection and responsible management, and thus they require a comprehensive and integrated ocean policy that can effectively insure the health of the whole.

This issue of the *Vermont Law Review*, from a symposium entitled *Changing Tides in Ocean Management*, explores how our evolving knowledge demonstrates the need to establish our nation's first comprehensive policy to protect oceans and their bounty, repair the damage that has been done, and thwart further crisis. An alarming awareness of this need led to the creation of the Pew Oceans Commission and the U.S. Commission on Ocean Policy, which together have confirmed the heavy footprint of humanity on the oceans and have plotted a course of redemption and remediation.

In June 2000, the eighteen members of the independent Pew Oceans Commission embarked on a national review of ocean conditions and policies affecting living marine resources, the first of its kind in more than thirty years.<sup>9</sup> For two-and-a-half years, the commissioners traveled around the United States, speaking to thousands of citizens who live and work along the coasts, and engaged leading scientists to publish a series of reports on pollution, coastal development, marine reserves, aquaculture, fisheries, and invasive species. Bringing together their collective experience from the areas of fishing, science, conservation, education, government, philanthropy, and business, the commissioners released in

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7. THOMAS JEFFERSON, *Letter to Samuel Kercheval, July 12, 1816*, in WRITINGS 1395, 1401 (1984).

8. See AMERICA'S LIVING OCEANS, *supra* note 1, at 27 (discussing six "of the major laws affecting our oceans").

9. See *id.* at iii-iv (providing each Commission member's biographical information).

June 2003, a set of recommendations to help restore and protect ocean and coastal ecosystems.<sup>10</sup>

The members of the U.S. Commission on Ocean Policy, appointed by President Bush in June 2001 after Congress authorized the Commission in 2000, undertook the first government-sponsored review of ocean laws, policies, and circumstances since the 1966 Stratton Commission.<sup>11</sup> Its sixteen members—with experience in areas ranging from ocean exploration, resource development, and marine transportation, to marine science, policy, and law—analyzed not only the marine stewardship issues covered by the Pew Oceans Commission, but also a broader set of issues including port and maritime transportation, ocean research, and offshore energy.<sup>12</sup> The Commission has now released a preliminary report for review by the nation's governors and interested stakeholders, and plans to deliver a final report and recommendations to the President and Congress later this year.<sup>13</sup>

With these findings of the U.S. Commission on Ocean Policy, we now have the second major report within a year that provides significant evidence that our oceans are in peril. The two Commissions—representing different origins, membership, and scope of duties—reached remarkably similar conclusions about the nature of the problem and the steps necessary to rectify it.

The Pew Oceans Commission's recommendations—calling for a bold, new conservation ethic that embraces the oceans as a public trust, recognizes our dependence on healthy marine ecosystems, and practices precaution as we manage ocean resources—provide a helpful benchmark at a time when governors are reviewing the U.S. Commission's draft report. Among the Pew Oceans Commission's leading findings and recommendations are the following:

**Finding:** U.S. ocean policy is a “hodgepodge” of narrowly drawn and specific laws that has grown by accretion over the years, often in response

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10. See Center for SeaChange, *Pew Oceans Commission Recommendations*, at <http://www.seachangecenter.org> (last visited Apr. 6, 2004) (summarizing the research activities of the Pew Oceans Commission and providing a link to the Commission's recommendations).

11. U.S. Comm'n on Ocean Policy, *About the Commission*, at <http://oceancommission.gov/commission/welcome.html> (revised Feb. 25, 2004).

12. See U.S. Comm'n on Ocean Policy, *The U.S. Commission on Ocean Policy*, at <http://oceancommission.gov/welcome.html> (revised Mar. 25, 2004) (outlining the scope of the Commission and providing a link to each member's biographical information).

13. Press Release, U.S. Comm'n on Ocean Policy, *U.S. Commission on Ocean Policy to Release Preliminary Report April 20-Historic Report to be Reviewed by Governors and Stakeholders* (Mar. 10, 2004), available at [http://oceancommission.gov/newsnotices/mar10\\_04.html](http://oceancommission.gov/newsnotices/mar10_04.html).

to crisis, and is in need of reform to reflect the substantial changes in our knowledge of the oceans and our values toward them.<sup>14</sup>

**Recommendation:** The Commission calls upon Congress and the President to pass a National Ocean Policy Act that integrates and coordinates this body of law and embodies a national commitment to protect, maintain, and restore the living oceans.<sup>15</sup>

**Finding:** Management approaches that cut across lines of jurisdiction and involve all members of the community have proven to be the most successful in ensuring the fair and sustainable use of natural resources.<sup>16</sup>

**Recommendation:** The Commission calls for the establishment of an independent oceans agency to streamline federal management, the creation of regional ecosystem councils to bring fishermen, scientists, citizens, and government officials together to develop ocean management plans, and a national network of marine reserves to protect and restore fragile ocean habitats.<sup>17</sup>

**Finding:** With half the nation living along the coast and millions more visiting each year, we are fundamentally changing the natural ecosystems that attract us to the coast.<sup>18</sup>

**Recommendation:** The Commission calls upon Congress and the states to work together to set aside habitat critical to coastal ecosystems and to promote smart land use that protects terrestrial and marine environments.<sup>19</sup> The Commission also calls for the redirection of government programs and subsidies that contribute to the degradation of the coastal environment.<sup>20</sup>

**Finding:** Overfishing, wasteful bycatch, habitat destruction, and resulting changes in marine food webs threaten the living oceans upon which our fishing industry and heritage depend.<sup>21</sup>

**Recommendation:** The Commission urges the adoption of ecosystem-based management that restricts destructive fishing gear, eliminates the wasteful practice of discarding unintended catch, and places a priority on the long-term health of marine life and marine ecosystems.<sup>22</sup> Central to this

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14. AMERICA'S LIVING OCEANS, *supra* note 1, at viii.

15. *Id.* at 102.

16. *Id.* at 28.

17. *Id.* at 33-34.

18. *Id.* at v.

19. *Id.* at 118.

20. *Id.* at 119.

21. *Id.* at 36.

22. *Id.* at 46-48.

goal is the immediate need to separate conservation decisions (i.e., how many fish should we catch?) from allocation decisions (i.e., who gets to catch them?) within the fishery management process.<sup>23</sup>

**Finding:** The nutrients and toxic substances running off our cities, streets, yards, and fields, and emanating from our smokestacks and tailpipes present the “greatest pollution threat” to coastal waters.<sup>24</sup>

**Recommendation:** The Commission calls for (1) national standards that set nutrient pollution limits and (2) compliance with these standards and further reductions in toxic pollution using watershed-based approaches.<sup>25</sup> The Commission also calls for stricter measures to abate pollution from animal feeding operations and cruise ships, and to stem the tide of invasive species arriving from overseas.<sup>26</sup>

The Commission also urges the doubling of the federal ocean research budget,<sup>27</sup> which “[f]or more than a decade . . . has hovered near 755 million dollars,” less than four percent of the nation’s total research budget.<sup>28</sup> Citing the need to “build a national constituency for the oceans,” the Commission also “calls for a new era of ocean literacy . . . [to] inspire the next generation . . . with a greater understanding and appreciation for the oceans.”<sup>29</sup>

We face a unique opportunity in the history of our Nation—and in fact, the world—to profoundly alter the attitudes, postures, and policies that are subjecting our largest and greatest public trust to unsustainable trauma. With the recommendations of two distinguished national Commissions, we can move forward credibly and confidently to change the tide of ocean management—so future generations can enjoy our oceans’ bounties for centuries to come.

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23. *Id.* at 47.

24. *Id.* at vi, 2.

25. *Id.* at 121.

26. *Id.* at 122–124.

27. *Id.* at 89.

28. PEW OCEANS COMM’N, FACTSHEET: SCIENCE, EDUCATION, & FUNDING (2003), available at [http://www.pewoceans.org/oceans/factsheets/oceans\\_factsheet\\_science\\_education\\_funding.pdf](http://www.pewoceans.org/oceans/factsheets/oceans_factsheet_science_education_funding.pdf).

29. AMERICA’S LIVING OCEANS, *supra* note 1, at 91.

