A COMPREHENSIVE NATIONAL OCEAN POLICY: 
AMERICA’S NEXT STEP?

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ABSTRACT

Historically, ocean governance has been sectoral in nature: different levels and sectors of government divide responsibility for ocean issues among them. In 1998, Australia released *Australia’s Oceans Policy*, the first comprehensive national ocean policy statement in the world. This policy framework addresses every level and sector of Australian ocean governance. Since then, other nations have joined Australia in unifying and clarifying their ocean governance. The U.S. may be next. Two reports, the Pew Oceans Commission and the U.S. Commission on Ocean Policy, recommend sweeping overhauls to U.S. oceans governance, including the creation of a comprehensive national ocean policy. Released within the last two years, these reports have caught the attention of legislators. I examined and compared the creation and implementation of other nation’s comprehensive national ocean policies, gaining insights into the composition of a successful policy. I recommend, among other things, that the U.S. pass an integrated, fully encompassing, authoritative, and binding National Ocean Policy Act.
A COMPREHENSIVE NATIONAL OCEAN POLICY: AMERICA’S NEXT STEP?

I) INTRODUCTION

The United States stands at a cross road. We have the opportunity to become the world leader in ocean resource management. Two ocean commissions, one federally funded and one privately funded, recently completed broad reports documenting the status of our ocean resources and governance. The status is not good; ocean resources are degraded and oceans governance is inadequate. Both of the reports agree that urgent action is needed to save our imperiled seas. Both of the reports agree that United States ocean governance must be reorganized under one document: a comprehensive national ocean policy.

Comprehensive national ocean policies (CNOPs) are a relatively new concept in ocean resource management. They attempt to address the many problems associated with the sectoral ocean resource managerial systems used by most countries. Only three other countries have attempted such sweeping reforms: Australia, Canada, and the United Kingdom. I will examine each of their experiences with comprehensive national ocean policies, along with other nations that are on the verge of composing such frameworks. What lessons can the U.S. glean from these countries? In what ways have these countries succeeded or failed? What are the next steps for the United States?
II) WHAT IS A COMPREHENSIVE NATIONAL OCEAN POLICY?

Comprehensive national ocean policies (CNOPs) are a relatively new phenomenon in ocean governance. As implied, they are comprehensive in nature; in a single framework, CNOPs address every ocean and coastal issue. CNOPS are a response to the sectoral approach currently dominating ocean governance. This approach often leads to fragmented and unorganized power, as new responsibilities are delegated to different agencies as they arise.

In addition to incorporating all ocean and coastal issues, CNOPs seek to integrate all levels of governance: tribal, local, state, and federal. The term “integrated management” is used to describe this approach. Although some states and regions have created comprehensive ocean policies at their level, I focus on ocean governance at the national level for a few reasons: regional and state level comprehensive ocean governance has already been tried to differing levels of success; often a state or regional area is not sufficiently large enough to effectively manage resources; and the federal government is already involved and has responsibility at the state or regional level.

Australia is widely regarded as the leader in comprehensive national ocean policy, producing *Australia’s Ocean Policy* in 1998. Great Britain followed in May, and Canada in July of 2002, with *Safeguarding Our Seas: A Strategy for the Conservation and Sustainable Development of our Marine Environment* and *The Canada Oceans Strategy*, respectively. As leaders in CNOPs, I focus on
these three countries as examples; their successes and failures can guide the creation of a U.S. National Ocean Policy.

III) Three Leaders

Australia

*Healthy Oceans: cared for, understood and used wisely for the benefit of all, now and in the future.*

In December of 1995, Australian Prime Minister Paul Keating announced his intention to develop an integrated oceans strategy. This announcement followed the release of a summary report, *State of Australia’s Marine Environment* (SOMER). In 1998, at the end of the International Year of the Oceans, *Australia’s Oceans Policy* (AOP) debuted, making Australia the first country in the world to create a comprehensive national plan to protect and manage their oceans. AOP represents an extension of the broader *National Strategy for Ecologically Sustainable Development*, established in 1992 in accordance with the United Nations Conference on Environment and Development’s (UNCED) Agenda 21. Creation of AOP was also influenced by Australia’s ratification of the United Nation’s Convention on the Law of the Sea (UNCLOS) in 1994, and the subsequent lobbying by some stakeholders, specifically marine scientists and fishery representatives. *Australia’s Oceans Policy* focuses on Regional Marine Plans (RMPs) (Figure 1) as a way to organize stakeholders—governmental, nongovernmental, regional, and federal. During the formation of AOP, the Commonwealth worked closely with industry, conservation groups, and research organizations. They also collected and considered extensive public comments.
The States kept themselves informed of the process, but did not get wholly involved until the RMP phase began. The government allocated $50 million over a period of three years for implementation of these initiatives.

AOP has nine broad goals:

- To exercise and protect Australia’s rights and jurisdiction over offshore areas; including offshore resources;
- To meet Australia’s international obligations under the UNCLOS and other international agreements binding on Australia under international law;
- To understand and protect Australia’s biological diversity, the ocean environment and its resources, and to ensure that ocean uses are ecologically sustainable;
- To promote ecologically sustainable development and job creation;
- To establish integrated oceans planning and management arrangements;
- To accommodate community needs and aspirations;
- To improve Australia’s expertise and capabilities in ocean-related management, science, technology and engineering;
- To promote public awareness and understanding of ocean matters.

*Australia’s Oceans Policy* is not based on legislation, but rather a broad range of policy commitments and institutional arrangements supporting cross-jurisdictional management for the RMPs. Moreover, AOP does not call for an over-arching governance unit. It modifies current governmental bodies and adds new governance groups (Figure 2). The Minister of the Environment chairs the newly created National Oceans Ministerial Board (NOMB). The NOMB is responsible for the implementation of AOP, comprised of the Ministers of Industry, Resources, Fisheries, Science, Tourism, and Shipping. Its primary job is to oversee the Regional Marine Planning Process. The NOMB is also responsible for establishing the National Oceans Advisory Group (NOAG), a non-government advisory body consisting of experts and stakeholders. The NOAG
consults with the NOMB on cross-jurisdictional issues and facilitates information sharing between stakeholder groups. The NOAG also reports to another new group, the National Oceans Office (NOO). The NOO is the lead AOP Commonwealth agency and gives technical and program delivery to the NAOG, NOMB, and the Regional Marine Plan Steering Committees. The NOO has primary responsibility to implement AOP. It has the additional responsibilities of coordinating between the State and Commonwealth governments and distributing information to all relevant stakeholders. The RMP Steering Committees, appointed by the NOMB, are comprised of regional non-government and government stakeholders.

The South-east Regional Marine Plan Steering Committee published the South-east Regional Marine Plan (SERMP) in July of 2003. The SERMP covers more than 2 million square kilometers of ocean around south eastern Australia, the most developed coastline in the country. Government agencies, industry representatives, indigenous groups, marine communities, and other stakeholders contributed to the SERMP. According to the Australian government, the SERMP “provides a framework to avoid conflicts over ocean resources” and “provides a framework for the sustainable development of future industries and resources.” Specific actions mentioned in the SERMP include: (1) developing an environmental health system that monitors ocean management in the region; (2) establishing a system of representative and adequate marine protected areas; (3) identification of overlap in ocean governance; and (4) establishment of a process to assess environmental, social and economic risks faced by industry and marine
communities in the region. AOP mandates implementation progress reviews, with an initial review after two years and subsequent reviews every five years.

**Implementation**

Seven years have passed since the publication of *Australia’s Oceans Policy*. It is difficult to measure the level of success for this policy, but some definite problems have emerged. A major problem with AOP is that it has little legislative backing; it does not have or grant sufficient authority to government agencies. The National Ocean Ministerial Board does not have authority over agencies outside of its membership, and cannot impose legal penalties for noncompliance. The NOMB is politically appointed; potentially its membership could completely change every three years.

Another problem involves the States, they have not been sufficiently involved in AOP process, and are therefore suspect of it. The States were initially part of an AOP consultation process with the Commonwealth, but that process stopped six months before publication. A Memorandum of Understanding (MOU) between the Southeast States and the Commonwealth promising to implement the policy has not been signed by the States. However, in the Northern Regional Marine Plan, Queensland and the Northern Territory both signed MOUs with the Commonwealth, formalizing their roles in AOP process.

Another problem is the lack of stakeholder involvement. Local and regional governments where to be integral in forming the Regional Marine Plans. However, during the Southeast Regional Marine Plan creation, the Commonwealth completed almost all the work. Moreover, AOP was not fully
supported during its initial stages. Australia’s Fisheries Management Agency, along with some fishing groups, opposed it. These groups believed that the then present arrangements were satisfactory and that any changes in ocean policy should go through existing sectoral mechanisms.

Additionally, funding questions surround Australia’s Oceans Policy. It was originally funded by selling the government telecommunications company, Telestra. Funding got a boost of stability in the 2003-4 budget when the Commonwealth appropriated $18.2 million for two more years of AOP implementation.

Different groups have voiced their disappointment with Australia’s Ocean Policy. The Australian Democrats called for a National Oceans Act, claiming that the Commonwealth’s policy has done little to protect ocean resources. In March 2003, a group of Australian environmental groups published Oceans Eleven, stating that AOP processes have stalled and recommending, among other things, a National Oceans Act. The group takes their name from an eleven-step process towards ecosystem-based regional marine planning. In 2000, the environmental group Australian-Canadian Oceans Research Network (ACORN) released a thorough document chronicling the development of AOP. They noted that a strong relationship between the Commonwealth and the States is critical to implementing a successful ocean policy, something AOP has not accomplished.

Pursuant to Australia’s Ocean Policy, an independent company reviewed the policy’s implementation progress in 2002. The review is very detailed,
recommending refocusing points and critiques for each AOP office and group. The report states that AOP is moving forward, but at a much slower pace than originally planned by the government. However, they are quick to point out the implementation difficulty for such an immense and ground-breaking policy.

**United Kingdom**

*Our vision for the marine environment is clean, healthy, safe, productive and biologically diverse oceans and seas. Within one generation we want to have made a real difference.*

The United Kingdom’s Department for Environment, Food, and Rural Affairs (DEFRA) released *Safeguarding Our Seas: A Strategy for the Conservation and Sustainable Development of our Marine Environment* (SOS) in May 2002. SOS sets out a vision for UK ocean policy and governance. The report lists six principles in which to “underpin” UK ocean policy: sustainable development, integrated management, conservation of biological diversity, robust science, the precautionary principle, and stakeholder involvement.

SOS additionally calls for a comprehensive review of previous marine conservation measures. DEFRA finished this report, *Review of Marine Nature Conservation* (RMNC), in July of 2004. It identifies examples of best practices and barriers to success. RMNC recommends many changes to UK marine conservation governance, applying additional support for SOS’s vision. Specifically RMNC recommends that the government “should finalize and apply an overarching policy framework of strategic goals, objectives, targets and
indicators which can apply to all elements of its strategic goals for the marine environment.35

*Safeguarding our Seas* outlines a stakeholder consultation process to develop and implement its recommendations. DEFRA released this report, *Seas of Change*, in November of 2002.36 Additionally, SOS promised a “State of the Seas” report to aid implementation of new ocean policies. DEFRA finished this report, *Charting Progress: An Integrated Assessment of the State of UK Seas*, in March of 2005.37

**Implementation**

The UK has a similar problem as Australia, a lack of legislation and authority. The environmental group, Wildlife and Countryside Link (LINK), is not satisfied with *Safeguarding our Seas*, pointing to a lack of legislative backing. They call for comprehensive marine legislation.38 Similarly, World Wildlife Fund (WWF) recommends a unifying UK Marine Act, and has published a Marine Act template as an example for the UK government.39

**Canada**

*Our Oceans, Our Future*40

At 250,000 kilometers, Canada has the longest ocean coastline of any country in the world. It has coasts on three oceans: the Arctic, Atlantic, and Pacific. Similar to the U.S, Canada employs a sectoral approach to oceans governance. Seeking to alleviate the problems and failures of this type of governance, Canada passed *The Oceans Act* (TOA), or Bill C-26 *An Act Respecting the Oceans of Canada* in 1996.41-42 There are three main sections in TOA. The first section covers the
United Nations Convention on the Law of the Sea (UNCLOS) and Canada’s legal demarcation of their EEZ. The second section outlines the ocean management obligations of the Minister of the Department of Fisheries and Oceans (DFO). The third section of the Act covers the powers and functions of the Minister. TOA tasks the Minister of the DFO to create and implement a national ocean policy for Canada. TOA does not represent an institutional change, but requires effort by the DFO Minister and other stakeholders to develop a national strategy. TOA requires this new ocean policy to be, not only based on the precautionary principle, but integrated in nature:

Part II 31. the Minister, in collaboration with other ministers, boards and agencies of the Government of Canada, with provincial and territorial governments and with affects aboriginal organizations, coastal communities and other persons and bodies, including those bodies established under land claims agreements, shall lead and facilitate the development and implementation of plans for the integrated management of all activities or measures in or affecting estuaries, coastal waters and marine waters that form part of Canada or in which Canada has sovereign rights under international law.

The Oceans Act, mandates ways to change oceans governance: (1) the promotion and development of institutional government mechanisms to enhance coordinated, collaborative oceans management across the federal government and with other levels of government; (2) through the implementation of integrated management planning which considers ecosystem integrity and protection while at the same time considering economic and social issue and engaging citizens; and (3) through the promotion of stewardship and public awareness.
In response to *The Oceans Act’s* mandates, DFO promulgated *Canada’s Oceans Strategy* (COS) in July 2002. COS represents the government’s policy statement for the management of estuarine, coastal, and marine ecosystems, “To ensure healthy, safe and prosperous oceans for the benefit of current and future generations of Canadians.” COS has three policy objectives: (1) understanding and protecting the marine environment; (2) supporting sustainable ocean-related economic opportunities; and (3) international leadership in ocean governance. COS recommendations are intended to be implemented in four years.

The Eastern Scotian Shelf Integrated Management (ESSIM) Initiative is seen as a test run of *Canada’s Oceans Strategy’s* mandate to link and support regionally driven integrated management initiatives. ESSIM is “a collaborative offshore planning process that aims to develop a proactive framework for addressing issues related to conservation, multiple use of the ocean and sustainable development.” The project area covers 325,000 square kilometers, or the entire Eastern Scotian Shelf. Activities on the shelf include: fisheries, science, oil and gas development, maritime defense, recreation and tourism, marine conservation, research and development, and submarine cable laying. The ESSIM’s goal is to form a comprehensive integrated management plan based on existing jurisdictional authorities. Stakeholders have been invited to define their goals which will then be examined within the overall context of COS. The ultimate decisions will be “participatory, but not necessarily consensus-based.” The government hopes this integrated management plan will move forward and
become a model for efficient, multi-stakeholder resource allocation and governance.

**Implementation**

Canada’s *Oceans Strategy* has similar problems as Australia’s *Oceans Policy*, mainly a lack of supporting legislative language. The legislation in TOA only addresses the discretionary power of the Minister of DFO to implement COS. There does not seem to be any penalties or incentives to implement it. Funding is also a potential problem for COS. So far almost all funding has come from the DFO, but they have not received any additional funds to implement TOA.

In March of 2003, the Canadian Parks and Wilderness Society criticized the government for inadequately funding COS implementation. “Canada must move forward on a comprehensive oceans strategy that addresses the urgent need for strong conservation measures,” said Sabine Jessen, Conservation Director for the British Columbia Chapter of the Canadian Parks and Wilderness Society. The Society describes COS as an “un-funded mandate.”

**IV) Other Nation’s CNOPs**

A handful of other countries, including the United States, are in the process of or examining the possibility of, creating comprehensive national ocean policies. These countries range in size—from the U.S. to New Zealand—and span the globe—from India to Norway. As these countries have not yet implemented their policies, the U.S. cannot use them to guide our next actions. However, it is
interesting to see the differences and similarities in approach taken by countries across the globe.

**India**

India’s *Vision for Ocean Development Year 2015* seeks to: (1) improve understanding of the Indian Ocean and its various inter-related processes; (2) assess the living and non-living resources of our seas and their sustainable levels of utilization; (3) contribute to the forecast of the monsoons and extreme events; (4) model sustainable uses of the coastal zone for decision-making; (5) forge partnerships with Indian Ocean neighbors through the awareness and concept of one ocean; and (6) secure recognition for the interests of India and the Indian Ocean in regional and international bodies. India’s *Vision* recommends creating an Ocean Resources Commission to coordinate ocean resource issues. The Commission will “interface with scientific organizations and policy-making departments.” Additionally, the Commission will: (1) draft policies and guidelines for government on matters related to ocean and ocean resources; (2) act as a nodal agency recommending legislation in consultation with concerned Ministries on all matters connected with ocean; and (3) recommend adoption of international ocean agency conventions and treaties.

**South Korea**

South Korea’s Ministry of Maritime Affairs and Fisheries created a national ocean governance strategy, *Ocean Korea 21*, with the vision statement, “Enhancement of National Sea Power through the Blue Revolution.” The document has three main objectives: (1) promoting the vitality of our territorial waters; (2)
developing a knowledge-based marine industry; and (3) sustainably developing marine resources. The document also declares seven goals for South Korea’s oceans: (1) creation of our jurisdictional ocean full of vitality production and livelihood; (2) creation of cleaner and safer marine environment; (3) promotion of a high value-added & knowledge-based marine industry; (4) creation of the world's leading marine service industry; (5) establishment of sustainable fishery production; (6) commercialization of marine minerals, energy and space resources; and (7) expansion of marine and fisheries diplomacy, including enhancement of cooperation between South Korea and North Korea. South Korea is additionally creating a “comprehensive program for marine environmental conservation” that incorporates precautionary marine management.

**New Zealand**

The New Zealand government, through the Oceans Policy Ministerial Group (OPMG), began creating a comprehensive national *Oceans Policy* in 2000. The OPMG is comprised of six Cabinet Members whose responsibilities relate to the economic and environmental interests of the marine environment. Other groups, including the Oceans Policy Reference Group, the Chief Executive Forum, and the Oceans Policy Secretariat will assist the OPMG in its mandate. The OPMG has completed Stage 1, creating a vision and corresponding principles, goals, and values. Stage 2 will consist of designing policies to achieve this vision. Stage 3 will focus on implementation and monitoring.

**Norway**
Norway is formulating a comprehensive national ocean policy. A report written in 2002 by their Ministry of the Environment, *Protecting the Riches of the Seas*, states that “the Government is therefore preparing a plan for total and integrated management of our maritime and coastal areas based on the ecosystem approach.” The report continues on, defining an ecosystem approach as involving “integrated management of human activities based on the dynamics of the ecosystems. The goal is to achieve sustainable use of resources and goods derived from the ecosystems and to preserve their structure, modus operandi, and productivity.” In 2003 the Government appointed a committee to draft a new *Ocean Resources Act* that will incorporate precautionary and ecosystem-based management approaches. The Act has three objectives: (1) to extend current legislation to include all living marine resources, rather than only those subject to commercial exploitation; (2) to modernize fisheries regulations according to the needs of the fishing industry and society in general, as well as simplifying the regulatory framework; and (3) to take into account Norway’s international environmental obligations.

**European Union**

In 2002 the European Union (EU) created, *Towards a strategy to protect and conserve the marine environment*, a document that takes the first step in creating a comprehensive ocean policy for the EU. This document describes current EU ocean management organization and lists threats to ocean resources. The document is in line with the *6th Environmental Action Programme* that, “stipulates the development of a thematic strategy for the protection and
conservation of the marine environment with the overall aim ‘to promote sustainable use of the seas and conserve marine ecosystems.” It is not clear when this comprehensive policy will be completed, but the EU timeline points to a finishing goal of 2005-6.

Pacific Region

Pacific Island leaders endorsed the Pacific Islands Regional Oceans Policy in 2002. Their vision statement focuses on the importance of, “a healthy ocean that sustains the livelihoods and aspirations of Pacific Island communities.” The goal of their policy is to “ensure the future sustainable use of our ocean and its resources by Pacific Island communities and external partners.” Their policy has five principles: (1) improving our understanding of the ocean; (2) sustainably developing and managing the use of ocean resources; (3) maintaining the health of the ocean; (4) promoting the peaceful use of the ocean; and (5) creating partnerships and promoting cooperation. Pacific community leaders tasked the Council of Regional Organizations Pacific to devise a plan for implementation of the Oceans Policy. Their Governing Councils recommended the report, Pacific Island Regional Ocean Framework for Integrated Strategic Action (PIROF-ISA), for implementation on February 6th 2004.

V) LESSONS FROM OTHER COUNTRIES

The United States can learn from countries that have gone ahead of us in designing comprehensive national ocean policies, especially those furthest along: Canada, Australia, and the United Kingdom. If the U.S. wants to produce
meaningful changes to our ocean governance, we should avoid the mistakes—and copy the successes—of these countries.

A common and serious problem with all three of these policies is a lack of governmental authority and responsibility stemming from insufficient legislative backing. The language of these CNOPs does not hold government accountable; penalties do not exist for wrong actions or inaction. Furthermore, without supportive legislation, non-government groups cannot get involved judicially, meaning they cannot sue the government for inaction or wrong action. Environmental NGOs and citizens can merely criticize and draw attention to inadequacies, as they have done in each of these countries. Without specific legislation mandating and tying government to certain goals and objectives, I am not sure these CNOPs will adequately change ocean management. These policies might be slowly adopted by government agencies over time, but it could be too late for many of the urgent ocean issues. It is still early to say if these CNOP efforts have failed, but progress to date is not promising.

Another problem is funding. To make such sweeping changes to governance requires money, and both Australia and Canada seem to have under funded their CNOPs. If the U.S. wants an effective policy, we will need a dedicated funding source. Government agencies already have more responsibilities than they can handle; it would be very hard to implement changes without additional staff and funding.
Our federal government must be wary of alienating lower levels of government. As can be seen with Australia, involving and working with the state level is crucial for successful implementation of a CNOP. In the U.S. we have a strong history of robust state rights and authority, these traditions and institutions must be respected and included in any policy processes.

As our governmental employees and legislators work on a CNOP and other changes to ocean governance, they must look to these countries for guidance. If we pass a U. S. National Ocean Policy that lacks funding, inclusiveness, or responsibility, it will most likely fail. We have the opportunity to learn from these examples and make smarter choices. We have the opportunity to create the first CNOP in the world that works.

**VI) U.S. Status**

The United States could be the next nation to create a comprehensive national ocean policy. Two major reports have been completed within the last two years assessing U.S. ocean governance. The Pew Oceans Commission (Pew), funded by The Pew Charitable Trusts, finished their report in the spring of 2003. The United States Commission on Ocean Policy (USCOP) finished their work in the fall of 2004. The two reports, issued by very different groups of commissioners, recommend similar actions.

**VII) The United States Commission on Ocean Policy**

The USCOP held sixteen public meetings and eighteen regional site visits from September 2001 to August 2004. They received 1,900 pages of testimony from public comments and other presenters. In their report, they offer thirteen guiding principles for future U.S. ocean policy (Appendix A), along with 212 recommendations. Many of the recommendations are ambiguous. They frequently use verbs such as: coordinate, consolidate, considerate, support, provide, increase, improve, expand, adopt, revise, strengthen, review, empower, experiment, develop, research, integrate, streamline, reemphasize, participate, and implement. The recommendations rarely use verbs such as: require, establish, make, set, ensure, affirm, and repeal. The following is a summary of the most important and specific recommendations made by the Commission.

**Oceans Governance**

The USCOP recommends the implementation of a National Ocean Policy (a CNOP), through the creation of a National Ocean Council (NOC) within the Executive Office of the President (Figure 3). The NOC, chaired by an Assistant to the President, would consist of cabinet-level secretaries and independent agency
administrators with relevant ocean and coastal responsibilities. This council would be responsible for developing and implementing the National Ocean Policy in coordination with all levels and departments of ocean and coastal governance.

To support the NOC, the USCOP recommends creating a Committee on Ocean Science, Education, Technology and Operations and a Committee on Ocean Resource Management. They also suggest nonfederal input into the NOC—a President’s Council of Advisors on Ocean Policy. This council would consist of state, territorial, tribal, and local government representatives as well as representatives from academic, public interest, and private sector organizations.

Furthermore, the USCOP calls for an Office of Ocean policy to provide staff support to these committees. The Commission recommends that Congress legislate these new ocean governance structures, but adds that, “Pending congressional action, the Commission recommends that the President put this structure in place through an executive order.”

The USCOP recommends creating Regional Ocean Councils (ROCs) that would address all ocean and coastal issues in a particular marine ecosystem. The ROCs would be comprised of government and nongovernmental representatives. These ROCs would not supplant existing authorities, but would serve to, “further regional goals, providing a mechanism for coordination of myriad regional issues.” The USCOP also advises a federal refocusing of regional efforts as well as creation of regional ocean information programs, to be set up by local Governors. Additionally, the USCOP proposes:

- That the NOC clarify which federal agency should have responsibility for offshore activities, current and emerging.
• Codifying the National Oceanic and Atmospheric Administration (NOAA) through an organic act. NOAA was originally created by executive order, and has no statutory foundation.
• That the Assistant to the President, with support from the NOC and the President’s Council of Advisors on Ocean Policy should make recommendations towards consolidating duplicative ocean related programs.
• The U.S. should accede to the United Nations Convention on the Law of the Sea (UNCLOS) and take a leading role in international ocean policy and development.

**Marine Protected Areas**

The Commission recommends that the National Ocean Council, “develop national goals and guidelines leading to a uniform process for the effective design, implementation, and evaluation of marine protected areas,” based on the best available science and input by local stakeholders.

**Education**

The Commission recommends that each ocean-related agency make ocean education and outreach a part of their mission. They recommend creation of a national ocean education office, Ocean.ED, that would work under the NOC promoting nationwide improvements in ocean education at K-12, university, and informal levels. They recommended the expansion of already existing programs such as the National Science Foundation’s Centers for Ocean Science Education Excellence program.

**Coasts**

The Commission warns of the danger inherent to intense economic development of the coasts, and the importance of managing on a watershed basis. The Commission recommends that the Coastal Zone Management Act be
reauthorized, boosted in funding, and amended to create a, “dedicated funding program for coastal and estuarine land conservation.” Furthermore, the NOC should, “develop national goals and direct changes to better link coastal and watershed management and minimize impacts associated with coastal population and housing.” The USCOP believes that federal policies such as the National Flood Insurance Program (NFIP), which encourage inappropriate development in hazard-prone areas, should be amended. Concerning dredging, the Commission recognizes the need for a national sediment management strategy that, “balances ecological and economic needs according to an eco-system based management approach.” Additionally, the USCOP recommends that the U.S. Fish and Wildlife complete the National Wetlands Inventory.

**Water Quality**

The USCOP proposes that the Environmental Protection Agency (EPA) determine the impact of chemicals, including pharmaceuticals, in wastewater and animal waste discharges. They call on states to issue additional controls on concentrated animal feeding operations (CAFOs), “when necessary to meet water quality standards.” The Commission recommends that the EPA and state governments work together to experiment with tradable permits for nutrient and sediment levels. Moreover, the USCOP believes Congress should amend the Clean Water Act (CWA), allowing the federal government authority to establish enforceable nonpoint source measures on states if they persistently fail to protect water quality. Concerning vessel pollution, the Commission recommends that Congress create a national “regime for managing wastewater discharges from
large passenger vessels,” and the EPA should, “revise the CWA marine sanitation device (MSD) regulations to require that new MSDs meet significantly more stringent pathogen standards.”

**Invasive Species**

The U.S. Coastguard should, in consultation with the EPA, “create biologically meaningful, mandatory, and enforceable ballast water treatment standards.”

**Fisheries**

The Commission puts forth six major recommendations for fisheries reform: (1) reemphasizing the role of science in the management process; (2) strengthening the Regional Fishery Management Council (RFMC) system and clarifying jurisdictions; (3) expanding the use of dedicated access privileges; (4) improving enforcement; (5) adopting an ecosystem-based management approach; and (6) strengthening international management. The USCOP recommends requiring the Regional Fishery Management Councils to rely on their Science and Statistical Committees (SSCs), “incorporating SSC findings and advice into the decision-making process,” and “should set harvest limits at or below the allowable biological catch determined by its SSC.” They also propose that the Administrator of NOAA should appoint all RFMC members, “with the goal of creating RFMCs that are knowledgeable, fair, and reflect a broad range of interests.” They urge Congress to amend the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA) to allow RFMCs use of dedicated access privileges. The USCOP calls for the National Marine Fisheries Service (NMFS), along with the states, to require saltwater angler licenses. The
Commission advises Congress to, “repeal all programs that encourage overcapitalization of fishing fleets.”

**Protected Species**

The Commission proposes that Congress amend the Marine Mammal Protection Act (MMPA), placing all marine mammal responsibility within NOAA. They also urge Congress to amend the MMPA so that it specifically lists activities that, “are allowed without a permit, those that require a permit, and those that are strictly prohibited.” USCOP believes that the definition of harassment should be revised to cover only activities that, “meaningfully disrupt behaviors that are significant to the survival and reproduction of marine mammals.” The Commission additionally advise NOAA, along with other government agencies, “to expand research on ocean acoustics and the potential impacts of noise on marine mammals.”

**Coral**

The USCOP directs Congress to pass a Coral Protection and Management Act that, “provides direct authorities to protect and manage corals, and creates a framework for research and for cooperation with international efforts.” They also believe that NOAA should be the lead agency responsible for protecting and researching newly discovered cold water corals.

**Aquaculture**

The Commission advocates that NOAA be the lead agency responsible for implementing the National Aquaculture Act and opening an Office of Sustainable
Marine Aquaculture that is responsible for, “developing a comprehensive, environmentally-sound permitting, leasing, and regulatory program for marine aquaculture.”

**Research and Data Collection**

Citing the fact that ocean science funding has fallen from 7% of the total federal research budget in 1979 to just 3.5% today, the Commission recommends doubling the federal ocean and coastal research budget over the next five years. They also recommend implementing the Integrated Ocean Observing System (IOOS). This program would, along with the proposed National Monitoring Network, monitor the oceans and Great lakes to, “assess their status, track changes over time, help identify causes and impacts, or determine the success of management efforts.”

**Funding**

To implement their recommendations, the Commission estimates costs of $1.5 billion for the first year and $3.9 billion for following years. They propose creating an Ocean Policy Trust Fund: a dedicated funding source for these ocean governance changes. Trust Fund revenue would come from Outer Continental Shelf (OCS) oil and gas royalties that currently funnel into the general fund. Revenues from future permitted activities in federal waters would also go into the Fund. A larger portion of the funds would go to OCS producing states to, “help address the environmental and economic consequences of energy production.”
In June of 2000, the 18 members of the Pew Oceans Commission (Pew) began their review of U.S. ocean governance. The Pew Charitable Trusts, a private philanthropic organization, funded the group in response to inaction within the federal government. The Stratton Commission report, *Our Nation and the Sea: A Plan for National Action*, published in 1969, was the last broad review of U.S. ocean governance. In response, Congress passed the *Oceans Act* in July of 2002, mandating the USCOP.

For two and a half years the Pew Commission traversed the country holding public meetings and gathering data from marine policy and science experts. They published their final report, *America’s Living Oceans: Charting a Course for Sea Change*, in May 2003. The Commission, chaired by Leon E. Panetta, had a more environmentally focused membership than the USCOP. While both commissions contained ocean-related academic faculty, Pew additionally employed three executives from prominent environmental groups and zero industry representatives. Reflecting their more environmentally focused membership, they call for more drastic changes to U.S. oceans and coastal governance, and place more emphasis on conservation. They implore politicians, managers, and the public to adopt an ocean ethic extending from land to sea. Pew did not cover as many topics as the USCOP, but I have placed the same topics that I summarized for the USCOP in this section as a means to contrast the two.

**Oceans Governance**

Pew recommends a National Ocean Policy Act (NOPA), “requiring federal, state, and territorial agencies to protect, maintain, and restore marine and coastal
ecosystems. They call for clear and measurable federal-level goals, standards, and compliance mechanisms binding on all parties. Pew also proposes regional ocean ecosystem councils (ROECs), mandated by the NOPA, and composed of federal, state, and tribal representatives. The ROECs would be supported by advisory committees comprised of interested stakeholders. The councils would have responsibility to develop and oversee implementation of the NOPA in their region. Pew urges the proposed ROECs to utilize ocean zoning, allowing “the protection of key habitats or resources while facilitating a variety of human activities.”

Pew proposes an independent oceans agency that would encompass: NOAA; the Department of the Interior’s ocean minerals, marine mammal, and seabird programs; the Chesapeake Bay Program; the National Estuaries Program of the Environmental Protection Agency; the Department of Agriculture’s aquaculture programs for marine species; and shoreline protection and estuarine restoration activities of the Army Corps of Engineers. This new agency would chair the ROECs, provide them funding and technical support, and review and grant approval of their plans.

Similar to the USCOP, the Pew Commission recommends a National Ocean Policy Council within the Executive Office of the President. The head of the new oceans agency would chair the council, with members from other relevant federal departments or agencies as members. The council would have the responsibility to oversee the implementation of the NOPA, and solve interagency disputes.
Additionally Pew calls for a National Oceans Advisor in the Executive office of the President.

**Marine Protected Areas**

Although the ROECs would have power to establish marine reserves in their jurisdiction, Pew recommends that Congress create a national system of reserves to, “protect marine ecosystems, preserve our national ocean treasures, and create a legacy for our children.”

**Education**

Pew recommends a “new era of ocean literacy”, but says little about how to achieve this goal.

**Coasts**

Pew recommends a “significant, permanent, and dedicated source of funding for [coastal] habitat protection.” They advise increasing in planning and zoning in coastal areas to reduce impervious surfaces and discourage growth in undeveloped areas. Pew recommends reforming the Corps of Engineers to make their practices environmentally and economically sound. They additionally advocate a redirection of all government programs and subsidies “away from harmful coastal development and toward beneficial activities, including restoration.” This would include the National Flood Insurance Program.

**Water Quality**

The Pew Commission recommends that government bodies address water quality on a watershed basis. They recommend action plans to address nonpoint source
pollution. Pew believes that the EPA and state governments should establish water quality standards for nutrients (especially nitrogen), PAHs, PCBs, and other heavy metals such as mercury. Moreover, they insist that Congress ratify the Stockholm Convention on Persistent Organic Pollutants (POPs). Pew asks Congress to amend the Clean Water Act to, “require the use of best management practices to control polluted runoff resulting from agriculture and development.” Concerning point-source pollution, Pew advises Congress to regulate cruise ships through minimum discharge effluent limits. Additionally, they recommend that all ships in U.S. waters be required to have ballast-water treatment devices, and that Congress implement the International Maritime Organization’s convention on ballast-water.

**Invasive Species**

The Pew Oceans Commission does not directly address this issue.

**Fisheries**

Pew recommends that Congress amend the Magnuson-Stevens Act to codify the following recommendations: (1) redefine the principle objective of American marine fishery policy to protect, maintain, and restore marine ecosystems; (2) separate conservation and allocation decisions; (3) implement ecosystem-based planning and marine zoning; (4) regulate the use of fishing gear that is destructive to marine habitats; (5) require bycatch monitoring and management plans as a condition of fishing; (6) require comprehensive access and allocation planning as a condition of fishing; and (7) establish a permanent fishery conservation and management trust fund.
Protected Species

The Pew Oceans Commission does not directly address this issue.

Coral

The Pew Oceans Commission does not directly address this issue.

Aquaculture

Pew advocates a monitoring system (run by the EPA and the Food and Drug Administration) that would create seafood labels explaining where foods come from and what they contain. They believe that Congress should enact legislation to regulate marine aquaculture “pursuant to sound conservation and management principles.” The new oceans agency would have responsibility for this mandate. Pew additionally calls for a moratorium on marine finfish farms and the use of genetically engineered marine or anadromous species until such legislation is passed.

Research and Data Collection

Pew recommends that Congress double funding for basic ocean science and calls for better, and more ocean research and monitoring.

Funding

Pew recommends that funding needed for these ocean governance changes come from the federal general fund and state governments. They also mention revenue-generating programs, such as resource-use fees in fisheries, mineral extraction, or ports as options.
IX) SUMMARY OF U.S. REPORTS

Many of the Pew Oceans Commission and the United States Commission on Ocean Policy recommendations are similar. Both reports come to the conclusion that the nation’s oceans and coasts are seriously threatened, and that immediate action is needed. They recommend some type of comprehensive national ocean policy, a U.S. National Ocean Policy Act. They recommend an Oceans Council within the Executive Office of the President, headed by an Oceans Advisor to the President. Additionally, the reports call for a NOAA Organic Act and creation of Regional Ocean Councils based on ecosystem boundaries.

The two commissions differ in their decisiveness, the USCOP tending to limit the suggestions for actual authority changes. A good example is in their regional council proposals. Although they both suggest Regional Ocean Councils to address resource issues and gain stakeholder input, the USCOP proposes voluntary councils, while Pew urges mandatory, authoritative councils. The USCOP does not recommend removing NOAA from the DOC, while Pew does. It is very difficult to accomplish major federal agency reorganizations, and I believe the USCOP was aware of this, reflected in their more conservative approach.

X) CONGRESSIONAL REACTION

Congressional reaction to the two reports has been tepid. It is difficult to get non-coastal representatives interested in the reports because they lack concerned constituents. Also, timing of the reports has been poor, as many Americans are
worried about other things such as the economy and terrorism. However, the representatives who have traditionally championed ocean causes are working to implement the reports’ recommendations. Some of this legislation concentrates on specific recommendations, while others attempt multiple reforms. It is unclear what will happen with these bills, but it is clear that there is little support for ocean legislation from the White House. It is obvious that restructuring ocean governance is not a priority for this administration.

XI) PENDING FEDERAL LEGISLATION

**National Ocean Exploration Program Act: S. 2280**

Senator Ted Stevens (R-AK) introduced this bill on April 5th, 2004. This bill directs NOAA to establish a coordinated national ocean exploration program. This program would be implemented through an Ocean Technology and Infrastructure Task Force.

**Fisheries Management Reform Act of 2004: H.R. 4706**

Nick Rahall (D-WV) introduced this bill on June 24th, 2004. Its primary purpose is to amend the Magnuson-Stevens Fishery Conservation and Management Act to increase stewardship of marine resources. The bill offers three major changes to the fishery management councils: the separation of conservation and allocation decisions concerning fishery resources; the broadening of the representation on the fishery management councils; and training and reducing conflicts of interest among council members.
**Ocean Research Coordination and Advancement Act: S. 2648**

Senator Ernest Hollings (D-SC) introduced this bill on July 13th, 2004. This bill seeks to “strengthen programs relating to ocean science and training by providing improved advice and coordination of efforts, greater interagency cooperation, and the strengthening and expansion of related programs administered by the National Oceanic and Atmospheric Administration.”

**National Ocean Policy and Leadership Act: S. 2647**

Senator Ernest Hollings (D-SC) introduced this bill on July 13th 2004, with co-sponsors senators Ted Stevens (R-AK), Judd Gregg (R-NH), and Daniel Inouye (D-HI). The bill grants an organic act and departmental independence to NOAA, creates an oceans council in the executive Office of the President, and establishes a national ocean policy, among other things.

**Ocean and Coastal Observation Systems Act of 2004: H.R. 5001**

Representative Curt Weldon (R-PA) introduced this bill on July 22nd, 2004. The bill proposes a pilot program to develop an ocean observation system that would detect and predict changes in the ocean and coastal zone. The program would be organized by NOAA.


The four co-chairs of the House Oceans Caucus introduced and co-sponsored the Oceans Conservation, Education, and National Strategy for the 21st Century Act, or Oceans 21, on July 22, 2004. The chair representatives are: Curt Weldon (R-PA), Wayne Gilchrest (R-MD), Jim Saxton (R-NJ), Jay Inslee (D-WA), Sam
Farr (D-CA), and Tom Allen (D-ME). The bill would enact many of the recommendations in the USCOP and Pew reports. It seeks to: create a National Ocean Policy, a National Oceans Council, Regional Ocean Ecosystem Councils, an Ocean Policy Trust Fund; and strengthen NOAA.

**National Oceanic and Atmospheric Administration Act: H.R. 50**

Vernon J. Ehlers (D-MI) introduced this bill in January of 2005. This bill simply codifies the National Oceanic and Atmospheric Administration.

**Marine Debris Research Prevention and Reduction Act: S. 362**

Senator Daniel K. Inouye (D-HI) introduced this bill on February 10th, 2005. This bill seeks to establish a program within NOAA and the U.S. Coast Guard to, “help identify, determine sources of, assess, reduce, and prevent marine debris and its adverse impacts on the marine environment and navigation safety.”

**National Marine Scholarship Act: H. R. 1191**

Jay Inslee (D-WA) introduced this bill in March of 2005. It proposes the creation of a scholarship fund dedicated to graduate students in marine science and management. After graduation, the scholarship awardees would work for NOAA for two years.

**XII) U.S. Ocean Action Plan**

On December 17th 2004, three days before a legislative response deadline, President George W. Bush released the *U.S. Ocean Action Plan*. Following are the recommendations highlighted in the plan. Many of the recommendations are
summaries of existing programs or past initiatives. However, the *Plan* does support the codification of NOAA.

On the same day the President, through an executive order, created a Cabinet-level Committee on Ocean Policy. This is essentially the National Ocean Council recommended by both reports. The Committee is to, “address a number of the [USCOPs] recommendations, including further actions on ocean, coastal, and Great Lakes issues that address governance principles, filing gaps in legislative authority, and streamlining unnecessary overlapping authorities.” The Committee will be chaired by the Chairman of the Council on Environmental Quality.

- The Action Plan promotes the use of market-based solutions to fisheries management, including dedicated access privileges like individual fishing quotas (IFQs).
- The President supports the implementation of the Integrated Ocean Observation system.
- The plan calls for an ocean research priorities plan and implementation strategy.
- The plan supports “coral reef local action strategies” that seek to coordinate differing levels of governance, focusing power at the local level.
• The Action plan reiterates a movement by the administration to create partnerships in the Gulf of Mexico to seek answers to public health problems stemming from water and shellfish quality.
• The action plan supports the passage of an Organic Act for NOAA while keeping it under the Department of Commerce.
• The plan wants to implement the National Freight Action Agenda, which focuses on creating a, “safe, reliable, and efficient freight transportation system that supports economic growth and international competitiveness.”

XIII) U.S. RECOMMENDATIONS

I recommend a United States comprehensive national ocean policy that has guts. Without appropriate legislative backing, a CNOP will not sufficiently change U.S. ocean governance. A U.S. CNOP will need strong language, compliance mechanisms, penalties, and binding authority. Both of the Commissions recommend this CNOP, this National Oceans Act. Its guiding principles and over-arching vision are essential to unify our oceans governance and produce successful oceans management. As can be seen from the three leaders in ocean governance, a CNOP without sufficient authority or legislative background does not work. The U.S. should avoid this mistake and its inherent waste of time and resources.

I recommend that NOAA stay within the Department of Commerce, simply because it is too difficult to take it out. The U.S. Ocean Action Plan and the
USCOP recommend that NOAA stay in the department. With more important measures and changes to make, this reorganization can wait. It will require too much political capitol to move NOAA, and the DOC will not give such a large portion of their total budget away so easily.

I recommend mandatory regional ecosystem councils that would engulf the current Regional Fisheries Management Councils. The voluntary councils proposed by the USCOP would not work—they lack appropriate incentives and penalties. My proposal is basically a modification of Pew’s council recommendation. Under my framework, the RFMCs would keep their authority over fisheries, but be subject to interaction and compromises with other user groups. I believe such a proposal would be easier to pass in Congress than a bill that eliminates the RFMCs altogether.

I recommend the use of the Outer Continental Shelf mineral and gas revenues to fund these changes. The USCOP’s recommendation to create a dedicated Ocean Policy Trust Fund is ideal. Ocean issues are classically under-funded and ignored; a secure funding source could do wonders for our ocean governance and resources. It will be difficult to place these monies into a dedicated fund because congressmen want more flexibility in spending, but the changes need a dedicated funding source.

**XIV) The Matrix**

To facilitate comparison, and hopefully ease comprehension of these different policy frameworks, implemented and recommended, I created a matrix that
includes the *U.S. Commission on Ocean Policy, the Pew Oceans Commission, Australia’s Oceans Policy, Canada’s Oceans Strategy, and Safeguarding Our Seas*. I have simply rated each of these documents on various topics, giving them a minus symbol for not covering a topic, a check for mentioning it, and a plus symbol for extra focus. It is very subjective, but useful to compare the documents.
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**Figure 1**

Australia’s Ocean Policy: Regional Marine Ecosystems

Preliminary large marine domains regionalisation (Modified from CSIRO 1998) and Marine Planning Regions
FIGURE 2
Australia’s Ocean Policy: New governmental bodies.
FIGURE 3
**APPENDIX A**

**Guiding Principles**
The Commission believes the vision described above is both practical and attainable. To achieve it, however, an overarching set of principles should guide national ocean policy.

**Sustainability:** Ocean policy should be designed to meet the needs of the present generation without compromising the ability of future generations to meet their needs.

**Stewardship:** The principle of stewardship applies both to the government and to every citizen. The U.S. government holds ocean and coastal resources in the public trust—a special responsibility that necessitates balancing different uses of those resources for the continued benefit of all Americans. Just as important, every member of the public should recognize the value of the oceans and coasts, supporting appropriate policies and acting responsibly while minimizing negative environmental impacts.

**Ocean–Land–Atmosphere Connections:** Ocean policies should be based on the recognition that the oceans, land, and atmosphere are inextricably intertwined and that actions that affect one Earth system component are likely to affect another.

**Ecosystem-based Management:** U.S. ocean and coastal resources should be managed to reflect the relationships among all ecosystem components, including humans and nonhuman species and the environments in which they live. Applying this principle will require defining relevant geographic management areas based on ecosystem, rather than political, boundaries.

**Multiple Use Management:** The many potentially beneficial uses of ocean and coastal resources should be acknowledged and managed in a way that balances competing uses while preserving and protecting the overall integrity of the ocean and coastal environments.

**Preservation of Marine Biodiversity:** Downward trends in marine biodiversity should be reversed where they exist, with a desired end of maintaining or recovering natural levels of biological diversity and ecosystem services.

**Best Available Science and Information:** Ocean policy decisions should be based on the best available understanding of the natural, social, and economic processes that affect ocean and coastal environments. Decision makers should be able to obtain and understand quality science and information in a way that facilitates successful management of ocean and coastal resources.
Adaptive Management: Ocean management programs should be designed to meet clear goals and provide new information to continually improve the scientific basis for future management. Periodic reevaluation of the goals and effectiveness of management measures, and incorporation of new information in implementing future management, are essential.

Understandable Laws and Clear Decisions: Laws governing uses of ocean and coastal resources should be clear, coordinated, and accessible to the nation’s citizens to facilitate compliance. Policy decisions and the reasoning behind them should also be clear and available to all interested parties.

Participatory Governance: Governance of ocean uses should ensure widespread participation by all citizens on issues that affect them.

Timeliness: Ocean governance systems should operate with as much efficiency and predictability as possible.

Accountability: Decision makers and members of the public should be accountable for the actions they take that affect ocean and coastal resources.

International Responsibility: The United States should act cooperatively with other nations in developing and implementing international ocean policy, reflecting the deep connections between U.S. interests and the global ocean.
4 op.sit. “Australia’s Ocean Policy”
7 Ibid.
9 op.sit. “Evaluation of Australia’s Oceans Policy as an example of public policy-making in Australia”
16 op.sit. “Australia’s Ocean Policy” page 16.
18 Ibid.
19 Ibid.
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31 op.sit “Safeguarding Our Seas: A Strategy for the Conservation and Sustainable Development of our Marine Environment”

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op.sit. “America’s Living Oceans: Charting a Course for Sea Change” page 58.

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op.sit. “America’s Living Oceans: Charting a Course for Sea Change” page 75.

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op.sit. “South-East Regional Marine Plan” page 1.

