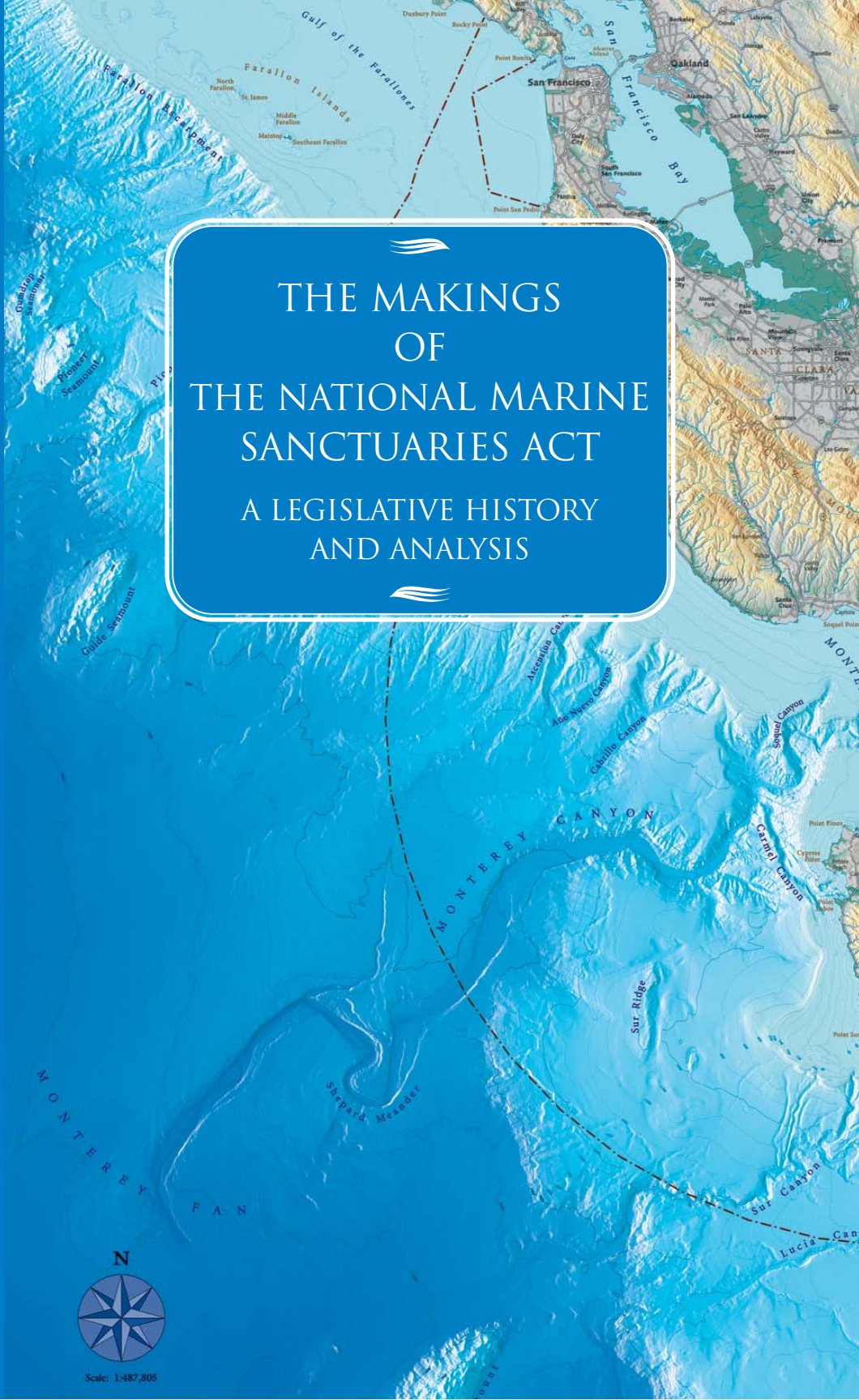


THE MAKINGS OF THE NATIONAL MARINE SANCTUARIES ACT

A LEGISLATIVE HISTORY AND ANALYSIS

Shane Anderson

Over the last three decades, the Sanctuary Program has designated 13 sanctuaries encompassing less than 0.5 percent of the U.S. exclusive economic zone. Most of these sanctuaries allow intensive human use.

Gulf of the Farallones NMS

Karen Angel

Front cover: Monterey Bay NMS
- ©Monterey Bay Sanctuary Foundation

Back cover and background map:
National Marine Sanctuaries - ©NOAA

THE MAKINGS OF THE NATIONAL MARINE SANCTUARIES ACT

A LEGISLATIVE HISTORY AND ANALYSIS

By

WILLIAM J. CHANDLER

AND

HANNAH GILLELAN

Made possible by a grant from the
Curtis and Edith Munson Foundation.

MAY 2005

Rescuers disentangling fishing line and netting from a Northern right whale. ©IFAW www.ifaw.org

"For if one link in nature's chain might be lost, another might be lost, until the whole of things will vanish by piecemeal."

- Thomas Jefferson

Frank and Joyce Burek

Map: ©NOAA

CONTENTS

Preface....4

Introduction....6

Marine Reserves....9

Early Sanctuary Bills (1967-1970)....11

The Marine Protection, Research, and Sanctuaries Act of 1972....13

The Rise of Multiple Use (1974-1986)....15

Emphasizing Preservation (1988-2000)....17

Assessing the Sanctuaries Act's Effectiveness....19

The Unfulfilled Preservation Mandate....19

Structural Flaws of the Sanctuaries Act....20

The Wilderness Act Model of Preservation....20

Holes in the System....21

What Does Protection Mean?....22

Oil Development and Commercial Fishing....24

Chart: Pacific Rockfish Declines....25

Preservation and Multiple Use....27

Moratorium on New Sanctuaries....28

Conclusion....29

Endnotes....31

Highlights of National Marine Sanctuaries....32

Table 1. *Summary of the National Marine Sanctuaries....cover*

Map of Sanctuaries....*inside back cover*

PREFACE

The National Marine Sanctuaries Act was enacted in 1972 after five government reports paved the way by emphasizing the need to protect key areas of the marine environment to preserve ocean wildlife and habitats. What has been the result?

One of the repeated struggles encountered in implementing the Act has been whether preservation or multiple use should be the driving management goal. The U.S. exclusive economic zone (EEZ) - those waters in which the U.S. government has jurisdiction over the natural resources - extends out to 200 nautical miles from the coastlines. Though the EEZ is vast, the Sanctuary Program has designated less than 0.5 percent of the EEZ as sanctuaries. Furthermore, most of these 13 sanctuaries allow intensive human use.

Public awareness of ocean problems

A northern right whale fluke entangled in fishing gear.
©IFAW www.ifaw.org

©Wolcott Henry

Oil spills, waste dumping
Oil covered beaches
Closed shell fish beds

1966

President Johnson's Science Advisory Committee called for a system of marine preserves.

1967

The first marine sanctuary bills were introduced in the House of Representatives.

1972

October 23, President Nixon signed the Marine Protection, Research, and Sanctuaries Act of 1972.

RICHARD NIXON

Today, hundreds of marine scientists around the world call for the creation of nationwide networks of fully protected marine conservation areas to help protect and restore degraded ocean ecosystems. Three recent U.S. reports also have endorsed the use of protected areas to conserve our oceans. Based on the latest scientific understanding, can the Sanctuaries Act deliver the desired results?

There is certainly controversy over whether it can or will. Attempts to create fully protected areas within sanctuaries have been controversial, particularly over the issue of commercial and recreational fishing. This analysis is intended to show how well the Sanctuaries Act has performed its preservation mission and how it might be improved to ensure that our marine resources are protected for the future. It is hoped that this analysis will be a useful touchstone as the Act is considered for reauthorization in 2005.[1]

1975

U.S.S. Monitor shipwreck site and Key Largo, Florida designated as Marine Sanctuaries.

1984

By 1984, NOAA and Congress had made a series of regulatory and legislative decisions that emphasized balancing preservation with other human uses of sanctuaries.

2000

13 Marine Sanctuaries exist, less than 0.5% of U.S. exclusive economic zone. Congress declared moratorium on new sanctuary designations, but authorized a new sanctuary in Hawaii.

2005

NOAA proposes to establish a new sanctuary, nearly 100,000 square nautical miles, in the Northwestern Hawaiian Islands.

INTRODUCTION

"The Oceans are in danger of dying"

- Jacques Cousteau[2]

Coastal and ocean degradation caused by pollution, industrial and commercial development, and waste dumping became salient environmental issues in the 1960s and 1970s. Public awareness of ocean problems was heightened by large oil spills, "dead seas" resulting from the dumping of dredge spoil and sewage sludge off America's coasts, and numerous scientific reports detailing the environmental decline of coastal areas. In response, the U.S. Congress approved a number of remedial measures to protect coasts and estuaries, including a program of federal assistance for states to develop coastal zone management plans, new water pollution and ocean dumping policies, and separate programs to establish estuarine and marine sanctuaries.

In his 1971 testimony before the Senate Subcommittee on Oceanography, world-renowned oceanographer Jacques Cousteau warned Congress that the world faced the destruction of the oceans from pollution, overfishing, extermination of species, and other causes. He called for immediate action on several fronts to reverse the situation.

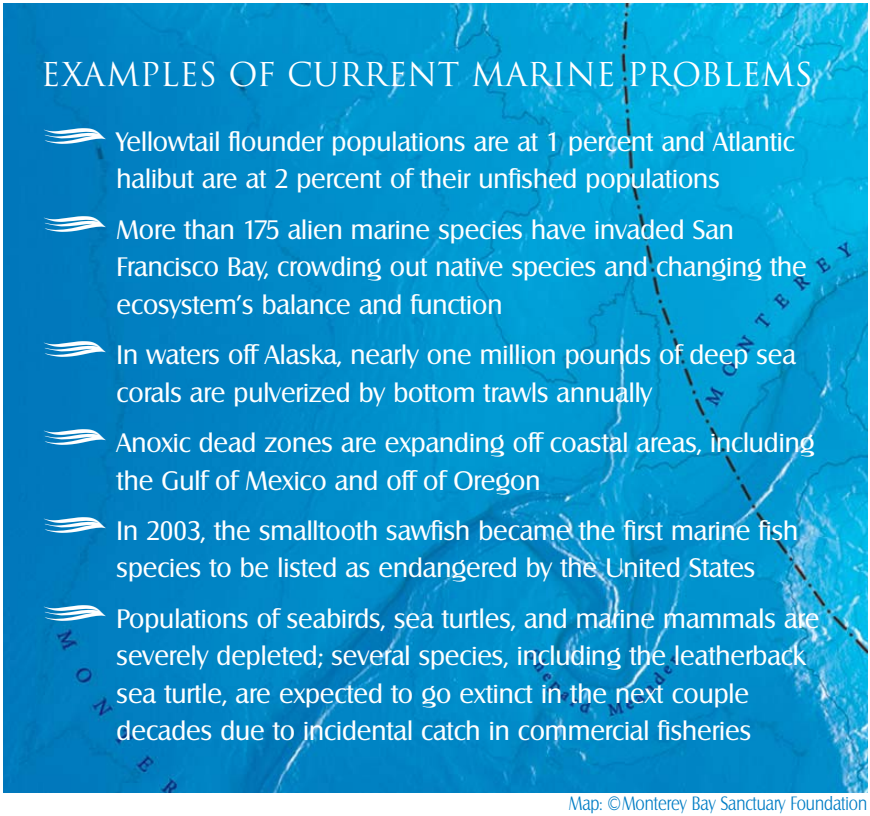
The following year, the floodgates of environmental legislation opened. Congress passed a number of environmental laws, among them the Marine Protection, Research, and Sanctuaries Act (MPRSA) of 1972.[3] The Act authorized a trio of programs to protect and restore ocean ecosystems. It regulated the dumping of wastes in ocean waters, launched a study of the long-term effects of humans on marine ecosystems, and authorized the Secretary of Commerce to designate national marine sanctuaries for the "purpose of preserving or restoring [marine] areas for their conservation, recreational, ecological, or esthetic values."

Early proponents of marine sanctuaries envisioned a system of protected ocean areas analogous to those established for national parks and wilderness areas. The concept of a marine wilderness preservation system had been raised in 1966 in *Effective Use of the Sea*, a report prepared by President Lyndon Johnson's Science Advisory Committee.[4] **The committee recommended a permanent system of marine preserves similar in purpose and design to that established for terrestrial wilderness areas by the Wilderness Act.** Like wilderness areas, marine preserves were to be managed to maintain the oceans' natural characteristics and values; only human uses deemed compatible with this goal would be allowed. Unfortunately, the Sanctuaries Act did not strictly follow the model of the National Wilderness Preserve System.

Is the overriding purpose of the Act the preservation and protection of marine areas, or is it the creation of multiple use management areas in which preservation has to contend with other uses, even exploitive ones like oil and gas extraction ?

For much of its history, the Sanctuaries Act has been a work in progress. A fundamental reason for its plasticity has been ambiguity of intent. The original Act and its accompanying legislative history were incongruous in that the law directed the Secretary of Commerce, acting through the National Oceanic and Atmospheric Administration (NOAA), to establish sanctuaries for preservation and restoration purposes, but the House legislative history, especially the floor debate, allowed for both preservation and extractive uses in sanctuaries. This ambiguity produced confusion and led to implementation difficulties, triggering periodic efforts by NOAA and Congress to clarify the Act's purposes and provisions.

Over time, Congress confirmed multiple use as one of several purposes of the Act and gave the Secretary of Commerce the discretion to



Map: ©Monterey Bay Sanctuary Foundation

determine which uses in each sanctuary are consistent with the resource protection objectives of the Act and the particular sanctuary. Although key areas of the oceans and Great Lakes have been protected to some degree in the 13 sanctuaries established since 1972, the Sanctuary Program has yet to produce a comprehensive national network of marine conservation areas that restores and protects the full range of the nation's marine biodiversity, nor does it have a credible strategy for doing so. Established sanctuaries cover less than 0.5 percent of U.S. waters, and many significant marine areas and resources are missing from the system.

Meanwhile, the ocean degradation of which Cousteau warned, and which Congress sought to arrest when it passed the MPRSA and other marine conservation laws, is rapidly coming to pass. Although progress has been made on some fronts, such as bans on the dumping of toxic wastes in the ocean and stronger protection for marine mammals, other problems, such as fisheries depletion and dead zones, have worsened.

MARINE RESERVES

Photo: National Marine Fisheries Service

The Sanctuaries Act was passed to preserve places in the sea from destruction, but the Act's multiple use provisions have made it difficult to create inviolate sanctuaries where no extraction of living or nonliving resources is allowed. Scientific thinking about conserving ocean ecosystems was in its infancy at the time the Sanctuaries Act was passed, but our knowledge has evolved substantially since the 1970s. Today, scientists call for the establishment of networks of marine reserves—areas exempt from all extractive or harmful activities, including commercial and recreational fishing—as a necessary tool to conserve marine biodiversity, restore and preserve the integrity of marine ecosystems, and maintain sustainable fisheries.[5] Nations around the world are increasingly heeding this advice.

However, in the United States, NOAA has moved slowly in creating fully protected marine reserve zones within sanctuaries. When Congress established the Florida Keys National Marine Sanctuary in 1990, it directed NOAA to consider zoning of the sanctuary as a method for creating "no-take" reserves.[6] NOAA's reserve initiative in the Florida Keys drew vociferous opposition from some commercial and recreational fishing interests, but agreement was eventually reached to establish 24 reserves covering less than 1 percent of the 2,873 square nautical mile sanctuary.

A more recent attempt by NOAA in partnership with the state of California to establish fully protected reserves comprising 26 percent of the 1,252 square nautical mile Channel Islands National Marine

Sanctuary also has generated opposition – particularly from recreational fishing interests—and is incomplete. Marine reserve initiatives at other sanctuaries have not been launched because of hostile political forces and lack of countervailing conservation advocacy.

In 2000, President Clinton issued an executive order calling for federal agencies to study, design, and establish a national system of marine protected areas under current legal authorities.[7] The executive order defines a "marine protected area" (MPA) as "any area of the marine environment that has been reserved by Federal, State, territorial, tribal, or local laws or regulations to provide lasting protection for part or all of the natural and cultural resources therein." The MPA Program is proposing a national system of MPAs to foster cooperation, clarify terminology and thereby improve MPA design and implementation, identify gaps to ensure inclusion of representative examples of marine resources, and better protect broadly distributed species and ecological processes. As defined by the executive order, the system would include a variety of marine areas that offer different degrees of protection.

Two recent national commissions have recommended a major overhaul of U.S. ocean policy. The Pew Oceans Commission, established by the Pew Charitable Trusts, issued its report in 2003.[8] Among other things, the report called for national legislation to create a system of fully protected marine reserves. The U.S. Commission on Ocean Policy's report, issued in 2004, recognizes marine protected areas as a valuable tool for implementing ecosystem-based management.[9] President Bush's Ocean Action Plan, released in response to the U.S. Commission on Ocean Policy Final Report, lauded the administration's continuing efforts to designate a 14TH national marine sanctuary in the Northwestern Hawaiian Islands, "the largest marine protected area in the Western Hemisphere," and supported the need to "coordinate and better integrate the existing network of marine managed areas."[10] In the ensuing debate over how to implement stronger ocean management, the role of the Sanctuaries Act should be assessed to determine its adequacy for meeting today's ocean conservation needs.

EARLY SANCTUARY BILLS (1967-1970)

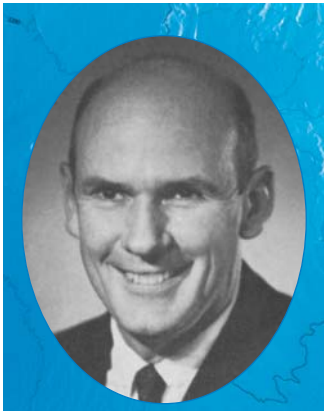
In 1967, bipartisan members of Congress, including Representatives Hastings Keith (R-Mass.), Phil Burton (D-Calif.), and George E. Brown, Jr. (D-Calif.), introduced bills to direct the Secretary of the Interior to study the feasibility of a national system of marine sanctuaries patterned after the wilderness preservation system.[11] At the time, the petroleum industry was rapidly expanding its operations in offshore waters. A principal factor prompting this legislation was the desire to protect scenic coastlines and special marine places, such as rich fishing grounds like Georges Bank, from oil and gas development.

Ocean Champion
Rep. Hastings Keith

The House Merchant Marine and Fisheries Committee held a hearing on the sanctuary study bills in 1968, but they were opposed by the Department of the Interior (DOI) on grounds that existing law permitted the DOI to manage the ocean for multiple uses, including environmental protection, and that sanctuaries might limit offshore energy development. Nevertheless, several members of the House continued to promote legislation to study sanctuary feasibility in the next two Congresses.

Concurrently, a second strategy for protecting ocean places was advanced by members of the California delegation who wished to designate areas on the Outer Continental Shelf (OCS) of California in which oil drilling would be prohibited. In 1968, bills were introduced but not passed in the House and the Senate to ban drilling in a section of waters near Santa Barbara. Following a massive oil spill from a

ruptured well in the Santa Barbara Channel in 1969, Sen. Alan Cranston (D-Calif.) became the most vocal advocate for prohibiting drilling at selected places along the California coast. The DOI opposed these bills as well, claiming that new drilling guidelines and procedures implemented after the Santa Barbara accident would be sufficient to prevent future spills. The Senate and House Interior and Insular Affairs Committees, which had authority over the OCS minerals leasing program, were sympathetic to the DOI's concerns and declined to act.



Ocean Champion
Sen. Alan Cranston

Oil-covered beaches, closed shellfish beds, and "dead seas" around ocean dump sites prompted the introduction of bills in 1969 and 1970 to comprehensively regulate ocean dumping.

A third approach to ocean protection was spawned by concern about the effects of waste dumping in the ocean. Oil-covered beaches, closed shellfish beds, and "dead seas" around ocean dump sites prompted the introduction of bills in 1969 and 1970 to comprehensively regulate ocean dumping. A 1970 report of the President's Council on Environmental Quality called for comprehensive regulation of dumping; predictably, the report made no mention of the need for a marine sanctuary system.[12]

Despite the Nixon Administration's opposition to marine sanctuaries, the Democrat-controlled House Merchant Marine and Fisheries Committee was determined to act. The ocean dumping crisis gave the committee the opening it needed. As the 91st Congress drew to a close, momentum for an ocean dumping law had become unstoppable.

THE MARINE PROTECTION, RESEARCH, AND SANCTUARIES ACT OF 1972

In June 1971, the House Merchant Marine and Fisheries Committee unanimously reported the Marine Protection, Research, and Sanctuaries Act (MPRSA), which contained titles on ocean dumping, marine research, and sanctuaries. The Act's sanctuaries title (Title III) was an amalgam of concepts from various bills pending before the committee and new ones forged in executive session. **The sanctuaries title did not mirror the Wilderness Act, as had been recommended by President Johnson's Science Advisory Committee. Furthermore, it lacked any prohibitions on industrial development, including energy development,** within designated sanctuaries, which had been a principal goal of Rep. Keith and others.

The House bill gave the Secretary of Commerce broad discretionary authority to designate marine sanctuaries in coastal, ocean, and Great Lakes waters to preserve and

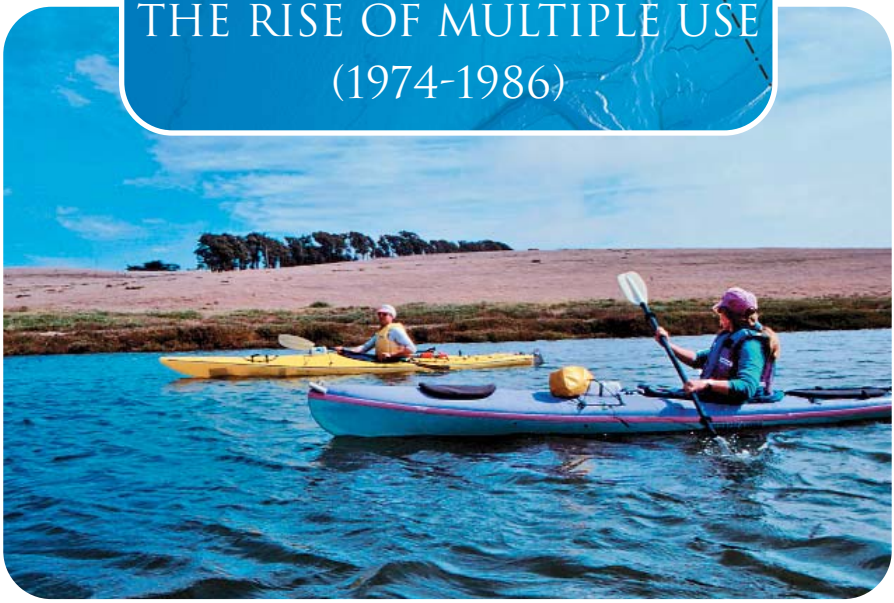
> "... We now need to preserve the quality of as much of the unmodified or useful marine environment as we can and to restore the quality of as much of the damaged environment as possible. Delay will only increase the cost in money, time, man-power, resources, and missed opportunities."
>
> - President Johnson's Science Advisory Committee (1966)

restore an area's conservation, recreational, ecological, or esthetic values. The Secretary was to make the first designations within two years and additional ones periodically thereafter. The Secretary was given broad power to regulate uses and to ensure they were consistent with a sanctuary's purposes, but no uses were specifically prohibited by the Act. The Sanctuaries Act was authorized for three years and granted annual budget authority of up to $10 million.

The MPRSA passed the House overwhelmingly in 1971, despite Nixon Administration opposition to the sanctuaries title. The Senate Commerce Committee did not support marine sanctuaries and deleted the program from its version of the legislation. Nevertheless, the House-Senate conference committee on the dumping bill ultimately reinserted the House sanctuaries title, with only minor changes. President Nixon signed the MPRSA on October 23, 1972, sanctuaries title and all.

Strawberry anemone. Cordell expeditions

THE RISE OF MULTIPLE USE (1974-1986)



Gulf of the Farallones NMS. *Photo:* Maria Brown

During House floor debate on the Act, members of the Merchant Marine and Fisheries Committee emphasized that Title III was not purely a preservation statute and that multiple use of sanctuaries was expected. The committee even considered extractive activities like oil and gas as potentially compatible with the statute's preservation and restoration purposes in certain situations. Taking this cue, NOAA's first regulations to implement the Sanctuaries Act permitted multiple uses that were compatible with the primary purposes of the sanctuaries.

Between 1972 and 1979, little money was spent to develop the program. Two small, non-controversial sanctuaries were designated in 1975: the *USS Monitor* off North Carolina, and Key Largo in Florida. Once implementation began in earnest under the Carter Administration, controversies erupted over the scope, requirements, and impact of the program as NOAA attempted to designate larger areas such as Flower Garden Banks, Channel Islands, Georges Bank, and Farallon Islands. Ultimately, President Carter was able to designate four sanctuaries (Channel Islands, Gulf of the Farallones, Gray's Reef, and Looe Key), but other proposals remained mired in controversy.

Oil and commercial fishing industries were increasingly antagonistic toward the program because of its potential to infringe on their activities. The oil industry sought to have oil development allowed in sanctuaries, and the fishing industry sought to prevent sanctuaries from restricting their access to fishing grounds. From roughly 1977 until 1986, commercial fishing and oil interests and their congressional allies challenged the Sanctuaries Act's existence. Battles over individual sanctuary proposals fueled the broader attack against the Act. Failing an outright repeal, oil and fishing industries were largely successful in limiting the Act's application and watering down its preservation purpose.

By 1984, NOAA and Congress had made a series of regulatory and legislative decisions that emphasized balancing preservation with other human uses of sanctuaries.

By 1984, NOAA and Congress had made a series of regulatory and legislative decisions that emphasized balancing preservation with other human uses of sanctuaries. As applied by NOAA, the balancing doctrine has made it extremely difficult to establish fully protected sanctuaries or even fully protected zones within sanctuaries which allow low-intensity human uses.

Photo: Wolcott Henry

EMPHASIZING PRESERVATION (1988-2000)

The Sanctuary Program suffered greatly under the Reagan Administration:

> *Beset with the active opposition from the administration . . . [s]taff positions went unfilled, and critics charged that management programs at existing sanctuaries languished. Funding levels stabilized at the beginning of the Reagan era but then actually declined during his second term. . . . Congress repeatedly allocated more money than the administration estimated was necessary. Most discouragingly for program advocates, NOAA designated no new sites other than Fagatele Bay, allowed the designation process for others to stagnate, and even removed Monterey Bay from the list of proposed sites.*[13]

Meanwhile, a series of marine pollution events highlighted the continuing need for protection. These events included algal blooms, mass dolphin deaths, medical waste that washed up on the Atlantic Coast, and the discharge of copper ore and bunker fuel oil from a shipwreck near the Channel Islands National Marine Sanctuary.

Of the 29 candidate sanctuary sites NOAA identified in 1983, only the tiny Fagatele Bay off American Samoa had been designated by

Left: Untrawled seabed on the northern edge of Georges Bank. A few miles south, a trawled site shows a disturbed seabed of pebble gravel with dead and broken scallop shells
Photos: Page Valentine and Dann Blackwood, U.S. Geological Survey

Bulk carrier *Pacbaroness* sinking after collision with the carrier *Atlantic Wing* off Point Conception in 1987. *Photo:* Glen Allen

1988. Congressional frustration over the lack of designations led to a new phase in which Congress actively participated in sanctuary designations. The first congressional designation, Florida Keys National Marine Sanctuary (1990), was followed by three more in 1992: the Hawaiian Islands Humpback Whale Sanctuary, the Monterey Bay National Marine Sanctuary, and the Stellwagen Bank National Marine Sanctuary. Ironically, Congress had to bypass the Act's administrative designation process to protect the Florida Keys and Monterey Bay sanctuaries from oil extraction, a use it had failed to prohibit in all sanctuaries in 1972. Congress also prohibited oil extraction at two NOAA-designated sanctuaries: Cordell Bank National Marine Sanctuary (1989) and Olympic Coast National Marine Sanctuary (1992).

Congress attempted to strengthen the Act's preservation mission in 1988, 1992, 1996, and 2000. However, because Congress did not also clarify the Act's purpose and revise the multiple use provisions, the amendments passed in those years had only a modest effect on the program's preservation mission.

Congress attempted to strengthen the Act's preservation mission in 1988, 1992, 1996, and 2000. However, because Congress did not also clarify the Act's purpose and revise the multiple use provisions, the amendments passed in those years had only a modest effect on the program's preservation mission. Moreover, the 2000 Amendments threw a blanket of uncertainty over the system's long-term future because they prohibited the designation of new sanctuaries until existing ones are inventoried and fully funded.

ASSESSING THE SANCTUARIES ACT'S EFFECTIVENESS

The Unfulfilled Preservation Mandate

The Sanctuaries Act has been used to set aside 13 key places. Although sanctuaries generally have been managed for multiple use, preservation zones have only been established in Florida Keys, and are under consideration in the Channel Island Sanctuary. Sanctuaries also have served as focal points for educating the public about marine conservation. One observer notes that the program has:

> *functioned as a popular and effective limit on oil and gas drilling, particularly along the California coast. It has been similarly effective in protecting other limited areas from selected threats; Stellwagen Bank is intact, unmined, and without floating casinos, and the reefs in the Florida Keys are better protected from shipping traffic. All of this protection, moreover, grew out of an uncommon level of bipartisan support and cooperation. The program also offers states a source of pride and communities a potentially defining connection to their surrounding environment. Finally, it has provided a platform for the potential development of future protection schemes.*[14]

Yet, the Sanctuaries Act has proved to be an unreliable vehicle for inventorying, identifying, and preserving the full array of the nation's marine ecosystems and resources. After 32 years, established sanctuaries encompass less than 0.5 percent of U.S. oceans. Moreover, many sanctuaries are inadequately protected from overfishing, bottom habitat destruction, pollution, or even oil and gas development and pipelines.[15]

Although existing sanctuaries do offer some protection to nationally significant marine areas, they fail to add up to a complete preserva-

tion system. Moreover, given the Act's numerous and conflicting mandates, it is unlikely that a system that comprehensively preserves the nation's unique and representative marine features, habitats, and resources can be achieved under current law and regulations.

Structural Flaws of the Sanctuaries Act

The paucity of protections resulting from the Sanctuaries Act is a result of several structural flaws:

- The Act's language makes it difficult to prohibit activities.
- Management of fisheries in sanctuaries has largely been ceded to NOAA Fisheries, not retained by sanctuary managers.
- The Act's multiple use provision can be employed by politically powerful lobby groups to trump scientifically sound regulations.
- The exhaustive consultation requirements and mandate to facilitate multiple uses "consistent with protection" are not found in national parks and wilderness protection laws.

The NMSA paradox

"[The Sanctuaries Act] provides authority for meaningful protection on the one hand, and then substantially undermines it with the other. The effect on the water is few real protections in marine sanctuaries."

— The Turnstone Group[16]

The Wilderness Act Model of Preservation

The fundamental flaw of the Sanctuaries Act is its lack of a singular focus on preservation. This conclusion is all the more obvious when it is compared to the Wilderness Act, enacted just eight years before.

The stated objective of the Wilderness Act is to preserve roadless areas of "untrammeled" wilderness. More than 675 wilderness areas in 44

states have been designated under the Act's auspices. The Wilderness Act has proved to be an effective conservation and management tool because it established:

- a clear national policy to preserve wilderness;
- a specific and practical definition of wilderness;
- a permanent wilderness preservation system ;
- clear management guidelines for all wilderness areas, including a general prohibition on commercial enterprises, roads, and structures;
- a wilderness review process that included an inventory of all potential sites and a time limit for the executive branch to recommend suitable wilderness areas to Congress; and
- Congress as the exclusive decision-maker on granting and removing wilderness area designations.[17]

In contrast, the Sanctuaries Act lacks a main focus on preservation and a rigorous process to achieve it. Congress has never defined what constitutes a sanctuary system and vaguely identifies the Act's purpose as protecting special areas of national significance. Yet, no extractive uses are specifically prohibited. Guidelines do not exist as to where or how many sanctuaries must be established by the Secretary of Commerce. Nor is there a requirement for a comprehensive survey to identify all potential sanctuaries.

Holes in the System

Many ocean areas that are most desirable from a conservation standpoint are missing from the sanctuary system. Sanctuaries have not been designated in the Caribbean or the North Pacific. On the West Coast, four sanctuaries lie off of California and one off of Washington, but none exists off of Oregon or Alaska, despite the presence of important marine ecosystems not otherwise represented in the sanctuary system.

In addition to geographic holes in coverage, NOAA has not adequately used the Sanctuaries Act to address protection of diverse ocean wildlife.

In 1992, Congress added to the Act's purposes: "to maintain, restore, and enhance living resources by providing places for species that depend upon these marine areas to survive and propagate."[18] In 2000, Congress clarified this purpose: "to maintain the natural biological communities in the national marine sanctuaries, and to protect, and where appropriate, restore and enhance natural habitats, populations, and ecological processes."[19]

However, little effective action has been taken. Among domestic marine species, 21 are endangered and 13 are threatened (as of the end of 2004). NOAA has no comprehensive program to assess the status of endangered species found within sanctuaries, address how sanctuaries should be managed to better conserve these species, or identify where additional sanctuaries are needed to protect other endangered wildlife, such as the Steller sea lion.

The Act has been used to protect many sanctuaries from oil development and pollution, but even this success is threatened by annual attempts by some in Congress to remove these protections. Finally, the Sanctuary Program has neither prevented overfishing within the borders of the sanctuaries nor consistently protected sanctuary bottom habitats from destructive fishing practices such as bottom trawling.

What Does Protection Mean?

None of the designated sanctuaries qualify as fully protected marine reserves in which all extractive or potentially disruptive activities are permanently prohibited and resource protection is the singular goal. Fully protected zones or sub-areas have been created in Florida Keys National Marine Sanctuary and have been proposed in a second, the Channel Islands. In addition, large portions of the proposed Northwestern Hawaiian Islands sanctuary may qualify as fully protected zones when the designation process is final. But what about the rest of the sanctuary system in which sensitive natural resources are threatened by destructive or intensive human uses?

Resource conflicts within sanctuaries are common. Generally, it is against the law to "destroy, cause the loss of, or injure any sanctuary resource managed under law or regulations for that sanctuary."[20] However, the prohibition applies only to resources that are specifically identified in the designation document for each sanctuary. Only if a use is listed in a designation document as subject to regulation can that use be curtailed or prohibited in the future. Unlisted uses are not subject to regulation unless the designation terms are amended. For example, the Stellwagen Bank regulations do not expressly exclude bottom-trawling[21] despite research that has "documented how bottom-trawling has leveled the seabed at Stellwagen and stripped vegetation."[22] The Hawaiian Islands Humpback Whale Sanctuary, established primarily for research and education about humpback whales, does not regulate fishing in the sanctuary, even though "overfishing of bottom fish . . . and live capture of reef fish for the pet trade have depleted stocks sharply."[23] Flower Garden Banks, a small sanctuary (42 square nautical miles) within an oil producing area off Texas, prohibits oil and gas development in some areas of the sanctuary but not others.[24]

Today, few sanctuaries can report the status of specific resources based on objective measures. Protection in these 13 areas is far from what one would expect upon hearing that they are "sanctuaries."

Furthermore, it is difficult to assess the condition of resources within sanctuaries because NOAA has not developed adequate baseline information or effective monitoring programs, though it is attempting to fix the problem. Today, few sanctuaries can report the status of specific resources based on objective measures. In short, protection in these 13 areas is far from what one would expect upon hearing that they are "sanctuaries."

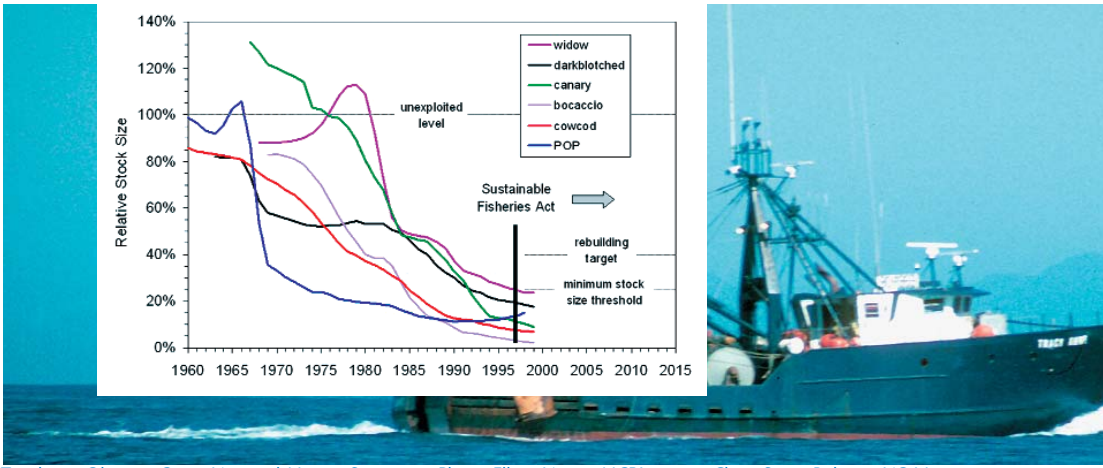
Oil Development and Commercial Fishing

Oil development and commercial fishing, two of the biggest threats to sanctuary resources, have been flashpoints throughout the Act's history. New oil development is prohibited in the system, at least for the moment. Although assertions were made that oil development could be compatible with other sanctuary uses, a number of sanctuaries specifically prohibited new oil and gas development when they were designated by either NOAA (e.g., Channel Islands, Gulf of the Farallones) or Congress (e.g., Monterey Bay, Cordell Banks). Public sentiment was a key reason for the limits of oil from the Monterey Bay and Channel Islands sanctuaries. However, oil and gas leases in place before a sanctuary's designation are often allowed to continue within the sanctuary (e.g., in Channel Islands).

In 1998, President Clinton issued an executive memorandum that prohibited new oil and gas leases in any sanctuary until the year 2012. However, the Clinton memorandum can be rescinded by a succeeding president. Congress can also intervene to allow oil and gas exploration (distinct from the issuance of new leases), as it did in 2003, when a proposed energy bill allowed for oil exploration throughout the entire Outer Continental Shelf, including in marine sanctuaries.[25] Though the measure passed the Senate, it was stopped in the House by coastal state opposition. As oil prices rise, offshore oil development in marine sanctuaries will continue to be a threat.

Since 1972, commercial fishing has contributed to severe population declines of many fish species. Depleted populations include New England cod; snapper and grouper reef fish in the Southeast Coast and Gulf of Mexico; various species of rockfish and the nearly extinct white abalone along the Pacific Coast; and several species of lobster in Hawaii. According to NOAA, 76 populations in the United States are classified as overfished.[26] Although sanctuaries are home to some of these depleted populations, most sanctuaries do not comprehensively prevent or even regulate commercial or recreational fishing. Eight sanctuaries do not regulate any fishing within their waters or expressly

Pacific Rockfish Declines



Trawler in Olympic Coast National Marine Sanctuary. *Photo:* Elliott Norse, MCBI *Chart:* Steve Ralston, NOAA

exempt "traditional fishing practices," including bottom trawling. Bottom trawling is allowed in seven of the 13 sanctuaries even though this method of fishing causes extensive damage to seafloor ecosystems that provide vital breeding, nursing, and feeding grounds to fish.

The Sanctuaries Act requires the Secretary of Commerce to give the appropriate regional fishery management council the opportunity to draft fishing regulations for each proposed sanctuary, but the councils must meet certain standards. If a council chooses to draft regulations, it must use as guidance the national standards of the Magnuson-Stevens Act, the law under which federal fisheries are managed primarily for exploitation, "to the extent that the standards are consistent and compatible with the goals and objectives of the proposed designation." A council's draft regulations must also "fulfill the purposes and polices [of the Sanctuaries Act] and the goals and objectives of the proposed designation," or the Secretary must reject the draft and prepare the regulations himself.[27] Any amendments to the fishing regulations must follow the same standards and process of development. **Therefore, while the draft fishing regulations are guided by some provisions of the Magnuson-Stevens Act, they must be entirely compatible with and assist fulfillment of the National Marine Sanctuaries Act.**

Although the Sanctuaries Act gives the Secretary the power to object to a council recommendation that would harm sanctuary resources,

the Secretary has been reluctant to change the regional council's draft fishing regulations for sanctuaries. The reluctance comes in part because of NOAA's conflicting responsibilities to protect sanctuary resources while promoting the economic viability of fisheries. In practice, staff often resolve conflicts between the National Ocean Service, which manages the Sanctuary Program, and NOAA Fisheries before these disputes ever reach the Secretary of Commerce.

Congress also has failed to address the negative effects of fishing on sanctuaries. For example, the legislative designations of Monterey Bay and Stellwagen Bank were silent on commercial fisheries regulation, leaving it to NOAA to decide whether to cover commercial fishing as a regulated or prohibited activity.[28] NOAA chose not to regulate fishing in either sanctuary because there was insufficient support for regulation. As a result, the sanctuaries have not helped stop the declines of certain resident fish populations nor have they halted the disturbance and destruction of seafloor habitat within their boundaries.

Actions in the past year suggest that NOAA's pattern of deference to the councils regarding management of fishing in sanctuaries may be changing. NOAA's draft goals and objectives for the Northwestern Hawaiian Islands, the one sanctuary currently under consideration for addition to the sanctuary system, would prohibit certain fisheries and regulate others, in order to effectively protect sanctuary resources. Furthermore, Monterey Bay National Marine Sanctuary may expand its borders to include Davidson Seamount to protect the seamount from fishing. Finally, Cordell Bank National Marine Sanctuary is considering clarifying that submerged lands are included in the sanctuary's jurisdiction, and has proposed prohibiting bottom trawling in the entire sanctuary.

Each of these proposals has garnered opposition by the councils, which argue that the Magnuson-Stevens Act and the Sanctuaries Act are incompatible, and that the Magnuson-Stevens Act should be the controlling authority. Not only is the councils' interpretation refuted by the plain meaning of the Sanctuaries Act, its acceptance would prevent the comprehensive management of sanctuary ecosystems.

Preservation and Multiple Use

While it is true that "preservation" or "protection" (the precise word used in the Act has changed over time) has always been a purpose of the Sanctuaries Act, it is not the Act's singular purpose. More than anything, it is the provisions related to multiple use that have prevented the development of a marine sanctuary system that lives up to its name.

Even though the Act now states that "resource protection" is the primary objective, by requiring that sanctuaries facilitate all public and private uses "compatible" with this objective, the Act allows users to

> *challenge the Secretary's decision to prohibit certain activities, and creates the expectation among resource users that their use will be facilitated. The Secretary must then defend his or her regulatory decisions by demonstrating that such activities are not "compatible" with resource protection . . . The Secretary must, in effect, answer the question: "Does this activity harm the resource enough in comparison to the benefits people get from that activity to justify regulating it?"*[29]

If protection or preservation is the primary purpose of sanctuaries, at what point do multiple uses compromise resource protection? **If most of the ocean is generally open to all uses, then the most direct and effective way to preserve ocean places is to set some of them aside for the singular purpose of preservation just as national parks and wilderness areas have been created on land. Only truly compatible uses of sanctuaries, such as education, science, and low-impact recreation would be allowed. An effective, comprehensive ocean zoning policy, if it existed, would divide the ocean into a number of different use zones, including preservation zones.** This was the strategy envisioned in 1966 by President Johnson's Science Advisory Committee, which called for a marine wilderness preservation system, not the creation of multiple-use sanctuaries.

MORATORIUM ON NEW SANCTUARIES

Efforts to designate additional sanctuaries came to a halt in the mid-1990s. Until that time, NOAA's designation process was driven by a list of sites that had passed a preliminary evaluation of appropriateness for sanctuary designation. NOAA inactivated the list because it was out of date and needed to be revised.[30] Before NOAA could revise the list, Congress enacted a moratorium on new designations in the 2000 Amendments to the Sanctuaries Act. Lifting the moratorium is contingent upon:

- publication of a study by the Secretary of Commerce concluding that the "addition of a new sanctuary will not have a negative impact on the system,"
- sufficient funding in the annual Commerce Department budget for an inventory of the new sanctuary's resources, and
- sufficient funding in the Commerce Department budget for complete site characterization studies of all current sanctuaries within ten years.[31]

The moratorium is a signal that additions to the sanctuary system are not a high priority for Congress, regardless of the scientific community's urgent call for greater protection of sensitive marine areas. The moratorium has had one positive consequence—forcing NOAA to develop a management program for congressional review—but it throws a pall of uncertainty over the program. It is hard to imagine a similar no-growth injunction being placed on the national park, wilderness area, or wildlife refuge systems, all of which continue to expand.

CONCLUSION

Without a singular preservation focus, the Sanctuaries Act has proved to be an unreliable vehicle for comprehensively preserving the full array of the nation's marine resources and special places. The Act's inadequacies have been obvious throughout its history. Incongruous and conflicting mandates, lack of strategic implementation guidelines, and the failure to prohibit incompatible uses and define uniform protection standards, have proved baffling to NOAA and been a source of continuing debate by the Act's authorizing committees. Furthermore, frequent reinvention efforts by Congress and NOAA have failed to fix the Act's fundamental problems.

The Act continues to lack a cohesive set of purposes and compatible uses that apply to every sanctuary in the system. Until this consistency is created, lengthy fights between user groups and conservationists are all but guaranteed each time a new sanctuary is designated or management plans are reviewed.

When such battles stymied the designation process in the 1980s, a conservation-minded Congress mandated deadlines for NOAA to designate certain sanctuaries. When that approach was unsuccessful, Congress bypassed the largely dysfunctional designation process to create the Florida Keys, the Hawaiian Islands Humpback Whale, Monterey Bay, and Stellwagen Bank marine sanctuaries. When Congress was dissatisfied with NOAA's position on minerals extraction, it again bypassed the designation process by prohibiting new oil and gas leases at Cordell Bank and Olympic Coast, oil development at Monterey Bay, and sand and gravel mining at Stellwagen. On the other hand, Congress has not been proactive in the regulation of commercial fishing in sanctuaries.

The Sanctuaries Act is now so constrained by its own architecture that it stands little chance of producing the comprehensive system of marine

preservation areas envisioned by early supporters who had hoped to create a system of marine wilderness preserves analogous to the terrestrial wilderness system. The blueprint of a permanent marine sanctuary system for the sole purpose of preservation was rejected in favor of one that attempted to balance preservation with other uses. As a result, progress toward protecting America's ocean resources has not resulted in the national network of marine conservation areas that scientists and marine managers today say are needed to protect and restore ocean life.

The Sanctuaries Act is now so constrained by its own architecture that it stands little chance of producing the comprehensive system of marine preservation areas envisioned by early supporters who had hoped to create a system of marine wilderness preserves analogous to the terrestrial wilderness system.

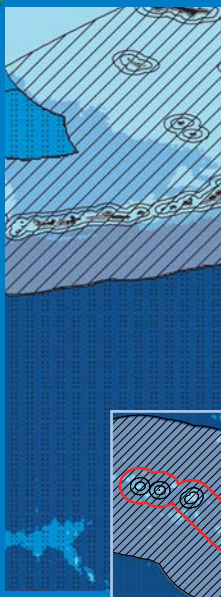
The reauthorization of the Sanctuaries Act offers Congress an opportunity to either bolster the Act through substantial amendment or bypass it altogether and create a new overarching statute that mandates the creation of fully protected marine conservation areas. In trying to decide what approach to take, we encourage looking back to the Wilderness Act. The Wilderness Act provides a compelling and successful model for establishing a system of areas managed to protect their inherent wild character by generally prohibiting commercial uses, while allowing low-intensity activities to continue. Regardless of whether Congress chooses to follow the Wilderness Act model in overhauling the Sanctuaries Act or in drafting new legislation, a bold, vigorous and determined effort is needed to identify, protect, and truly preserve America's marine ecosystems before they are irrevocably lost.

Map: ©Monterey Bay Sanctuary Foundation

ENDNOTES

1 This paper grew out of a more detailed legislative history of the Sanctuaries Act. *See*, William J. Chandler & Hannah Gillelan, *The History and Evolution of the National Marine Sanctuaries Act*, 34 Envtl. Law Rep.: News & Analysis 10483, 10505 (2004).
2 *The Dying Oceans,* TIME, Sept. 28, 1970, at 64.
3 Marine Protection, Research, and Sanctuaries Act (MPRSA) of 1972, Pub. L. No. 92-532, tit. III, 86 Stat. 1052, 1061 (1972) (current version at 16 U.S.C. §§ 1431 et seq. (2004)).
4 Panel on Oceanography, President's Science Advisory Committee, Effective Use of the Sea (1966).
5 *See, e.g.*, *The Science of Marine Reserves*, Ecological Applications, Supp., Feb. 2003.
6 Florida Keys National Marine Sanctuary and Protection Act, Pub. L. No. 101-605, § 7(a)(2), 104 Stat. 3089, 3093 (1990).
7 Exec. Order No. 13178, 65 Fed. Reg. 76903 (2000), *as amended by* Exec. Order No. 13196, 66 Fed. Reg. 7395 (2001).
8 Pew Oceans Commission, America's Living Oceans: Charting a Course for Sea Change (2003).
9 U.S. Commission on Ocean Policy, An Ocean Blueprint for the 21st Century 141 (2004).
10 President George W. Bush. U.S. Ocean Action Plan 20, 25 (2004).
11 *See, e.g.*, H.R. 11584, 90th Cong. (1967); S. 2415, 90th Cong. (1967) (Sen. Edward Brooke introduced this companion bill to Hasting's bill).
12 Council on Environmental Quality, Ocean Dumping, A National Policy, H.R. Doc. No. 91-399 (1970).
13 Dave Owen, *The Disappointing History of the National Marine Sanctuaries Act*, 11 N.Y.U. Envtl. L.J. 711, 728 (2003).
14 *Id*. at 745-746 (citations omitted).
15 *See* Table 1.
16 The Turnstone Group, An Assessment of the Adequacy of the Authority of the National Marine Sanctuaries Act to Establish a Network of Fully Protected Areas 7 (2003) (unpublished manuscript, on file with Marine Conservation Biology Institute).
17 Douglas W. Scott, Campaign for America's Wilderness, A Wilderness-Forever Future: A Short History of the National Wilderness Preservation System (2001).
18 National Marine Sanctuaries Program Amendments Act of 1992, Pub. L. No. 102-587, § 2101(b)(9), 106 Stat. 5039, 5040 (1992).
19 National Marine Sanctuaries Amendments Act of 2000, Pub. L. 106-513, § 3(c)(4), 114 Stat. 2381, 2382 (2000).
20 National Marine Sanctuaries Act, § 306(1), 16 U.S.C. § 1436(1) (2004).
21 National Marine Sanctuary Program Regulations, 15 C.F.R. § 922.142(a)(3)(ii) (2004).
22 Center for the Economy and the Environment, Protecting Our National Marine Sanctuaries 27 (2000).
23 *Id.* at 92.
24 15 C.F.R. § 922.122.
25 Memorandum on Withdrawal of Certain Areas of the United States Outer Continental Shelf from Leasing Disposition, 34 Wkly. Comp. Pres. Doc. 1111 (June 12, 1998).
26 NATIONAL MARINE FISHERIES SERVICE, U.S. DEPARTMENT OF COMMERCE, SUSTAINING AND REBUILDING, NATIONAL MARINE FISHERIES SERVICE 2003 REPORT TO CONGRESS: THE STATUS OF U.S. FISHERIES (2004).
27 National Marine Sanctuaries Act §304(a)(5), 16 U.S.C. § 1434(a)(5) (2004).
28 National Marine Sanctuaries Program Amendments Act of 1992, Pub. L. 102-587, §§ 2202, 2203, 106 Stat. 5039, 5048 (1992).
29 The Turnstone Group at 6.
30 National Marine Sanctuary Program Regulations, 60 Fed. Reg. 66875 (Dec. 27, 1995).
31 National Marine Sanctuaries Amendments Act of 2000, Pub. L. 106-513, § 6(f), 114 Stat. 2381, 2385 (2000).

HIGHLIGHTS OF NATIONAL MARINE SANCTUARIES



- The **Channel Islands** provides habitat for breeding populations of 4 pinniped species, and resident populations of 18 species of whales and dolphins and 16 species of sea birds. — **1**—

- In **Cordell Bank**, scientific submarine surveys identified 60 species of fish, 42 of which belonged to the economically important rockfish family. — **2**—

- Scientists at **Fagatele Bay** have used the sanctuary to gather data on coral bleaching events that will help them understand the causes and ecological impacts of future bleaching events.— **3**—

- In the **Florida Keys**, sanctuary and university scientists have rescued more than 1,000 corals and coral fragments from destruction by U.S. Navy restoration projects.— **4**—

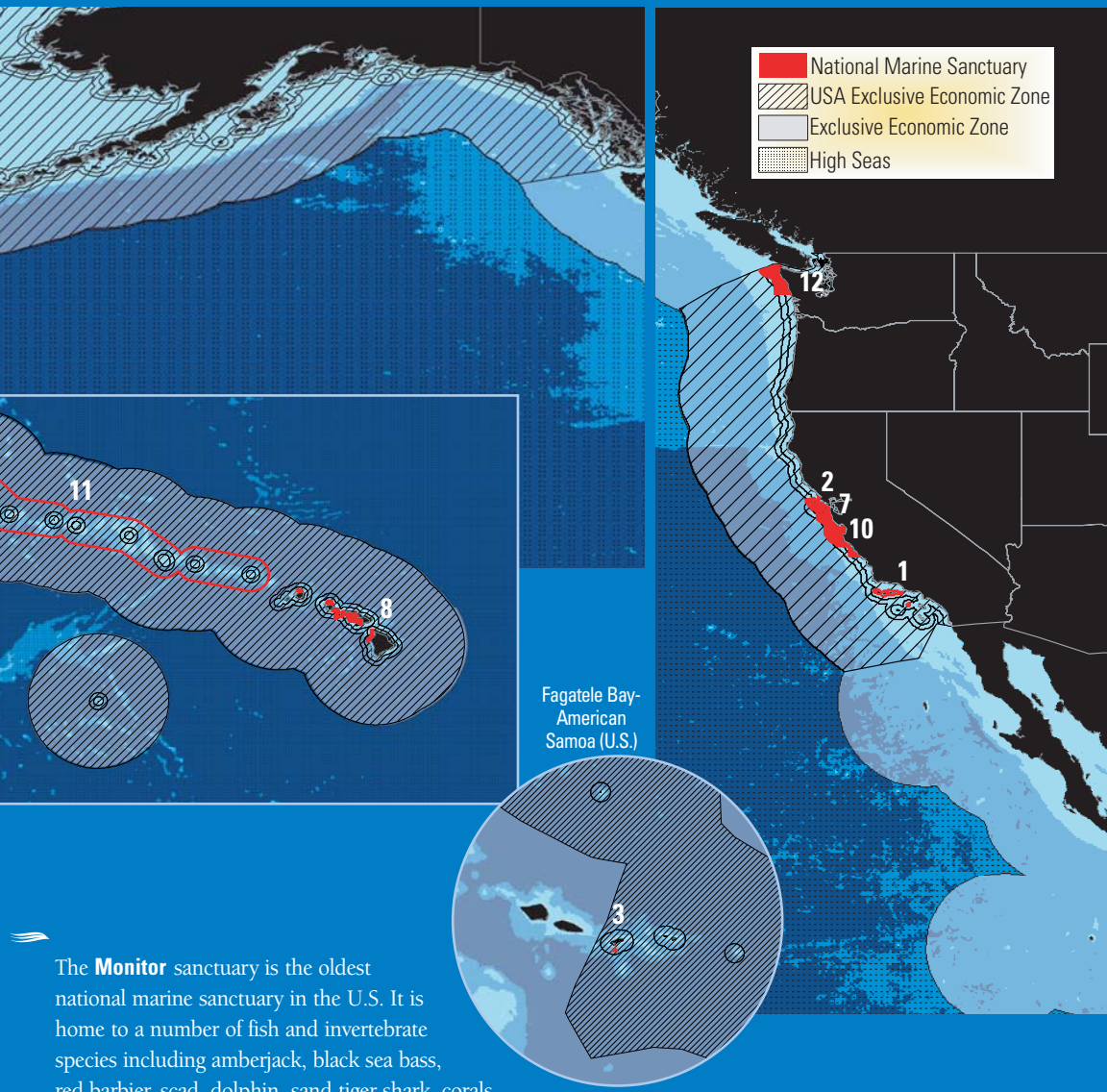
- In the **Flower Garden Banks**, a four-year study (1998-2001) monitoring the growth, diversity, percent cover, incidence of disease, and bleaching of corals within the sanctuary has demonstrated that the sanctuary successfully maintained species diversity and coral coverage over the entire research period.— **5**—

- Scientists working at **Gray's Reef** have identified what they believe to be three new species of seasquirts within sanctuary waters. The sanctuary is also home to the warty sea slug and has given marine biologists the rare opportunity to photograph this elusive invertebrate.— **6**—

- The **Gulf of the Farallones** sanctuary is home to one fifth of the harbor seal population in the state of California. In 2003, largely through the efforts of sanctuary volunteers, a steady drop in harbor seal pupping was reversed by eliminating major human disturbances within the sanctuary.— **7**—

- A whale rescue team from the **Hawaiian Islands Humpback Whale** sanctuary successfully rescued their first humpback whale from entanglement in a polypropylene line in 2003.— **8**—

Florida Keys NMS. Photo: Heather Dine

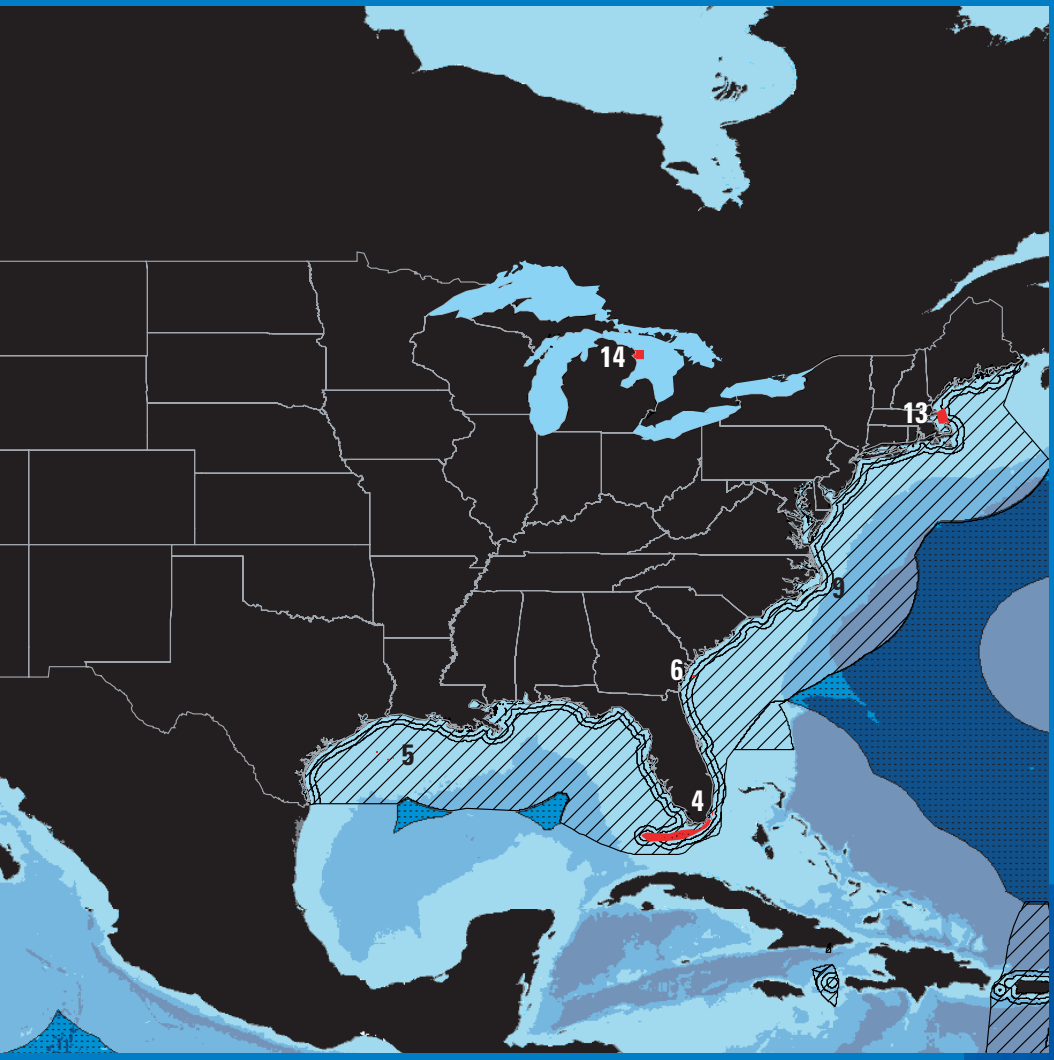


The **Monitor** sanctuary is the oldest national marine sanctuary in the U.S. It is home to a number of fish and invertebrate species including amberjack, black sea bass, red barbier, scad, dolphin, sand tiger shark, corals, sea anemones, and sea urchins.— **9**—

Monterey Bay is home to 26 federally listed endangered and threatened species. In order to coordinate research on these and other Monterey Bay species, the sanctuary recently developed a Sanctuary Integrated Monitoring Program (SIMoN) that will include compiled historical data, state-of-the-Sanctuary research, internet access for education and resource management purposes, and new funds for ecosystem monitoring. — **10**—

The **Northwestern Hawaiian Islands** reserve is currently undergoing the sanctuary designation process in order to become the 14TH National Marine Sanctuary. The coral reefs in the Northwestern Hawaiian Islands are relatively isolated and are among the healthiest and most extensive reef ecosystems remaining on the planet.— **11**—

Channel Islands. *Photo:* Shane Anderson



The **Olympic Coast** sanctuary is home to 29 species of marine mammals, nesting seabirds - including common murres, rhinoceros auklets and tufted puffins, haul-outs for endangered Steller sea lions and nest sites for endangered peregrine falcons.— **12**—

Stellwagen Bank researchers are currently using tagging studies to track the behavior of the Atlantic cod, an over-fished species whose stocks collapsed in the 1990s. — **13**—

In **Thunder Bay**, mooring buoys have been installed to reduce the likelihood of anchor damage to historic shipwrecks.— **14**—

Photo: Steve Turek

TABLE 1. SUMMARY OF THE NATIONAL MARINE SANCTUARIES

Sanctuary Name	Designation Date	Area (nm²)	No-Take Areas (nm²)	Congressional Involvement	Oil/Gas Leases[1]	Bottom Trawling[2]
USS Monitor	1/30/75	0.6	—		Prohibited	Prohibited
Channel Islands	9/22/80	1,252	—		New Leases Prohibited; Old leases allowed	Restricted
Gulf of the Farallones	1/16/81	966	—		Prohibited	Allowed
Gray's Reef	1/16/81	17	—		Prohibited	Prohibited
Fagatele Bay	4/29/86	0.2	—		Allowed	Prohibited
Cordell Bank	5/24/89	400	—	Required NOAA to designate; Prohibited oil and gas exploration	Prohibited	Allowed[4]
Florida Keys[4]	11/16/90	2,873	165	Designated	Prohibited	Restricted
Flower Garden Banks	1/17/92	42	—	Expanded to include Stetson Bank	Restricted	Prohibited
Monterey Bay	9/18/92	4,018	—	Designated; Prohibited oil and gas exploration	Prohibited	Allowed
Stellwagen Bank	11/4/92	639	—	Designated	Prohibited	Allowed
HI Humpback Whale	11/4/92	1,031	—	Designated	Prohibited	Prohibited
Olympic Coast	7/16/94	2,404	—	Required NOAA to designate; Prohibited oil and gas exploration	Prohibited	Allowed
Thunder Bay	10/7/00	337	—		Restricted	N/A
TOTAL SYSTEM		13,979.8	165 (1.2%)			
Proposed Northwestern Hawaiian Islands Sanctuary[5]	2006	99,500	unknown	Authorized the President to create, required NOAA to study designation	Prohibited	Prohibited

1 New oil and gas leases are prohibited in *all* sanctuaries by President Clinton's Executive Memorandum. This column lists those sanctuaries whose regulations expressly prohibit or regulate oil and gas exploration or development, or the activities such as drilling that are a necessary component of such exploration or development. If the Executive Memorandum were overturned, oil and gas production would still be prohibited in the sanctuaries whose regulations prohibit the activity. "Restricted" means that the activity is allowed in some areas and prohibited in others.

2 Bottom trawling is also sometimes restricted by fishing regulations promulgated under the Magnuson-Stevens Act. This column lists sanctuaries whose regulations expressly prohibit or regulate this method of fishing. "Restricted" means that the activity is allowed in some areas and prohibited in others.

3 Cordell Banks NMS is considering modifying its regulations such that bottom trawling within the sanctuary would be prohibited.

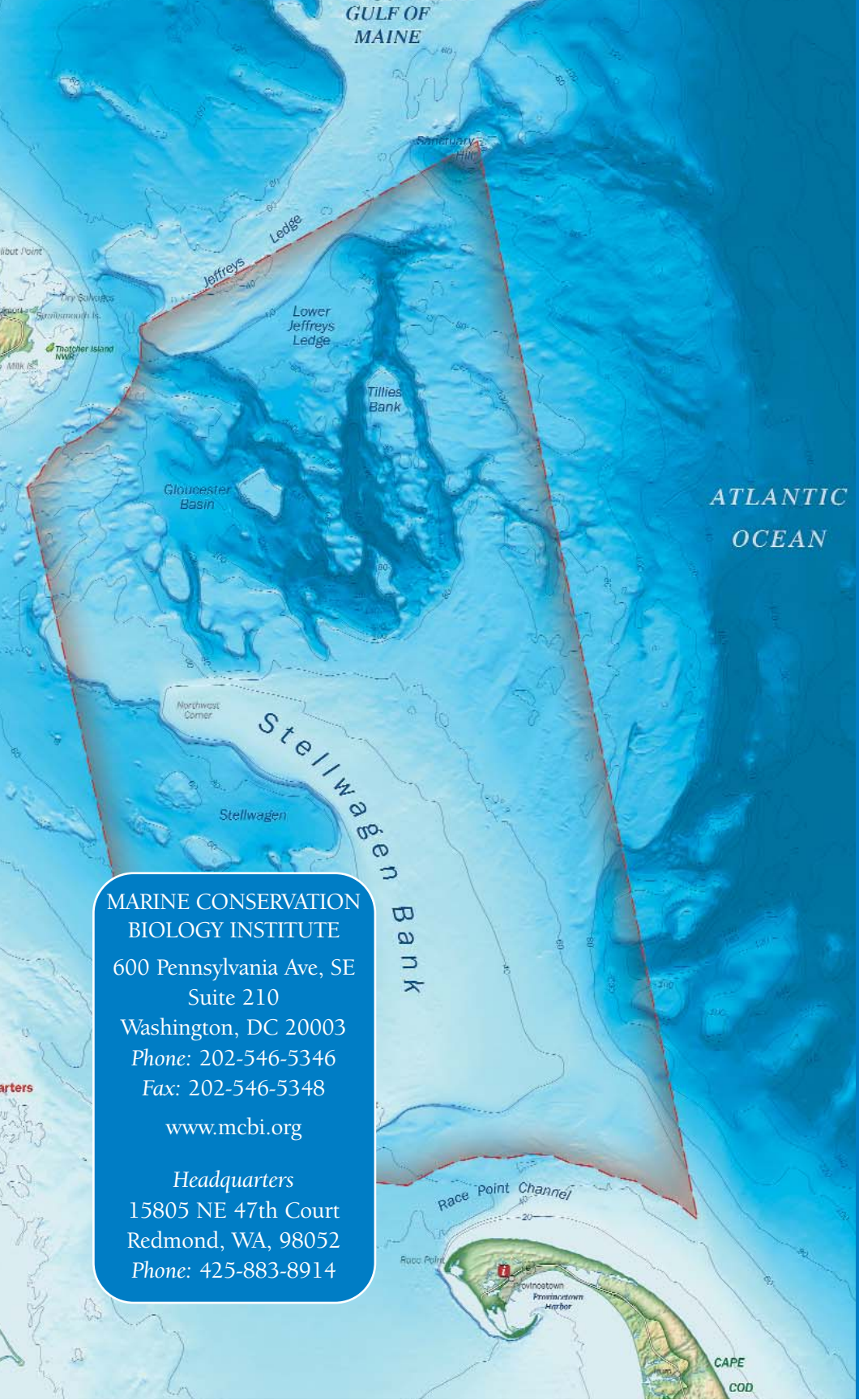
4 Florida Keys NMS incorporated Key Largo (designated in 1975) and Looe Key NMSs (designated in 1981).

5 The NWHI Coral Reef Ecosystem Reserve is being considered as a national marine sanctuary, designation of which is expected in early 2006.

Source: National Marine Sanctuary Program

Map: National Marine Sanctuaries - ©NOAA

Printed on recycled paper with environmentally friendly inks
Design: Feld Design



MARINE CONSERVATION BIOLOGY INSTITUTE

600 Pennsylvania Ave, SE
Suite 210
Washington, DC 20003
Phone: 202-546-5346
Fax: 202-546-5348

www.mcbi.org

Headquarters
15805 NE 47th Court
Redmond, WA, 98052
Phone: 425-883-8914