

**MARINE PROTECTION RESEARCH AND SANCTUARIES
ACT**

HEARING
BEFORE THE
**COMMITTEE ON COMMERCE, SCIENCE,
AND TRANSPORTATION**
UNITED STATES SENATE
NINETY-SEVENTH CONGRESS
FIRST SESSION
ON
MARINE PROTECTION RESEARCH AND SANCTUARIES ACT

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MARINE PROTECTION RESEARCH AND SANCTUARIES ACT

MONDAY, MARCH 30, 1981

U.S. SENATE,
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,
Washington, D.C.

The committee met at 1:57 p.m. in room 235 of the Russell Senate Office Building; Hon. Bob Packwood (chairman of the committee) presiding.

The CHAIRMAN. Ladies and gentlemen, I think we will start the hearing right now. We run the risk of two or three back-to-back votes, in which case we will have to recess the hearing. The more we can get done at the moment, the better off we will be.

We will start with Mr. Robert Knecht, Acting Assistant Administrator. Good afternoon.

You are aware of our time limits. We will place your entire statement in the record, and you go ahead.

STATEMENTS OF ROBERT KNECHT, ACTING ASSISTANT ADMINISTRATOR, OFFICE OF COASTAL ZONE MANAGEMENT, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, DEPARTMENT OF COMMERCE, AND MICHAEL WEBER, MARINE HABITAT COORDINATOR, CENTER FOR ENVIRONMENTAL EDUCATION

Mr. KNECHT. Thank you, Mr. Chairman.

As you acknowledge, we have a written statement, and I will try to paraphrase what I consider to be the key portions of that statement. I will quote from a couple of places where I think it is important that the wording be more or less exact. That involves the first three paragraphs in particular.

Approximately 2 years ago, our agency appeared before this committee to discuss reauthorization of title III of the Marine Protection Research and Sanctuaries Act of 1972. In the intervening years significant steps have been taken to refine the operational aspects of the program, and several new sites have been added to the national system. I am pleased to be here today to testify again on the reauthorization of this program.

The Administration will be submitting draft legislation to reauthorize this program shortly. Although we are seeking an authorization for this program for fiscal years 1982 and 1983—that is to say, 2 years—because of the year-ahead authorization requirements of the Congressional Budget Act of 1974, the Administration plans to review

the program in the context of the fiscal 1983 budget and may propose changes or amendments upon completion of that review.

What I would like to do, Mr. Chairman, in the remainder of my time is briefly review the sanctuaries that have been designated during the past year and then to mention several of the refinements that we are considering as ways of improving, streamlining, and making more effective the marine sanctuaries program.

In my testimony, I list the four sanctuaries that were added or designated during the past year. Let me just mention briefly which they were.

First, the Channel Islands National Marine Sanctuary in the northern Channel Islands area off the coast of California, a very productive area containing some of the richest assemblages of seals and sea lions, marine birds, and so on, certainly in this country's waters and in the world.

Second, the Point Reyes-Farallon Islands National Marine Sanctuary off the coast of north central California, and again some of the largest sea bird rookeries in the world, 12 or the 15 species known to breed on the west coast.

Third, the Looe Key National Marine Sanctuary off the coast of Florida, the Florida Keys, a sanctuary that identifies, manages, and protects a small but very highly used segment of the Florida coral reef tract.

Fourth and last for this year's sanctuaries so far, the Gray's Reef National Marine Sanctuary located 18 miles east of Sapelo Island, Ga., an unusual, live bottom outcrop, unusual in that part of the Continental Shelf, and one that contains a rich population of various species.

When you add these four sites to the two sites already designated, the Monitor and the Key Largo, the total marine sanctuary system is up to six at this point.

In terms of refinements to the designation process, I would like to mention several of these that are under consideration and review at the present time. The first involves the elimination of what we have been calling our list of recommended areas, LRA for short. That was a means of advising the public at large of the sanctuaries that had been nominated. These sanctuaries went on the list in substantially the same form in which they were nominated, both in terms of area, size, and so on. That resulted in substantial confusion and concern. Most of the areas on that list never had much of a chance of surviving the various screenings and ever being designated as a sanctuary. So it resulted in confusion and concern unnecessarily, in our judgment.

What we are proposing is instituting a more active rather than a reactive process for filtering sanctuary nominations. What we propose is the identification of sites suitable for active candidacy based on the uses of regional resource teams. These regional resources evaluation teams would review all potential sites in their particular region and come forward, based on clear site selection criteria, with those nominations that they feel are meritorious and deserve support.

Third, we are adding a site management plan which we think will inform the public and all affected interested parties in a much more cogent way as to just how sanctuaries would be proposed to be operated.

We think with these changes we will simplify and improve the effectiveness of the marine sanctuary program and hence make it an even better program in the future.

I would be happy to answer any questions.

[The statement follows:]

STATEMENT OF ROBERT W. KNECHT, ACTING ASSISTANT ADMINISTRATOR, COASTAL ZONE MANAGEMENT, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

Mr. Chairman and Members of the Committee: Approximately 2 years ago, our agency appeared before this Committee to discuss reauthorization of Title III of the Marine Protection, Research and Sanctuaries Act of 1972. In the intervening year significant steps have been taken to refine the operational aspects of the program and new sites have been added to the national system. I am pleased to be here today to testify again on the reauthorization of the program.

The Administration will be submitting draft legislation to reauthorize this program shortly. Although we are seeking an authorization for this program for fiscal years 1982 and 1983 because of the year-ahead authorization requirements of the Congressional Budget Act of 1974 (P.L. 93-344), the Administration plans to review the program in the context of the fiscal year 1983 budget and may propose changes or amendments upon completion of that review.

I will first describe the program's activities during the past year, and then describe the refinements we have developed in the site designation process.

I. ACTIVITIES DURING THE PAST YEAR

The goals of the marine sanctuary program are:

- to enhance resource protection through the implementation of comprehensive, long-term management plans tailored to the resources of special marine areas;

- to promote and coordinate research to expand scientific knowledge of significant marine resources and improve management decisionmaking;

- to enhance public awareness, understanding, and wise use of the marine environment through public educational and recreational programs; and

- to provide maximum public and private use of special marine areas.

With these goals in mind, we have designated four new sanctuaries during this past year. I will describe each of them briefly and note the benefits which each provides.

(1) The *Channel Islands National Marine Sanctuary* encompasses the waters within 6 nautical miles of the Northern Channel Islands (San Miguel, Santa Rosa, Santa Cruz, and the Anacapa) and Santa Barbara Island off the coast of Southern California. The Sanctuary area is exceptionally productive, providing feeding and breeding grounds for one of the largest and most varied assemblages of seals and sea lions in the world. The Sanctuary is also one of the richest resource areas in the United States for marine birds, including the endangered brown pelican. The opportunities for research, educational, and public use of the Sanctuary are numerous, and where consistent with protection of the resources of the Sanctuary, will be encouraged.

(2) The *Point Reyes-Farallon Islands National Marine Sanctuary* encompasses waters off the north-central California coast, including those around Farallon Islands and between the islands and the mainland. The Sanctuary area supports some of the largest seabird rookeries in the United States, including 12 of the 16 species known to breed in the west coast, virtually the entire world population of the ash storm petrel, the world's largest colony of western gulls, and the endangered brown pelican and peregrine falcon. The area also provides habitat for 23 species of marine mammals. Although management of the Sanctuary will emphasize resource protection, because of the close proximity of urban populations research, educational and public use will also be encouraged.

(3) The *Loos Key National Marine Sanctuary* is an area approximately 6.5 nautical miles off Big Pine Key in the Lower Florida Keys. The Sanctuary will provide protective management for a small, highly used segment of the Florida reef tract, including a spectacular "spur and groove" coral formation that supports a diverse marine community. While most public use of the Sanctuary will continue to be permitted, the fragility of the coral reef resources will require that

less emphasis be placed on attracting additional visitors than will be the case in other sanctuaries.

(4) The *Gray's Reef National Marine Sanctuary* is located 17.5 nautical miles east of Sapelo Island, Georgia. Gray's Reef is a naturally occurring live bottom outcrop on the otherwise flat, sandy and sparsely populated South Atlantic Continental Shelf. Gray's Reef is one of the largest nearshore hard bottom reefs in the South Atlantic and supports a diverse array of both temperate and tropical species, including the threatened loggerhead turtle. Management of the Sanctuary will stress all four program goals, with initial emphasis given to research and assessment activities.

Included as appendices to this testimony are detailed descriptions of the four new sanctuaries. I will be happy to discuss with you in further detail any of these sites.

These designated sites, when added to the two previously existing sanctuaries—the U.S.S. Monitor and the Key Largo Coral Reef National Marine Sanctuary—bring to six the number of sanctuaries in the program. This represents, in our view, a solid foundation for the Marine Sanctuary Program. The six sites are diverse in the types of resources encompassed and, correspondingly, in the manner in which the resources are managed.

II. REFINEMENTS TO DESIGNATION PROCESS

We have gained important experience over the past several years in the process of designating new sanctuaries. Through this experience, we have been able to develop several policy and programmatic refinements which we believe will resolve much of the confusion and controversy that has surrounded the program and which will result in a more predictable, productive process for the establishment of future sites. We are describing these changes in a Program Development Plan, now in its final drafting stage. The members of this Committee will be provided with copies of the documents as soon as they are available. I would like to share with you today the highlights of these refinements.

1. *Eliminate the List of Recommended Areas*

The List of Recommended Areas (LRA) is a list of all recommended sites which have met minimal screening criteria. Under our present regulations, listing on the LRA is a prerequisite for sanctuary designation but does not imply that designation will ever occur.

The LRA was established as a means of advising the public at large of what sites had been recommended, and of soliciting information on those sites. Nevertheless, since its inception the LRA has caused substantial confusion and concern over the status of areas on the list, the likelihood of further action on the sites, and the overall emphasis of the program. Even though the vast majority of the listed sites will never become active candidates, the LRA is often perceived as the blueprint for the sanctuary program. This has led to concern over the future size of the program, particularly since recommendations are placed on the LRA as submitted to NOAA—in some instances sites on the list cover thousands of square nautical miles of Outer Continental Shelf waters.

The LRA has resulted in unnecessary controversy and has left an open door for nominations which, although marginally acceptable, are on balance inappropriate for further consideration. Accordingly, we are proposing to eliminate the LRA.

2. *Institute an effective, active process and clear site selection criteria which will assist in early identification of high quality sites and elimination of poor candidates*

The current site selection process is essentially reactive. NOAA receives recommendations to be evaluated for placement on the LRA. Under the current system recommendations may be forwarded by anyone and are usually accompanied by minimal data. The staff is bound by the program regulations to react to each and every submission. This process has resulted in an extraordinary range of site nominations, most of which will never be suitable for sanctuary status, with little substantive information. In addition, LRA criteria are much too broad to ensure effective screening.

We are proposing to initiate a rigorous procedure for the identification of sites suitable for active candidacy using regional resource teams. By actively seeking appropriate sites based upon sound resource data and early public input through

a network of regional resource evaluation teams, we will eliminate unrealistic nominations and those which fail to advance the goals of the marine sanctuary program.

We are proposing to provide the regional resource evaluation teams with clear site selection criteria that will assure that rigorous analysis results in recommendation of only those sites with exceptional resource values. This process will assure that the pool of sites we have to work with is composed only of high quality areas with a good chance of designation.

3. Emphasize management aspects of sanctuary designation

We intend to emphasize the benefits derived from fostering research, promoting public education, and coordinating management. Therefore, we are now incorporating the site Management Plan (which will include regulations as necessary) into the EIS. With preparation of a site Management Plan as a part of the EIS process, the public and private sectors will have a much more complete proposal on which to comment and a much clearer picture of the purposes and effects of sanctuary designation. This will facilitate an interagency review as part of the recommendation process.

In sum, we propose the following program refinements. First, we will evaluate the resource and human use values of a potential site and assess the adequacy of existing management and regulatory authorities. We will promulgate new regulations only if immediately necessary and establish research and monitoring programs to assess various potential impacts on the resources. If we find evidence of resource deterioration, additional steps will be recommended to strengthen management of the Sanctuary. These steps will start first with further improving the effectiveness of existing authorities and programs and, as a last resort, may involve new regulations.

We plan to solicit public comment in the near future on these refinements in the program and will propose and adopt such changes in the program regulations as appear appropriate in view of the comments we receive. It is our belief that the modifications I have outlined will simplify and improve the effectiveness of the Marine Sanctuary Program.

Conclusion

By way of conclusion, I would like to make the following observations. The Marine Sanctuary Program has not been without controversy. In fact, few other programs in our agency have stimulated as much intense dialogue with other Departments of the Executive Branch, Members of Congress, industry, and concerned citizens. With a few exceptions, the basic purposes and merits of Title III are not called to issue; rather it is the specific application of the program to individual sites that gives rise to controversy. It is likely that some level of controversy will always accompany sanctuary designations. We have tried to balance the many interests and concerns while bearing in mind the basic mission given us by the Congress. On balance, I think we have done a good job and the program refinements we are preparing will further improve our ability to serve the intent of this law.

The CHAIRMAN. Can you check on the vote and see if it is—the three of them—back to back to back?

Just one question right now. All right.

How cooperative, Mr. Knecht, have the States been in their participation in this program?

Mr. KNECHT. Very cooperative. The nominations that I mentioned had their origin, each of them, from State governments in California, Georgia, and Florida. They are enthusiastic supporters.

The CHAIRMAN. These were not nominations that came off of the LRA list?

Mr. KNECHT. They were off and on; they were small, a small part. It contained lots of other nominations.

The CHAIRMAN. Almost anything can get on the LRA list. I can put them on there. I know the fear that has caused. We don't have an LRA list for national parks, an LRA list for national recreation areas.

Do you think with the proposed changes you will be able to alleviate many of the fears and uncertainties that are caused by virtue of a designation appearing on the list?

Mr. KNECHT. Definitely. When a nomination occurs on the list, it is clear it is under serious consideration. The affected interests will understand that they need to become a part of the process. It is not crying wolf, as is now the case with many nominations on the list.

The CHAIRMAN. In the areas that are open where the public is more or less encouraged to use them, do you have any figures on what kind of public participation you are getting?

Mr. KNECHT. We are just beginning to get figures. The only numbers I have at the moment are in connection with the Key Largo Marine Sanctuary off the coast of Florida. For the last year, there were 400,000 people who used the sanctuary.

The CHAIRMAN. That is very good.

Mr. KNECHT. We are pleased.

The CHAIRMAN. With that, I am going to stop. I would ask the staff to advise the audience if by chance we are going to have a series of votes back to back, to tell them, in which case we will recess for about half an hour. If we are not, I will be back in about 15 minutes.

[Recess.]

The CHAIRMAN. Back on the record. Mr. Michael Weber.

Mr. WEBER. I am with the Center for Environmental Education. I wish to thank you for the opportunity to testify on the reauthorization of the marine sanctuaries program.

Today I am going to run through a number of slides which will describe some of the sanctuaries that have been recently designated.

[Slide.]

One of the problems that we frequently run into as far as the oceans are concerned is that most people think of them only as a surface, and there is no great familiarity with what is under water and how complex our coastal waters are.

As you can see, the Outer Continental Shelf, our coastal waters, make up approximately 550 million acres, although you can find a variety of figures.

[Slide.]

One of the sanctuaries which was designated this year is the Looe Key Sanctuary. Once again, you can see from the surface one impression, but once we go down below, you can see that there is a richness of life that is paralleled only perhaps by the tropical forest. Looe Key is used by a variety of people, mostly skindivers and scuba divers, and as most coral reefs, you have a variety of corals, staghorn, reef fishes and sponges.

[Slide.]

And anemones.

[Slide.]

The number of species is just tremendous. Likewise, the coral reef is very, very fragile, and it can suffer some degree of degradation just simply from the flipper of a scuba diver or skindiver touching it. This shot is from Gray's Reef, which is notable in that it is hard bottomed, which is basically just limestone, which comes above the sandy areas surrounding it. This is largely an oasis, as it were, in the South Atlantic, providing—the limestone provides a place where various benthic

organisms can affix themselves. Those benthic organisms, in turn, provide habitat and food for commercial and recreational fish.

These areas are also used by endangered sea turtles such as the loggerhead, which is a threatened sea turtle. Those two areas are off—the former are off of Florida, and the last one is off the coast of Georgia.

[Slide.]

This is one of the Channel Islands or part of the Channel Islands off of Santa Barbara.

[Slide.]

This is a biogeographic boundary. That is that here you can find species that are more characteristically found in southern areas or northern areas. This is a group of rafting sea lions. They use the offshore waters considerably for feeding, as does the southern sea otter, which is a transient in this area.

[Slide.]

The Channel Islands themselves are used for breeding and pupping, and hulling out by a good number of marine mammals. San Miguel Island is—provides a breeding and pupping grounds for five species of pinnipeds, which makes it unique along the coasts of the United States.

[Slide.]

Elephant seals use this area as well. There is a pup and female.

[Slide.]

And there are harbor seals.

[Slide.]

All along the California coast, but in particular at Santa Barbara, about this time of year thousands of people line the cliffs to watch the grey whales passing by. They pass by twice each year, the entire world's population of the grey whale. This in turn provides a great deal of money to local economies. Whale-watching trips are taken out frequently. This alone is a multimillion dollar industry in California now, and it provides offseason employment for a good number of fishermen.

[Slide.]

The area is characterized by about 17 species of marine mammals like the Pacific white-sided dolphin, which attests to the biological richness of the area. Various birds use the area as well. The endangered brown pelican relies on the productivity of the waters and the areas along the Channel Islands themselves for nesting. Like the marine mammals, the birds have mostly been driven from their mainland nesting grounds, so the islands themselves and the surrounding waters really represent a last chance.

[Slide.]

This is a shot from the headlands at Point Reyes. Several years ago Congress designated it as a wilderness area, 15 miles around the area, recognizing its biological productivity and its beauty.

[Slide.]

Once again at the National Seashore which is established here, every year some 1½ million people come and visit the seashore. This is characterized by rocky cliffs, by tidal areas, and further offshore are the Farallon Islands, which do not look like they are particularly—they look quite bleak, but they provide nesting areas for over half of California's nesting sea birds.

[Slide.]

Likewise they provide areas for a variety of marine mammals. These nesting sea birds, once again, live on the bounty of the surrounding waters.

[Slide.]

The world's largest colony of western gulls is found at the Farallon Islands. You can see them feeding off the waters, and I would like to note here that the productivity is so great that 40 percent of the crab catch in the bay area is taken out of the sanctuary waters.

[Slide.]

As I said, a variety of marine mammals use the area, like the elephant seal.

[Slide.]

You can see gray whales blowing off at the lighthouse at Point Reyes. The area is used, as I said, by about 1.5 million people each year.

That really completes my remarks. I can refer to my written testimony, if you would like.

I will be happy to answer questions.

The CHAIRMAN. If there were no sanctuary program, would these species disappear?

Mr. WEBER. In the short term, probably not. It is difficult to say, over the long term, whether they would or not. Our coastal waters are seeing increasing levels of development, and in many cases, we don't know what the cumulative impacts of those developments will be.

Certainly, the sanctuaries program is meant to protect the species. But it also provides kind of a living laboratory to really gage what impact coastal development has on the species and the ecosystem.

The CHAIRMAN. If we were to get into drilling for oil in these areas, what evidence do we have that it would be harmful?

Mr. WEBER. If I may, I would like to just take one particular animal. Oftentimes, people are concerned about the effect of oil drilling, because of oil spills, particularly in the case of the southern sea otter, for instance, which simply cannot withstand an oil spill.

A variety of studies have been done to show that the sea otter cannot recover at all from—once it's fur is oiled. As a matter of fact, it starts ingesting the oil. It goes underwater, trying to clean its pelt and, unlike other marine mammals, the southern sea otter has to rely solely on its pelt, or its fur, to keep it warm.

That is one aspect.

Another aspect of oil drilling is that, at this point, I don't believe that the jury has come in on the effect of drilling muds, for instance, and other routine discharges from oil rigs.

At Santa Barbara, for instance, this will provide—because there will be drilling carried on within the sanctuary, as a result of past oil leases, we will really be able to tell, over the long run, what the effect of these chronic discharges may be.

They may be null, but there is some indication that they do have, if nothing else, sublethal effects which make organisms less able to survive other environmental assaults.

The CHAIRMAN. I have no other questions.

It was a good presentation, and I appreciate your bringing the slides.

Mr. WEBER. Thank you for having me here.
[The statement follows:]

STATEMENT OF MICHAEL WEBER, MARINE HABITAT COORDINATOR, CENTER FOR ENVIRONMENTAL EDUCATION

My name is Michael Weber. I am the Marine Habitat Coordinator for the Center for Environmental Education. I wish to thank the Committee for allowing me to testify in support of the reauthorization of Title III of the Marine Protection, Research and Sanctuaries Act of 1972 (the "Act").

The Center for Environmental Education has over 300,000 supporters around the United States. A primary focus of the Center's public education program is the protection of marine ecosystems. In the past year, the Center has actively supported the designation of marine sanctuaries at the Channel Islands and Pt. Reyes/Farallon Islands areas off the California coast, at Looe Key off Florida, and at Gray's Reef off Georgia. Our efforts in support of this program complement other efforts to protect endangered species of marine animals and their habitats.

THE MARINE SANCTUARIES PROGRAM: AN IMPORTANT ELEMENT OF U.S. OCEANS POLICY

I wish to emphasize at the outset that we believe the marine sanctuaries program is an indispensable element of our Nation's oceans policy. In an era of increasing development both within and along our coasts, a sound oceans policy must be able to avail itself of a variety of management tools. These tools must range from being primarily protective to primarily exploitative. Such a range reflects the variety of values attributed to our coastal waters, including economic, esthetic, recreational, scientific or ecological values. A balance between these values is often difficult to strike. Rather than assuming that an appropriate mix can be achieved in every area, we should seek to provide an appropriate mix among areas, insofar as this is possible.

The Nation has set aside certain land areas, such as our National Parks, primarily for recreation and preservation. Other areas have been set aside for intensive development, such as the many valleys flooded by dams. Our National Park System represents a recognition that a proper overall balance of land uses requires the setting aside of certain unique areas for non-consumptive uses and preservation. The marine sanctuaries program continues this sound tradition into our coastal waters. Years and years of experience have shown that our national parks have been a wise investment. We are confident that years of experience will demonstrate the same to be true of the sanctuaries program.

EARLY HISTORY OF THE SANCTUARIES PROGRAM

Congress considered more than ten sanctuaries bills before passing the Marine Protection, Research and Sanctuaries Act in 1972. Although there is no doubt that the Act envisions multiple use of sanctuaries; the Act also differs from other statutes in placing the emphasis of the program upon the preservation or restoration of sanctuary areas. This feature makes the marine sanctuaries program substantively different from other statutory authorities relating to the protection of our coastal waters. In addition, this emphasis reflects four years of Congressional consideration of the competing values regarding our coastal waters.

The implementation of Title III of the Act has been labored, to say the least. By 1980, only two sanctuaries had been designated: a one square mile area off Cape Hatteras protecting the wreck of the *Monitor*, and a 100-square mile area off Florida protecting the Key Largo coral reefs. It is important to note here that until sanctuary designation in 1975, the Federal Government had no authority to comprehensively protect either the *Monitor* or the Key Largo coral reefs from a variety of threats.

Soon after President Jimmy Carter announced plans for accelerated development of outer continental shelf (OCS) oil and gas resources in 1977, the President also called for vigorous implementation of the marine sanctuary program. The President recognized that the sanctuary program offered an important means of balancing development with conservation of distinctive marine areas. The marine sanctuary program issued a call for nominations of areas for marine sanctuary designation and received well over 100 recommendations from Federal

agencies, State governments and citizens. Most of these recommendations were not pursued because they did not meet criteria established by the program. After review, some seventy sites remained for further consideration. Of these seventy, only seven have been actively considered and only four have been designated to date. In the case of every nomination, which has led to designation, the original proposal has been revised and refined through a lengthy process of review by the marine sanctuary program itself, other Federal and State agencies, by industry and by the public.

THE SANCTUARIES PROGRAM AND OCS PETROLEUM DEVELOPMENT

Some ocean users, in particular the oil and gas industry, have maintained that this brief history of the marine sanctuary program indicates a program run amuck, which threatens to lock up significant oil reserves on the OCS. A careful analysis of the program, however, reveals something quite different.

Much of the concern regarding the marine sanctuaries program's impact upon future development of OCS petroleum reserves was generated by consideration of marine sanctuary proposals for the Beaufort Sea, the Flower Garden Banks, and the Georges Bank. I wish to emphasize at this point that these sanctuary proposals all reflected genuine concern about unique and/or endangered biological resources in areas slated for offshore oil development. Neither the proposals themselves nor the sanctuaries program's consideration of them was capricious, nor were these proposals intended to stop oil development just as a matter of principle. Rather, the coral reefs at the Flower Garden Banks, the endangered bowhead whale and other marine mammals in the Beaufort Sea, and the unusually valuable fisheries of the Georges Bank were always uppermost in the minds of the supporters of the sanctuary proposals.

Have these proposals tied up oil development? Definitely not! The Beaufort Sea sanctuary proposal was dropped and an oil lease sale held. The Flower Garden Banks proposal has been deferred until a variety of issues can be adequately addressed in a final environmental impact statement. The Georges Bank proposal was dropped and an oil lease sale held. It is interesting to note here that a recent settlement among the Interior Department, the State of Massachusetts and the Conservation Law Foundation calls for the Secretary of Commerce to consider "whether a site or sites on all or parts of the Georges Bank area should be placed on the list of active candidates for marine sanctuary designation."¹ It should be clear that any sanctuary at the Georges Bank will be conditioned by the planned oil development rather than the other way around. Any sanctuary proposal for this area would have to undergo over two years of review after selection as an active candidate, if that should happen, before a sanctuary could be designated. In the meantime, of course, industry should have well underway its drilling program in the area.

Even the sanctuary which is most advanced in the designation process—the Channel Islands Sanctuary which was approved by President Carter in September of 1980—is not in effect. Under the 1980 amendments to the Act, any proposed sanctuary or sanctuary regulation may be deleted by the passage of a concurrent resolution of Congress within 60 days of continuous session after transmittal of the designation documents to Congress. Even when this sanctuary becomes effective, the prohibition on hydrocarbon operations will apply only to future lease sales. Drilling in tracts already leased will not be affected. Resources estimates for those tracts affected by the oil drilling prohibition are very low: perhaps one percent of the petroleum resources estimated for the whole Santa Barbara Channel.

Some have seen an inconsistency in this partial prohibition on hydrocarbon operations. To me, it is an indication of the sanctuaries program's willingness to deal fairly with the oil companies and to recognize our Nation's need to develop our energy resources that the program did not sacrifice investments in leases, equipment and personnel for total protection of the area. More importantly, perhaps, the partial prohibition will allow for a long-term research and monitoring program on the effects of routine oil drilling on surrounding waters. A recent report of the General Accounting Office concludes that no other federal agency has yet been able to carry on such a monitoring program.²

¹ Coastal Zone Management Newsletter, January 14, 1981. Page 2. Nautilus Press. Washington, D.C.

² General Accounting Office, "Impact of Regulations—After Federal Leasing—on Outer Continental Shelf Oil and Gas Development," EMD-31-48, February 27, 1981.

Of the six sanctuaries which have been approved, only the Channel Islands and the Pt. Reyes/Farallon Islands sanctuaries impose any limitations on hydrocarbon operations. The impact of these prohibitions is miniscule. I have included with this written testimony a report (Appendix A) based upon figures available from the Bureau of Land Management, the U.S. Geological Survey, and the Sanctuaries Program Office. This report compares the size of areas in which hydrocarbon operations are prohibited by sanctuaries designation to the total area of the OCS, that portion of the OCS which has been offered for sale, has been bid upon, or has been leased. These figures show that sanctuary prohibitions on oil drilling involve just one-tenth of one percent of the total OCS, just over two percent of the total area offered since 1954 in oil and gas lease sales, and under five percent of the total area on the OCS which has been bid upon or leased. In light of the fact that many leased tracts have yet to see a drill rig, sanctuary regulations can hardly be accused of tying up oil reserves (Appendix B). What is more the area of the OCS which is leased will increase at a rate far beyond the rate at which the sanctuary program will increase. In 1981 alone, millions of acres of the OCS will be leased, while the Sanctuaries Program Office expects to recommend designation of only one marine sanctuary in the Virgin Islands. Even that sanctuary area is not of interest to the oil and gas industry.

THE FOUR RECENTLY APPROVED SANCTUARIES

Each of the four marine sanctuary proposals which were approved in the last year are distinctive marine areas, which will benefit from the comprehensive management, research and education programs which the marine sanctuaries program offers.

The Santa Barbara Channel is a biogeographical boundary between northern and southern biological regimes. Here one can find an unusual mixture of northern and southern marine species. The area is also noted for its high biological productivity, which is generated largely by the meeting of northerly and southerly flowing ocean currents. Some thirty species of marine mammals have been observed in the area. San Miguel Island provides breeding and pupping areas for five species of pinnipeds, making this area unique in U.S. waters. Kelp beds, among the most extensive in the world, provide nursery and feeding areas and shelter for hundreds of species of fish. The waters offshore of the islands also support surprisingly rich reef communities. Seabirds frequent the area and rely upon the waters' biological richness for their sustenance. Like the marine mammals, many of these seabird species have been driven from traditional mainland nesting areas by coastal development; the islands represent a last chance.

At the same time, the Channel Islands and the surrounding waters provide thousands of citizens with opportunities for recreation, whether that be fishing, boating, scuba diving or wildlife watching. Through its educational program, the sanctuaries program will be able to help these people increase their enjoyment of the area. Through its management and research programs the sanctuaries program will help insure that the area remains a source of enjoyment and learning.

The Pt. Reyes/Farallon Islands sanctuary was one of three approved by President Carter on January 16 of this year. This area is home to more than half of California's nesting seabirds. Twenty-three species of marine mammals have been observed in the area. Several species of pinnipeds use the islands and the beaches of the Pt. Reyes National Seashore for hauling out and pupping: these same species feed with other creatures upon the unusually productive waters of the Gulf of the Farallons. The world's entire gray whale population passes through these waters twice each year, providing many of the 1.5 million visitors to the Pt. Reyes National Seashore with a rare opportunity to observe these amazing creatures each year. Designation of this sanctuary will provide, as do the others, a living laboratory for the study of marine ecosystems and for the development of management tools which will be invaluable not only for these waters but for other coastal waters of the United States.

Looe Key is one of Florida's most spectacular coral reefs. Amateur skin divers and scuba divers come to this reef to view the hundreds of fish species which inhabit these coral gardens. Increasing recreational use of the area, together with the use of fish traps which not only damage coral but can quickly deplete reef communities of their fish stocks, threatened to send this reef down

the same road of degradation which so many of Florida's reefs have already gone down. Sanctuary designation will provide for research into the complex web of interdependencies upon which coral reefs depend, while increasing recreational enjoyment and protection of the reefs.

Gray's Reef is perhaps the largest natural live-bottom reef along the southeastern coast of the United States. Limestone outcroppings provide homes for coral and other benthic organisms and shelter and forage areas for fish and sea turtles. Research on the use of such areas by the loggerhead sea turtle will aid in the recovery of this threatened species. At the same time, the designation of this sanctuary will provide a unique opportunity to study the impact of spearfishing and line fishing on reef communities. By cooperating with both types of fishermen, the sanctuaries program may be able to devise new means of insuring the long-term opportunity to engage in recreational fishing in such areas.

1980 was a very productive year for the sanctuaries program. Although we do not anticipate such a number of sanctuaries being designated in the next several years, this year's efforts have brought the program out of the bureaucratic backwaters and into prominence as an important contributor to the use and enjoyment of our Nation's coastal waters.

FUTURE CANDIDATES FOR SANCTUARY DESIGNATION

The marine sanctuaries program has under consideration now several proposals. The Department of Conservation and Cultural Affairs of the Virgin Islands has proposed designating waters off St. Thomas Island as a marine sanctuary. Besides having the most extensive stand of mangroves in the Virgin Islands, this area also contains coral reef communities, a variety of commercial and recreational fish habitats, and nesting and feeding areas for endangered sea turtle species and bird species. A variety of threats jeopardize the continued recreational use of the area, including sewage pollution from boats and other sources, disturbance of mangrove habitats by bulkheading, dumping and landfill, and destruction of coral and other benthic communities by anchoring. As a result of these pressures, the very attributes which make this area so popular for tourists and thus aid the local economy could well be jeopardized in the near future. This proposal is the only one at all likely to be designated a marine sanctuary in 1981.

A large portion of the North Pacific population of the endangered humpback whale winters in Hawaiian waters. Maintaining those characteristics which make this area a vital calving area would be but one object of sanctuary designation. Research into the biology, behavior and habitat needs of this species in a comprehensive manner would benefit not only Hawaiian humpbacks, but humpbacks in other areas of the world. An educational program regarding the humpbacks would aid in the enforcement of current National Marine Fisheries Service regulations regarding harassment of humpbacks. Simply put, the more individuals know about these animals, the more likely they are to avoid harassing them. This can only aid federal efforts to prevent harassment through regulations. Finally, by proceeding with a humpback whale sanctuary, the United States would join Mexico, Argentina, and the International Whaling Commission in designating certain critical areas as cetacean sanctuaries. A Hawaiian humpback sanctuary would thus be of international significance. All of this, of course, would aid tourism in the Islands.

Monterey Bay provides habitat for a tremendous variety of marine animals. Many species of marine mammals are found in this area, including some who venture close to shore in very few other places, such as the sperm whale. In addition, the threatened southern sea otter rafts in the waters of the Bay and southwards. Ano Nuevo Island, which might form the northern boundary of such a sanctuary, is an important pupping and breeding area for elephant seals and sea lions. Monterey Bay is also the site of considerable recreational activity, including boating, fishing and wildlife watching. The beauty of the coast draws millions every year to this region, as does its wildlife. A Monterey Bay sanctuary will complement the adjacent Elkhorn Slough Estuarine Sanctuary by providing an opportunity for research and educational programs on a complete estuary/bay ecosystem.

Finally, Puerto Rico's Department of Natural Resources has proposed designating certain waters off some of the islands a marine sanctuary. The waters surrounding Mona Island alone are distinctive, since they contain some of the most extensive and unusual sea caves in the entire world. Mona Island is also a major nesting area for the critically endangered hawksbill sea turtle. The en-

dangered green and leatherback sea turtles and the threatened loggerhead sea turtle are all found in the proposed sanctuary's waters. Areas landward of the proposed sanctuary have been proposed for designation as critical habitat for the hawksbill by the Department of the Interior, since they serve as nesting beaches. Marine sanctuary designation would complement this effort by providing greater protection for the turtles while they are in their offshore feeding and staging areas. Like most of the other sanctuaries and sanctuary proposals, sanctuary designation of these waters will help insure the long-term attractiveness of these waters for tourists and others. This, in turn, will only help the local economy. The alternative may well be degradation of this important contributor to Puerto Rico's economy and the well-being of Puerto Ricans.

I must emphasize that all of these proposals must still undergo considerable review, not only by the sanctuaries program itself, but also by other federal and state agencies, by industry and by the general public. This process takes time. Indeed, as a supporter of the sanctuaries idea, I have many times found myself impatient with the deliberateness of the program. Most of this deliberateness, however, has been due to the care the program takes in considering the input of other federal offices, state and local officials, industry people, and the public. In this respect, the program is quite refreshing, as federal programs go. This care results, I believe, from a clear understanding that marine sanctuaries must accommodate different values to as great an extent as is possible, while maintaining national objectives.

UNIQUE CAPABILITIES OF THE SANCTUARIES PROGRAM

The recently released General Accounting Office report, titled "Marine Sanctuaries Program Offers Environmental Protection and Benefits Other Laws Do Not," concludes that the sanctuaries program can make a substantial contribution to our Nation's efforts to insure the long-term productivity and enjoyment of our coastal waters. I do not wish to reiterate all of the points made in this report, although I couldn't agree more with them. I do wish, however, to emphasize some points.

Much has been made, in some quarters, of the many laws and agencies which might conceivably be called upon to protect the resources of various marine areas considered for sanctuary designation. In the Channel Islands area, for instance, there are 22 federal and state authorities, implemented by 18 agencies. The very number of such authorities indicates to me that none of these laws or programs are directed at the Channel Island area as an ecosystem. Rather, these authorities have either single purposes, such as insuring water quality, or have environmental protection as a secondary objective of a development program. The State of California, which is responsible for a number of these programs, recognized that the Channel Islands area deserved something more than a piecemeal, hodge-podge of protective authorities, and not only proposed the area for marine sanctuary designation but vigorously supported the designation.

Many of these same authorities are designed only to react to a situation of deteriorating environmental quality, and are thus crisis-oriented. By their very nature, they are after the fact. The benefit of marine sanctuary designation is that attention is directed to maintaining environmental quality positively and preventing degradation before it occurs. In addition, the sanctuary program looks at the ecosystem as a whole, as a habitat for various species of plants and animals. Probably the greatest cause for species extinction in the coming years will be degradation of habitat, whether the habitat be tropical forest or coral reefs.² Protection of habitat is crucial to the protection of species. Once a species is threatened with extinction by habitat degradation and is placed on the endangered species list, it is often that one can only hope for the recovery of the species. Beyond preventing endangerment of species, a number of the areas which have been designated marine sanctuaries are important commercial and recreational fishing areas. Maintenance of habitat is crucial to the long-term productivity of these fisheries.

Ecosystem management has far too long been little more than a desirable goal, reflected in a variety of statutes such as the Endangered Species Act and the Marine Mammal Protection Act. The marine sanctuaries program is uniquely qualified to breathe some life into this crucial goal by focusing research on the

² Council on Environmental Quality, Environmental Quality: The Eleventh Annual Report of the Council on Environmental Quality, December 1980. Pages 43ff.

development of management tools for marine ecosystems. Such tools will be valuable, as I have noted before, in all areas of our coastal waters. If our Nation is to insure long-term use of these coastal waters, such management tools are badly needed.

Last but not least, I wish to stress the flexibility of the marine sanctuaries program's regulatory role. The program does not use blanket regulations affecting all sanctuaries. Rather, regulations are tailored to specific sanctuaries, taking into account the resources and threats in the area and the capabilities of other authorities. The sanctuaries program can therefore be uniquely responsive to local issues, while maintaining national objectives.

SANCTUARIES IN OTHER AREAS OF THE WORLD

The United States is not alone in recognizing the need to establish marine sanctuaries. In 1971, the President of Mexico declared one of the lagoons in which gray whales calve a sanctuary. The lagoon, Guerrero Negro, is one of six such lagoons in Baja, California, where gray whales spend the winter.

In December of 1974, the Gulf of San Jose off Argentina was designated a sanctuary to protect the remnant population of right whales which breed and calve there. The reserve also provides protection for killer whales, elephant seals, and other marine mammals and birds.

In 1979, the International Whaling Commission set aside the Indian Ocean (above 55° south latitude) as a whale sanctuary in which no species of whale is to be hunted. An ambitious program of research has been undertaken by a number of nations ringing the Indian Ocean in order to assess the use of these waters by whales and other marine species.

In October of 1980, twelve Mediterranean Nations agreed to establish fifteen marine parks, reserves and other restricted areas in order to protect species such as the endangered monk seal and loggerhead and green sea turtles which are threatened by degradation of nesting and feeding areas. At the conclusion of the conference which saw the establishment of these areas, Mr. Aldo Manos, an Italian environmental program official, stated: "In the final analysis our network is not just for birds and beasts, fish and plants, but especially for the people who live or visit the Mediterranean area."⁴ Eventually, the conference's action plan calls for the creation of 100 such sites in the Mediterranean.

Finally, the Soviet Union recently designated its first marine sanctuary around the rocky islands of the Rimski-Korsakov archipelago in the Sea of Japan. This sanctuary will support research on the sea's biological productivity. Aquaculture experiments are planned. The public will be allowed to visit the area's beautiful waters. Depending upon the success of this first sanctuary, a complete system of such sanctuaries will emerge over the years.

A variety of international conferences, stretching back to the turn of the century, have called for the establishment of a network of marine sanctuaries around the world in recognition of the importance of habitat protection to the survival of marine animal and plant species. The very productivity of the oceans, upon which we shall all depend even more in the coming years, makes the establishment of such reserves of great importance. The U.S. marine sanctuaries program has a contribution to make, therefore, not only to the Nation, but also to the world community, who continue to look to us for direction in environmental management. To renege on this program would only weaken U.S. prestige abroad.

WHO SHALL BENEFIT FROM THE PROGRAM

Who shall derive benefits from the marine sanctuaries program? First and foremost, the millions and millions of Americans who live along our coasts will have the opportunity to learn about and enjoy for years to come the many aspects of our coastal waters. Teachers will be able to avail themselves of a living classroom, in which their students may learn about marine mammals, sea turtles, coral reefs, fish, and, most importantly, the ways in which all of these creatures and plants build a community. The interested citizen will be able to learn about the importance of coastal ecosystems in food production, what potential these areas hold for supplying our needs, and how human use of such areas might be managed to insure long-term productivity. The scuba or skin diver can spend hours among coral gardens and come away refreshed for having spent time in

⁴ New York Times, "Twelve Mediterranean States Plan Refuge Areas for Marine Life." October 20, 1980.

another world. Other citizens will continue to line the shoreline in California intently searching for brown pelicans, or gray whales, or sea otters. Fishermen will be able to seek out their favorite fishing grounds and spend hours of pleasure upon sanctuary waters. Commercial fishermen will be able to continue reaping the bounty of the sea, knowing that important nurseries and shelter areas for fish receive appropriate protection. Scientists will be able to avail themselves of living laboratories, representing very different types of marine ecosystems, as they seek to understand the complex basis of the ocean's productivity. Policymakers will gain substantial benefit from the development of management tools for marine ecosystems. Sanctuary research programs will also benefit the consideration of various development plans, including oil and gas development. The Channel Islands Sanctuary is especially important in this regard, since the research conducted there will better be able to assess over the long run the impact of routine oil drilling on surrounding waters. In the end, this should help expedite reasonable consideration of oil development plans.

The marine sanctuaries program will provide a range of benefits, not otherwise available in one program, to an audience much broader than any audience addressed by any current program. The marine sanctuaries program is a small investment for such a substantial return.

The sanctuaries program is entering a period of consolidation. The last year has seen the creation of four additional sanctuaries. President Carter's designation of these areas as sanctuaries only marks the beginning of the process of making them fulfill their potential. Each sanctuary requires a management plan which will insure the attainment of the objectives of sanctuary designation. Research and education programs must be designed and initiated. In order to achieve these objectives, however, the program must be reauthorized and properly funded.

REAUTHORIZATION

For the reasons stated above, we strongly support reauthorization of Title III of the Marine Protection, Research and Sanctuaries Act of 1972. Furthermore, we urge Congress to approve a three-year reauthorization. In order to capitalize fully upon the recent marine sanctuary designations, it is important that the sanctuaries program be provided a period in which to develop management, research, and education plans for these sanctuaries. Only when these plans have time to operate will we truly be in a position to assess the success and impact of the program. Anything less than a three-year reauthorization at this time will only lead to inefficiency in administration by creating uncertainty as to the program's future.

As mentioned above, we believe the program must be allowed to consolidate its advances. Amendment of the authorizing Act will only make implementation that much more difficult. The program has already had to deal with amendments passed last year; these amendments and the program itself should be allowed to operate before consideration of further amendments. I believe that my testimony demonstrates that the program will not run away with our coastal waters in the meantime.

Finally, the program should receive adequate funding, that is, at least \$2.25 million annually. While we realize that the Nation has entered a period of budget austerity, we believe that the requested amount is quite modest. Anything less could well turn the program into little more than good intentions not acted upon.

In closing, we only wish to note that the marine sanctuaries program, alone of all federal programs, can insure that certain unique areas of our coastal waters are preserved for the use and enjoyment of future generations of Americans. I urge members of this committee to bear this in mind when considering reauthorization of Title III of the Act.

Thank you again for allowing me to testify in support of the marine sanctuaries program.

APPENDIX A.—THE OUTER CONTINENTAL SHELF, O.C.S. OIL AND GAS LEASING, AND MARINE SANCTUARIES: A COMPARISON OF AREAS

INTRODUCTION

The Outer Continental Shelf of the United States is a vast area of approximately 770 million acres. This area accommodates a variety of uses including fisheries, oil and gas production, recreation and shipping. The Outer Continental

Shelf Lands Act of 1954, 43 U.S.C. 1331 *et seq.* and the Outer Continental Shelf Lands Act Amendment of 1978, P.L. 95-372 govern the production of oil and gas in the OCS region. The Marine Protection, Research, and Sanctuaries Act of 1972, 16 U.S.C. 1431-1434, authorizes the designation of ocean areas with distinctive conservation, recreational, ecological or aesthetic value as marine sanctuaries.

The recent designation of two marine sanctuaries with prohibition of hydrocarbon operations within the boundaries of the sanctuaries has caused controversy. Specifically, certain organizations and individuals are concerned that the hydrocarbon prohibition represents an unreasonable barrier to energy development on the OCS. Others fear that allowing hydrocarbon operations within the sanctuaries would expose the distinctive features of the sanctuaries (e.g., marine mammals, reefs, historic artifacts) to unwarranted dangers.

This paper is intended to address one aspect of the controversy by examining the scope of the marine sanctuary program relative to the OCS in general and the OCS oil and gas leasing program in particular.

THE AREA OF OUTER CONTINENTAL SHELF

The Outer Continental Shelf has been estimated to have an area equivalent to one-third that of the United States (House Report No. 95-510, Aug. 29, 1977, p. 65). The area of the United States is 3,615,123 square miles (Hammond World Atlas, 1977, p. 189). One third of this area is 1,205,041 square miles or 771,228,240 acres. Since this is an approximation, the figure has been rounded for the purposes of this report to 770 million acres.

As used here, the term Outer Continental Shelf means the submerged area between the outer edge of state waters and the break between the continental shelf and the continental slope. This is generally consistent with common usage. It specifically does not include the areas of the continental slope or the deep seabed. Neither does it include the continental shelf lands under the jurisdiction of the states.

MARINE SANCTUARIES

To date, six marine sanctuaries have been proposed for designation. These six sanctuaries cover a total area of 1,965,026 acres, of which 1,097,340 acres were closed to hydrocarbon operations before the sanctuaries were proposed. Some of the remaining area, 846,160 acres, represents the area which will be closed to hydrocarbon operations as a result of the designations. Table I summarizes this data.

TABLE I.—AREA OF MARINE SANCTUARIES

Name of sanctuary	Total acreage ¹	Acreage closed to oil and gas development	
		Prior to designation	Due to designation
Channel Islands.....	1,057,940	249,000	608,940
Point Reyes-Farallon.....	801,060	563,840	237,220
Key Largo.....	84,500	84,500	0
Gray's Reef ²	14,365	0	0
Loose Key ³	4,495	0	0
Monitor ⁴	666	0	0
Total.....	1,963,026	1,097,340	846,160

¹ Source: Department of Commerce, Office of Coastal Zone Management.

² Derived from estimates of John Cassell, Senior Staff Geologist for Chevron USA, Inc.—Declaration of John Cassell supporting motion for preliminary injunction, "Western Oil & Gas Association v. Frank," Docket No. 80-03038 TJH (TX), (U.S. District Court, Central District of California, filed July 11, 1980) (area within State waters).

³ Derived from estimates of D. T. Magee, vice president, Western Region, Chevron USA, Inc.—Letter Comments on Draft Environmental Impact Statement for Proposed Point Reyes-Farallon Islands Marine Sanctuary, May 14, 1980, Final Environmental Impact Statement for Proposed Point Reyes-Farallon Islands Marine Sanctuary, vol. 2, no page (area within State waters plus area excluded from hydrocarbon development by sec. 206(2)(h) for the Outer Continental Shelf Lands Act Amendment of 1978, Public Law 95-372).

⁴ This area was withdrawn from consideration for future oil and gas leasing by the Department of Interior

⁵ These sanctuaries impose no prohibitions on hydrocarbon operations.

OCS OIL AND GAS LEASING

The areas involved in the OCS oil and gas leasing program are set out in Table II. This table covers all leasing from the inception of the program in 1954 through the most recent sale, Number 62, on November 18, 1980.

During this period, fifty-one sales have been held. Bids were received on over 53% of the acreage offered, resulting in the leasing of almost 47% of the offered acreage (some high bids were rejected or otherwise failed to result in leases). Stated in other terms, despite the opportunity to develop over 38 million acres of the OCS for oil and gas, the oil and gas companies chose to actively pursue only 53.33% of that area. The remainder of the areas offered for bidding were rejected.

Seven sales are scheduled for 1981. These seven are:

No. 53, offshore California, to be held in May.

No. RSI, reoffering tracts from No. 55, to be held in June.

No. A66, offshore Gulf of Mexico, to be held in July.

No. 56, offshore South Atlantic, to be held in August.

No. 60, offshore Alaska (Cook Inlet), to be held in September.

No. 66, offshore Gulf of Mexico, to be held in October.

No. 59, offshore Mid-Atlantic, to be held in December.

These sales will significantly increase the acreage offered, bid on, and leased under the OCS oil and gas leasing program.

TABLE II.—TOTAL AREA OF OCS OIL AND GAS LEASE SALES—OCT. 13, 1954—MAR. 12, 1981

	Area offered in acres	Area bid on in acres	Area leased in acres
	38,025,095	20,290,385	17,734,710
Percent of area offered.....	100	53.36	46.64

Source: U.S. Department of the Interior, Bureau of Land Management, New Orleans Office, Outer Continental Shelf Statistical Summary 1954-72, 1973-75, 1976-78, 1979-81; U.S. Department of the Interior, Bureau of Land Management, New Orleans, OCS Office, Sale-Specific Data Series 1, No. 1, Dec. 17, 1980.

DISCUSSION

The Outer Continental Shelf is a huge area, only a very small part of which has been offered for leasing for oil and gas development. A much smaller area yet has been proposed for designation as marine sanctuaries. Table III illustrates the relationship between the total area of the designated marine sanctuaries and the total area of the OCS. This table also shows the relationship between the area of the sanctuaries and the areas offered, bid on, and leased for oil and gas development in the OCS.

Just one-fourth of one percent of the OCS has been covered by proposed marine sanctuary designations. The equivalent of just over five percent of the area offered for oil and gas development has been proposed for designation as marine sanctuaries. This figure is equivalent to less than one-eighth of the acreage offered for oil and gas development and subsequently rejected by the oil and gas companies.

These very small areas proposed for marine sanctuaries, as the figures show, are insignificant when viewed within the context of the total OCS and the OCS oil and gas leasing program. Moreover, as the oil and gas leasing programs progress, the significance of the marine sanctuaries within that particular context will decline and continue to do so. For example, during the remainder of 1981, seven lease sales are scheduled to occur. Two of these sales, number 66 and A66, may result in the offering of a total of 1,979,794 acres, an area larger than the combined areas of all the designated marine sanctuaries.

Table IV presents similar data but there are the following differences: (1) the table excludes the areas closed to hydrocarbon development by other authorities or not subject to hydrocarbon prohibitions at all, and (2) it relates the area to be closed to oil and gas development solely as a result of the designations (the net area of the marine sanctuaries as opposed to the total area to the other key OCS indicators). Significantly, the net area of the sanctuaries represents only eleven one-hundredths of one percent of the total OCS and the equivalent of less than two and one-half percent of the total area offered in oil and gas sales on the OCS. Stated another way, nearly forty-four times as much acreage has been offered for oil and gas development to date would be closed to oil and gas development by the proposed designations.

As these figures show, the marine sanctuary program and the designated sanctuaries affects only the tiniest part of the OCS and its potential for oil and gas production.

TABLE III.—TOTAL AREA OF MARINE SANCTUARIES COMPARED TO OTHER OCS INDICATORS

Indicator	Ratio of total area of sanctuaries to other OCS indicators
Total of OCS.....	0.0025
Total area offered in O. & G. sales.....	.0516
Total area bid on in O. & G. sales.....	.0567
Total area leased in O. & G. sales.....	.1107

TABLE IV.—AREA OF MARINE SANCTUARIES CLOSED TO HYDROCARBON OPERATIONS COMPARED TO OTHER OCS INDICATORS

Indicator	Ratio of net area of sanctuaries to other key indicators
Total area of OCS.....	0.0011
Total area offered in O. & G. sales.....	.0222
Total area bid on in O. & G. sales.....	.0417
Total area leased on in O. & G. sales.....	.0477

APPENDIX B.—A PRELIMINARY ASSESSMENT OF OCS DRILLING CAPABILITIES

Since 1954, fifty-one OCS oil and gas lease sales have been held. In these sales, 38,025,095 acres of OCS lands have been offered for leasing, and 20,290,385 acres (53.33 percent) have been bid upon by oil companies. The fact that only slightly more than half the acreage offered has been bid upon has raised questions concerning the diligence of the oil companies in pursuing the development of the oil and gas resources on the OCS.

The issue of diligence may be approached in a number of ways. One method is that presented above, analyzing the acreage bid upon versus the acreage leased or offered. The figures suggest that despite the opening of over 38 million acres of the OCS, the oil and gas companies choose to actively pursue only slightly more than 20 million acres.

Moreover, since the oil companies have had the opportunity to provide input to the Bureau of Land Management (BLM) on which tracts are of leasing interest, the record of the oil companies in pursuing the offered tracts is further questioned. Presumably, the input to the tract selection process has worked to help ensure that the more desirable tracts would be offered for leasing. Despite this, over 47 percent of the tracts offered were not bid upon.

ANOTHER METHOD

A second method of examining the diligence of the oil companies in developing the OCS lands is to analyze the rate of exploratory drilling on leased tracts. The Department of Energy (DOE) has analyzed exploratory activity and found that from 1954 to 1973, approximately 74 percent of all tracts leased were drilled. General Accounting Office (GAO) data for 1970 to 1974 in the Gulf of Mexico showed that of 878 leases issued, 79 percent have been drilled, and 21 percent (184 tracts) have not. (Tracts leased in that period and not drilled have reverted to the government and consequently will not be drilled unless they are reoffered for leasing.) These rates of drilling have been characterized by the DOE and GAO as "diligent" but this is open to interpretation.

A closely related method of determining diligence is to examine the time from lease date to first well. In the early years of OCS leasing, this period averaged over five years. By 1969-1973, this period declined to 8.6 months on the average, meaning that most tracts were drilled during their first year after leasing. In recent years there has been an actual decline in the percent of leases drilled during the first year after leasing. The GAO has noted that the percent drilled during the first year dropped from 45 in 1977 to 31 in 1979, and concluded that factors such as the availability of drilling rigs have contributed to the decline. The table below is a reproduction of GAO's data.

LEASES DRILLED DURING 1ST LEASE YEAR, 1977-79

Year	Leases issued	Leases drilled in 1st lease year	Percentage
1977.....	162	73	45
1978.....	89	36	40
1979.....	217	67	31

Source: GAO Report No. EMD-81-48, p. 47 (Feb. 27 1981).

Oil industry reports show that a variety of factors are constraining the ability of the industry to fully explore and develop tracts already under lease. For example, Shell Oil Company reported that it could not find a mobile offshore rig recently (Oil & Gas Journal, October 20, 1980, p. 95). The rig shortage is seriously delaying the evaluation of Gulf of Mexico acreage leased in three sales in late 1978 and 1979 (*Id.*) Two hundred and fifty-two tracts were leased in those sales, with four more sales scheduled for the Gulf in the next 17 months. The strain on rigs may be expected to continue indefinitely, despite planned expansion of the mobile offshore rig fleet (Oil & Gas Journal, September 15, 1980, p. 138). The strain will be exacerbated by an acceleration of offshore leasing.

As of January 1, 1981, there were 252 mobile offshore drilling rigs in U.S. waters (Hughes Tool Company Rig Count). Of these, 228 were in the Gulf of Mexico, 21 were offshore California, one offshore Alaska, and two offshore Rhode Island. The Oil & Gas Journal reported that the offshore rigs are fully utilized, and that the planned expansion of the offshore rig fleet will do little to ease the shortage (Oil & Gas Journal, September 15, 1980, p. 138).

Industry sources indicate that if the rate of expansion of the rig fleet is immediately accelerated, it will have no effect before late 1983 at the earliest. Shipyards are presently producing rigs at capacity and could not materially increase their output. Offshore jack-up rigs ordered today could not be delivered before late 1983. Semi-submersibles would take slightly longer.

OTHER CONSTRAINTS

Further clouding the outlook for rig fleet expansion is the need for capital. Offshore rigs represent major investments, with prices running from \$30 million to \$50 million for jack-ups (averaging around \$40 million) and \$50 million to \$100 million for semi-submersibles (\$75 million average). Global Marine, Inc. (Glomar), for example, one of the most important offshore drilling firms, recently ordered a \$90 million semi-submersible and a \$45 million jack-up as part of its planned \$2 billion five year fleet expansion program (Oil & Gas Journal, January 26, 1981, p. 105). The large capital demands for these rigs tend to preclude an increase in capital outlay given that rig operators are already expanding their fleets at the highest financially prudent rates.

PERSONNEL SHORTAGES

An additional problem facing the oil companies is a shortage of qualified personnel. Industry sources state that while crews for rigs are able to be assembled, they lack experience. This lack of experience causes problems with equipment, deteriorating it more quickly and causing more breakdowns. Lack of skilled mechanics causes repairs to the equipment to be delayed or not done properly.

Many firms are establishing training programs to lessen their personnel problems. According to its 1979 annual report, Glomar's training and recruiting program cost \$2 million. Other firms are undertaking similar efforts, but some complain that as soon as an employee is trained, another company attempts to hire him away (Oil & Gas Journal, October 20, 1980, p. 97).

Personnel shortages exist at all levels in the oil industry and are getting worse (Oil & Gas Journal, December 15, 1980, p. 27). Companies are having difficulty locating engineers, geologists, geophysicists, landmen, and others. Salaries, bonuses, benefits, and perquisites are all getting higher as companies compete for qualified professionals. There are no signs the competition will lessen in the foreseeable future.

EQUIPMENT AND SUPPLY SHORTAGES

Other shortages further constrain the expansion of the offshore oil industry. Equipment and supplies are in high demand, with shortages becoming acute at times. High grade drilling pipe is in particularly tight supply, with lead times for special orders approaching a year. U.S. steel mills don't have the capacity to meet the demand, and the capital costs of expansion, coupled with the financial conditions of the U.S. steel industry, precludes significant increases in production capacity (Oil & Gas Journal, October 20, 1980, p. 95). Industry observers see the shortage getting worse over the next ten years.

Additional shortages exist in a variety of equipment and supplies such as drilling mud and cement, swivel joints, tees, blowout preventers, bits, and drill collars. The shortages of equipment are so severe that a ready market has developed for stolen equipment, with the annual loss to theft victims approaching \$1 billion (Oil Daily, March 17, 1981, p. 1).

CONCLUSION

Thus, capital expenses, rig shortages, personnel shortages, and equipment and supplies shortages constrain the expansion of the offshore oil industry. Drilling in U.S. waters occurs in competition with offshore efforts undertaken overseas, particularly in Asia, as well as with onshore drilling. Prudent development of the U.S. OCS is therefore dictated by both shortages in necessary inputs and by the need to avoid the type of crash which decimated the U.S. drilling industry when oil companies transferred their attention to foreign sources of crude oil. The industry does not have the capacity to handle the areas currently under lease, much less those areas which are slated for leasing in the coming years. Increasing the amount of OCS acreage to be offered would only serve to exacerbate the existing problems. It would not get more U.S. oil out of the ground and into the hands of U.S. consumers.

[The following information was subsequently received for the record:]

QUESTIONS OF THE COMMITTEE AND THE ANSWERS THERETO

Question 1. One criticism which has been offered of the Marine Sanctuary Program is that is used as a means of excluding or regulating oil and gas activities. Is this true? If not, why not?

Answer. Title III of the Marine Protection, Research and Sanctuaries Act gives the Secretary of Commerce the authority to identify special marine areas and designates certain ones as marine sanctuaries. Section 302(f) (2) directs the Secretary of Commerce to "issue necessary and reasonable regulations to implement the terms of the designation and control the activities described in it . . ." In certain cases, oil and gas activities may be found to have adverse effects on significant resources within a proposed sanctuary. In such cases, reasonable regulations may be proposed to minimize potential adverse effects of oil and gas activities. Of the six designated National Marine Sanctuaries, only two have contained provisions regulating oil and gas activities (Channel Islands and Point Reyes-Farallon Islands Sanctuaries) and the oil and gas provisions in both of these are currently under review. Since these proposed prohibitions represent only a very small portion of the total OCS available for leasing, the impact of the National Marine Sanctuary Program on oil and gas development has been negligible.

Question 2. Certain critics of the program have charged that it is duplicative of existing laws which already provide ample environmental safeguards, such as the Outer Continental Shelf Lands Act Amendments. Recently, studies by both the Congressional Research Service and the General Accounting Office have disputed this. Please comment.

Answer. Both studies conclude that Title III has a legitimate and important role to play in the overall picture of marine resource development and conservation. The CRS report concluded that although there was some overlap with other Federal laws designed to protect the environment, the marine sanctuary program offered environmental protection benefits "not directly achievable through other Federal statutory authorities." The GAO report concluded that the Program:

Provides comprehensive regulation, planning, and management (within the limits of international law) to assure long-term preservation of all the resources that require protection;

Provides environmental protection where gaps exist in the coverage provided by other laws; and

Encourages and supports research and assessment of the condition of sanctuary resources and provides an educational and informational service to promote public appreciation of their value and wise use.

GAO finds that the "benefits make the program useful in protecting designated sanctuaries."

Question 3. Regulations for the two California marine sanctuaries, Channel Islands and Point Reyes-Farallon Islands, originally carried prohibitions for hydrocarbon activities. These specific prohibitions have just been suspended by OMB and a 30-day comment period opened up.

If the prohibitions were considered necessary a few months ago, why are they being questioned now? Do you have any new substantive information?

Answer. The regulations prohibiting oil and gas development in the two approved California sanctuaries were suspended pursuant to the Administration's Executive Order 12291. NOAA will be conducting a regulatory impact analysis to determine if any new substantive information exists which may warrant reconsideration of the necessity for the prohibitions and to determine if the regulations are consistent with the Administration's policies toward energy development.

Question 4. Given the problems that have developed over the regulations governing the two California marine sanctuaries, will you propose an area for sanctuary designation again that would impact oil and gas activities?

Answer. It is possible that an area containing a wealth of natural resources, which includes oil and gas, will be considered for marine sanctuary status in the future. If so NOAA will, as a part of its normal consultation process, consult with the Department of the Interior, Department of Energy and other appropriate agencies to determine the extent to which sanctuary designation or regulations should address oil and gas activities.

Question 5. What kind of relations does the marine sanctuary program enjoy with State and local governments, and private interest groups? How thorough is your effort to consult with all affected parties regarding a proposed sanctuary or sanctuary regulation?

Answer. The National Marine Sanctuary Program has exceptionally good relations with State and local governments. Florida and California, States with two sanctuaries each, are very supportive of the Program and have testified to Congressional Committees on its behalf on several occasions. State agencies have nominated several of the sanctuaries and six have been supported by the State Governors. The California sites, in particular, have received wide county and municipal government support. Where applicable, States (California, Massachusetts, Virgin Islands, and Puerto Rico) nominations have included the territorial sea within the sanctuary.

State agencies are involved in the onsite administration and management of all six sanctuaries. The Marine Sanctuary Program staff works closely with the Florida Department of Natural Resources (DNR) in managing the Key Largo and Looe Key Sanctuaries. Sanctuary staff members also have a long standing working relationship with the California Resources Agency and particularly the California Coastal Commission. The Sanctuary staff works closely with the Georgia DNR in managing Gray's Reef and the North Carolina DNR in managing the MONITOR Marine Sanctuary. Local governments were consulted throughout these designations through personal contacts, workshops, mailings, and public hearings. State and local government input is also being sought on existing sanctuary proposals, such as those at Monterey Bay, Puerto Rico, and Virgin Islands; we are working together to develop appropriate management schemes.

Private interest groups are consulted in generally the same manner as government agencies (see following description). The majority of involved private interest groups are supportive of Title III, although certain groups may oppose a specific sanctuary proposal or its terms. The fact that an average of 18 months is required for sanctuary designation is a direct result of the extensive consultation procedures followed by NOAA.

The Marine Sanctuary Program solicits government and public input at each step in the designation process. Before selecting any site for further evaluation

as an active candidate, NOAA seeks preliminary consultation with the public and government agencies to obtain information on the site and activities within the area (existing and proposed), how the site meets the selection criteria, and recommended management framework. Local, state, national and, where appropriate, international input is sought. To aid in this process, NOAA prepares a written evaluation of the site and how it meets the selection criteria; this evaluation is provided to the public for review. Based on the results of preliminary consultation, NOAA determines whether to select the site as an active candidate and thus proceed with a particular sanctuary. Notice of this determination is published in the Federal Register. If a decision is made not to proceed, reasons are specified in the notice. If a decision is made to proceed, the preparation of a draft environmental impact statement (DEIS) begins and a notice of intent to publish a DEIS is published in the Federal Register.

The DEIS discusses in detail the existing resources within the area, existing and potential activities, a comprehensive management scheme, and the environmental consequences of alternative boundaries and management measures, including any necessary regulations. Consultation with the public and government agencies is sought throughout the development process. As part of the DEIS process, a regional scoping meeting is held in the area near the proposed site to solicit public and government input on the significant issues related to the proposed action. Scoping meetings are held with Federal agencies to solicit their views, as required by NEPA regulations. When appropriate, NOAA provides funds to eligible parties to ensure their participation in the EIS process, particularly in the public hearings.

When the DEIS is completed, notice of its availability is published in the Federal Register. The notice includes the full text of the proposed Designation Document and draft Management Plan. No sooner than 30 days after the availability notice appears in the Federal Register, a formal public hearing is to be held in an area near the nominated site. The public hearing provides a forum in which all interested parties can present their views on the adequacy of the DEIS, the proposed Management Plan, and any necessary regulations. Written comments on the DEIS are accepted for 60 days from the date of the notice. After the close of the comment period, a final environmental impact statement (FEIS) is prepared, and distributed for final comment. Specifically, final consultation is sought with the Departments of State, Defense, the Interior, Transportation, the Environmental Protection Agency, and the heads of other interested Federal agencies. If the proposed sanctuary includes waters lying within the territorial limits of any state, officials of the state are consulted.

After the consultation on the FEIS, the Secretary of Commerce, upon approval of the President, designates the area as a national marine sanctuary. The designation becomes effective unless: (1) within 60 days of publication of the designation in the Federal Register, the Governor of any state with waters lying in the sanctuary certifies that the designation or any of its terms is unacceptable or (2) both Houses of Congress adopt a Concurrent Resolution within the first 60 calendar days of continuous session after publication of the designation that disapproves the designation or any of its terms.

Question 6. How many marine sanctuaries do you propose to have in the end, and what will be the projected cost for maintaining this system?

Answer. The final national marine sanctuary system will consist of fewer than 40 sites. The actual size will depend upon the number of available qualified sites as well as fiscal constraints. The sites will be designated on an average of two per year.

Currently, NOAA budgets an average of \$250 thousand per year per site during the first 2-3 years after designation. Approximately \$100 thousand of this is allocated to research, assessment and monitoring. After the first few years, this figure may decrease to about \$25-\$50 thousand per site depending upon information needs.

Question 7. Serious questions have been raised about the nomination process, specifically, the open-ended manner in which areas may be nominated. How are you proposing to change this system? Will you eliminate the List of Recommended Areas?

Answer. The National Marine Sanctuary Program is proposing to eliminate the present List of Recommended Areas (LRA) and establish a clearer procedure including more precise criteria for selecting areas and choosing Active Candidates for designation consideration.

The LRA is a list of all recommended sites which have met minimal screening criteria. Under present regulations, listing on the LRA is a prerequisite for sanctuary designation but does not imply that designation will ever occur.

The LRA was established as a means of advising the public at large of what sites had been recommended, and of soliciting information on those sites. Nevertheless, since its inception the LRA has caused substantial confusion and concern over the status of areas on the list, the likelihood of further action on the sites, and the overall emphasis of the program. Even though the vast majority of the listed areas will never become active candidates, the LRA is often perceived as the blueprint for the sanctuary program. This led to concern over the future size of the program, particularly since recommendations are placed on the LRA as submitted to NOAA—in some instances sites on the list cover thousands of square nautical miles of Outer Continental Shelf waters.

The LRA has resulted in unnecessary controversy and has left an open door for nominations which, although marginally acceptable, are on balance inappropriate for further consideration. Accordingly, NOAA is proposing to eliminate the LRA.

NOAA is proposing to initiate a rigorous procedure for the identification of sites suitable for active candidacy using regional resource teams. By actively seeking appropriate sites based upon sound resource data and early public input through a network of regional resource evaluation teams, unrealistic nominations and those which fail to advance the goals of the marine sanctuary program will be eliminated.

NOAA will provide the regional resource evaluation teams with clear site selection criteria that will assure that rigorous analysis results in recommendation of only those sites with exceptional resource values. This process will assure that the pool of sites is composed only of high quality areas with a good chance of designation.

Question 8. Is the kind of management program you have developed for marine sanctuaries in keeping with the legislative history of the Act? Please explain why this may be so.

Answer. A comprehensive management program will be developed for each sanctuary which includes a long-term research and assessment program, on-site administration, surveillance and enforcement, an education and interpretive plan, and regulations if necessary. The Program's management system is derived from Title III of the Marine Protection, Research, and Sanctuaries Act. Title III authorizes the Secretary of Commerce with Presidential approval to designate ocean waters as national marine sanctuaries where necessary to protect their conservation, recreational, ecological, or esthetic values. National marine sanctuaries may be designated as far seaward as the outer edge of the continental shelf, in coastal waters where the tide ebbs and flows, or in the Great Lakes and their connecting waters. After designation, the Secretary of Commerce has the power to promulgate "necessary and reasonable regulations to implement the terms of the designation and control the activities described in it" (16 U.S.C. 1432(f)(2)). The Act also requires that the Secretary shall "conduct such research as is necessary to carry out" the Act and "conduct such enforcement activities as are necessary and reasonable" to carry out the Act, 16 U.S.C. 1432(f)(3) and (4).

The Act and its legislative history clearly indicate that the Program was designed to protect significant marine areas. While a key concept of the Program is the protection of identified areas, the Program is not intended to prohibit all uses, but rather to protect the recognized values of the site and emphasize their various human uses. In striking the balance between resource protection and use of the ocean, some type of management system is needed to ensure the desired protection and maximize public use. Where regulations are unnecessary, management techniques and policies can be applied to ensure that the resources are protected. Education regarding resource values and wise use is one of the most effective means of insuring the long-term protection which is mandated by the Act. In other situations, regulations may be developed to control various activities or protect certain areas or resources. The Management Plan ensures that certain areas are identified for specialized protection; that public benefits in terms of research, educational, and interpretive programs are emphasized; that necessary research and assessment programs are funded; and that certain activities, as needed, are controlled.

The CHAIRMAN. Now, if we can take Mr. Jackson and Mr. Fritschie. Good afternoon, gentlemen. Sorry to have kept you waiting. I hope we can finish your testimony before we have another vote.

STATEMENTS OF J. R. JACKSON, JR., MANAGER OF EXPLORATION, REGULATORY AFFAIRS, EXXON CO., U.S.A.; AND GUSTAVE FRITSCHIE, DIRECTOR OF GOVERNMENT RELATIONS, NATIONAL FISHERIES INSTITUTE, INC.

Mr. JACKSON. Good afternoon, Mr. Chairman. I am manager of exploration, regulatory affairs, for Exxon Co., U.S.A., out of Houston.

My statement today is presented on behalf of the American Petroleum Institute, a national trade association representing some 350 companies and 7,000 individuals engaged in all sectors of the petroleum industry, including the Outer Continental Shelf oil and gas development.

The petroleum industry supports the basic concept and objective of the marine sanctuaries program as originally conceived by Congress. However, we do not believe the sanctuaries program should be reauthorized if it is to continue to be used as a mechanism for obstructing lease sales and unnecessarily prohibiting or regulating offshore hydrocarbon operations and the use of existing marine transportation corridors. In this regard, we believe that sanctuaries should be limited to discrete areas of unique or significant ecological value which are not already adequately protected by existing Federal and State authorities. In addition, the regulation of activities within and in the vicinity of a designated sanctuary should be limited to that required to adequately protect the marine resource values of concern. Unnecessary prohibitions of activities in such areas should be strictly avoided.

During the past 4 years, considerable controversy has centered around several recommended sanctuaries which have been nominated in direct response to President Carter's environmental message of May 1977. A principal result of this has been to prohibit or severely restrict petroleum development in promising ocean areas scheduled for oil and gas leasing.

While there has been some midcourse correction for sanctuary nominations of inordinate size and political management infeasibility, such as the Georges Bank and Flower Garden Banks sanctuary proposals, other sanctuaries were designated by the Carter administration which were very difficult to justify on logical or scientific grounds. Here I am specifically referring to the Channel Islands and Point Reyes/Farallon Islands National Marine Sanctuaries, 1,252 and 948 square nautical miles, respectively.

The regulations implementing both of these sanctuaries effect an absolute prohibition of future hydrocarbon operations even though other economic uses of the oceans are not so severely treated. Categorical exclusions of energy development in such vast ocean areas cannot be justified on any objective criteria. This is especially true given the environmentally safe manner in which oil and gas activities are conducted under programs administered by other agencies of the Federal Government.

The environmental impact statement for the Point Reyes/Farallon Islands sanctuary aptly illustrates our concern with the overreaching administration of the marine sanctuary program by the National Oceanic and Atmospheric Administration's Sanctuary Program Office. Notwithstanding the number and coverage of existing laws and regulations—such as the Clean Water Act, the Endangered Species Act, the Marine Mammal Protection Act, the Fisheries Conservation and Management Act, the Coastal Zone Management Act, and the OCS Lands Act Amendments—NOAA concludes in its environmental impact statement that the:

... extraordinary diversity of natural resources concentrated in the study area warrant additional protection beyond that provided by the present institutional structure. Although certain activities in the area do not threaten resource quality at present they could have more significant impact if and when they intensify. The current multitude of regulatory authorities, most of which have differing mandates in varying jurisdictions, could bring about policy conflicts and, thereby, diminish overall management effectiveness as use pressures mount.

Stated more simply, NOAA has unduly inflated the risk of harm from certain activities which may or may not ever occur, and unilaterally discounted the tiers of protections provided by the myriad of existing regulations. The result is a program of sanctuaries management, out of proportion to the probable or demonstrated risks to the marine environment. This application of the act, we submit, is in conflict with the intent and language of the statute.

Indeed, some Members of Congress anticipated this possible use of the 1972 law during debate on passage of the bill. During House discussion, Congressman Aspinall moved to strike title III—the Sanctuaries Act—because he believed it would impair the mineral leasing program. He stated: “* * * the enactment of this title could result in unnecessarily locking up offshore resources. * * *” Congressman Pelly, a sponsor of the bill, replied: “* * * the fear is groundless. Let me assure the distinguished chairman of the Interior Committee that it has never been our intention to stop the development of these vast resources. * * *” Congressman Dingell, also responding to Congressman Aspinall, said: “* * * this legislation is not * * * going to halt oil drilling.”

Notwithstanding this philosophy, the implementation of the act has become a mechanism for NOAA to halt future oil and gas drilling altogether. An example is the September 22, 1980, designation of the Santa Barbara Channel Islands Marine Sanctuary, where all future oil and gas operations are prohibited on unsold lease tracts. In effect, NOAA is designating “marine wilderness” areas of inordinate size in regions highly favorable for the discovery of hydrocarbon resources.

If huge sanctuaries are deemed appropriate by the administration for withdrawal from mineral-leasing activities, then Congress should be the branch of Government to designate major marine wilderness areas. Given the national interest implications of marine sanctuary designations which carry with them the prohibition of oil and gas activities, we view Congress limited power of disapproval under the present act as far too small a check on agency discretion. Instead, Congress might retain absolute authority for designation of marine sanc-

tuaries of, for example, over 5,000 acres. Such a procedure would require an amendment to section 302 (b) (2) (B).

If your committee is to recommend simple reauthorization of title III, and continued appropriations for the marine sanctuaries program, then we hope you will act favorably on our proposed amendment as well as direct a change in NOAA administration of the program. With respect to the regulation of hydrocarbon operations in large OCS areas, former Interior Secretary Andrus and Secretary Watt have opposed categorical prohibition and/or unnecessary regulation. Instead, they favor the existing permitting system of case-by-case project review which has been adequate for the protection of sensitive marine resources. Additionally, we urge that the sanctuary program office be required to:

Distinguish between alleged threats to the specific marine resources under consideration for protection which are a mere possibility and those threats for which there is a reasonable expectation of occurrence;

As a precondition for designation or prohibition of oil and gas activity, demonstrate that there is a significant risk of harm to the specific marine resources under consideration, taking into account the assimilative capacity of the resources;

Require scientifically derived protective measures only for those impacts which cannot be assimilated. The burden for these measures should be the responsibility of all users and not fall only on one industry. Moreover, performance standards are preferable to specific technology requirements; and

Encourage a high degree of management and protection to specific resources within reasonably limited geographic areas. This approach is much preferred over either lower degrees of management over large areas, or management of competing activities. Under either approach, the boundary of a sanctuary should be no larger than proven necessary for the protection of the resources for which the sanctuary is proposed.

Our industry is anxious to work with Congress and the administration to approach the management of marine sanctuaries with the best experience and technology we can muster.

We note with optimism NOAA's promulgation of a draft program development plan outlining a new course for the sanctuaries program. The apparent new direction identified the program's primary role as a comprehensive, site-specific marine management program, rather than a strictly regulatory program. We think such a positive initiative is much more responsive to the act's legislative history, and will promote more manageable sanctuaries and a broader constituency for the program. We urge your committee to participate in the review and implementation of the program development plan. This oversight would lend some important congressional direction which the marine sanctuaries program has been lacking over the past several years.

We appreciate this opportunity to present the American Petroleum Institute's views and will be pleased to respond to any questions.

Before I complete my statement, I would like to say I'm sorry I did not bring a series of slides along today, because I could have brought you pictures of the tremendous growth of marine organisms and plan forms. I could have brought you pictures of the various mammals sunning themselves on the buoys of our rigs offshore.

And, all in all, we think those would be completely good for our side of this particular issue.

Thank you, sir.

The CHAIRMAN. I have discovered, Mr. Jackson, there are pictures and pictures. And there are myths and myths. I think any of us could find pictures we would want.

I recall, in the early days of the nuclear development, the argument about pouring warmer water into colder water would not have an adverse effect on the fishery resource. And then, I saw the two plants at Dungeness, England, where they were pouring out reasonably warm water, comparatively speaking, into the English Channel, around which the fishing fleets collected, because the fish gathered around the warm water.

Take it for what it's worth. It apparently did not seem at least to hurt the commercial fishing industry in that place.

[The following information was subsequently received for the record:]

QUESTION OF THE COMMITTEE AND THE ANSWER THERETO

Question. Regulations regarding prohibitions on hydrocarbon activity have recently been suspended, an effort that was supported by your industry. One of the sanctuaries affected is Point Reyes-Farallon Islands off California.

The two tracts within the sanctuary which seem to be in question were previously leased but not drilled upon, and the leases expired. The potential hydrocarbon value of the tracts appears to be nominal. Why are you opposed to the prohibition in this case; isn't it feasible to drill from outside the sanctuary boundaries and both determine the extent of the resource and extract the hydrocarbons? Is this just a matter of principle in this case?

Answer. The American Petroleum Institute opposes the prohibition of all future oil and gas operations on unsold lease tracts included in the Point Reyes/Farallon Islands National Marine Sanctuary for the following reasons:

As discussed in API's written statement for the record, adequate regulatory authorities already exist for the effective management of hydrocarbon operations in an environmentally safe manner without an absolute prohibition;

Future OCS sales off the central and northern California coast could include several tracts within the boundary of the new sanctuary. The issue here is not just the two tracts proposed for OCS Sale 53. The issue is that NOAA has failed to provide any scientific evidence that an absolute prohibition within any portion of the sanctuary is necessary and reasonable as the Marine Sanctuary Act requires. The fact that hydrocarbon potential is low lends even more credence to industry's position—i.e. low potential means low risk of significant harm to the environment from drilling in the area. Regarding directional drilling from outside the sanctuary, several thousand acres are involved with the sanctuary designation, not just two tracts for Sale 53. Therefore, directional drilling from tracts adjacent to the sanctuary boundary could determine or reach the resource potential of interior tracts.

For all of these reasons, API continues to oppose the prohibition of hydrocarbon operations within the Point Reyes/Farallon Islands Marine Sanctuary. Our objection is not just a matter of principle.

The CHAIRMAN. Mr. Fritschie?

Mr. FRITSCHIE. Thank you, Mr. Chairman.

I must admit, I appreciate the vote which enabled me to testify before the other body and make it over here on time to be on schedule on your witness list.

I am the director of government relations for the National Fisheries Institute, a trade association representing more than 1,000 member

companies which harvest, process, and distribute fish and seafood products.

During previous consideration of title III by the Congress, the institute has expressed its deep concern with the expansion of the marine sanctuary program, particularly in view of uncertainties surrounding the intent of Congress when the original legislation was adopted. Not only is the legislative history sketchy, but title III provides limited criteria to be evaluated by the Secretary of Commerce in designating such areas. Thus, the decision by the previous administration to place additional emphasis on the marine sanctuary program due to particular concern with the impacts of expanded Outer Continental Shelf oil and gas development gave rise to concerns that a protectionist management philosophy could lead to the regulation of fishing activities within sanctuary boundaries.

Industry's concern with the program was heightened by statements in draft environmental impact documents which called for the creation of a marine sanctuary based on hypothetical policy conflicts which could be brought about by existing regulatory authorities even though activities in the then proposed marine sanctuary area did not threaten resource quality. To many in the seafood industry this rationale for a marine sanctuary designation suggested an intent to utilize the program as a comprehensive ocean use management tool. We would suggest a more narrow focus for the program, a focus which recognized other significant marine resource protection legislation and a focus which restricts the application of the statute to particular instances where existing law and regulations do not provide sufficient protection.

To achieve this tighter focus, the Institute supported in principle Congressman Pritchard's discussion last Congress of an amendment which would predicate a marine sanctuary designation on a secretarial determination that the coordination of existing regulatory authorities will not provide protection for a given area which is commensurate with that available under a sanctuary designation. While this amendment was not formally considered by the House committee, the House committee report did include language expressing the committee's intent that the Secretary in exercising authority under title III, "shall avoid duplicative regulatory authority and additional layers of bureaucracy where existing law and regulations provide sufficient protection."

Unfortunately, this committee admonition, sir, was not headed by the Agency in considering the Looe Key Sanctuary designation. Our concern with that action is not necessarily with the designation of a marine sanctuary but with the inclusion of fisheries as a regulated activity within the designation document and the promulgation of regulations which govern commercial fishing activity in a manner somewhat different than would have been proposed by the appropriate regional fishery management councils. Even though the regulations almost parallel the council's proposed fisheries management plan, it is the opinion of the chairman of the Gulf Council, in a letter to my office, that "the regulation of the marine species should come under the fishery management council."

In view of the existing realization that the Federal budget has definite limitations, it is not appropriate to regulate commercial fishing activities under the marine sanctuary program when millions of dollars are being expended on the development and administration of fishery management plans under the Magnuson Fishery Conservation and Management Act.

In summary Mr. Chairman, the Institute believes that sanctuary designations should be limited to instances where it is not possible to coordinate existing Federal and State statutes, and when it is appropriate to designate a marine sanctuary, regulations should not be promulgated to control commercial fishing activities if such activities can be regulated pursuant to a fishery management plan.

Thank you, Mr. Chairman.

[The following information was subsequently received for the record:]

QUESTION OF THE COMMITTEE AND THE ANSWER THERETO

Question. Some segments of the fishing industry suggest that certain coral reef areas would be better protected under the Fishery Conservation and Management Act and regional fishery management councils, than under the marine sanctuaries program. Yet the GAO report pointed out that while the FCMA can protect coral from threats posed by fishing activities, it cannot provide protection against nonfishing vessel activity such as vessel discharge, pollution, dredging, and the like. Aren't there limits, as the GAO report suggests, to what the FCMA can do to respond to the broader range of ecosystem threats?

Answer. While the MFCMA may not respond to the complete range of ecosystem interactions the Act in conjunction with other Federal and State programs may provide an appropriate management regime. Certainly, fishing activities within a sanctuary should be managed by the regional council established under the MFCMA.

The CHAIRMAN. I might announce to the group that there was an assassination attempt on the President just a few minutes ago, when he was coming out of the Washington Hilton. And five shots were fired. Three people are injured, including Jim Brady, the press secretary, although the President was missed. Shots came from about a distance of 10 feet.

Gus, let me ask you: Do you object to the way the sanctuaries program manages it a comprehensive way the stocks of recreational fisheries within the sanctuary areas?

Mr. FRITSCHIE. The seafood industry's objections have not been with the regulation of recreational fishing activities.

Quite frankly, I have to tell you, sir, I am not totally familiar with the manner in which those fish are regulated.

Our concern has been with the fact that we have an existing entity set up to manage commercial species, and we question the duplication.

The CHAIRMAN. The argument is raised in terms of the management, that the regional fishery management councils manage on a species-by-species basis, rather than on an ecosystem approach that the sanctuary program uses.

Do you want to comment on that difference?

Mr. FRITSCHIE. Yes.

I can see that argument, sir. In the early stages, for example, of the Looe Key debate where not only my institute but the councils

were arguing that the then-pending coral plant and other fishery management plants in the area, including the refishery plant, would provide sufficient protection for that area.

Evidently, as a result of the process, it was felt that the comprehensive regulation or management permitted under the sanctuary designation was more appropriate.

I am not necessarily quarreling with that.

The issue is in coordinating with other parts of NOAA. We think it would have been preferable, since the fishing regulations were very close to what the sanctuary designation document was looking at, to totally maintain the commercial fishing regulations within the council's purview.

It would appear to us that the only time in which the—speaking about waters outside of State boundaries—where a council should not be permitted to exercise the authority would be if it appeared that there was no inclination on the part of the council to move toward a fishery management plan. And thus, you would have a lack of some degree of regulation.

In instances where the councils are moving forward, we would like to see better coordination between the sanctuary managers and the fishery management councils.

The CHAIRMAN. Mr. Jackson, what estimate of petroleum reserves are there in the sanctuaries, and you can use USGS estimates and others, if you want.

Mr. JACKSON. That was asked Standard of California at the House hearings, and it was responded that there were 11.8 million barrels of oil, 17 billion cubic feet of natural gas according to an estimation by the Geological Survey, after some tracts had been deleted. We do not make estimates of that kind, as a general rule, in our company. API does make such estimates.

The CHAIRMAN. That is total reserves they are talking about?

Mr. JACKSON. Those are estimates by the Geological Survey.

The CHAIRMAN. I hear you qualify that. I have read some of the Geological Survey estimates over the past 50 years, where they have frequently underestimated, in fact, consistently underestimated. I'm not holding them in any way negligent or careless. It is difficult to estimate, but if 11 million or even twice that, it is a relatively slight amount of oil, considering our consumption.

Mr. JACKSON. That is correct. The point I would like to make. We do not know how much oil and gas is present there. There is no way of knowing until such time as we drill exploratory wells. That is an extremely complex area geologically. It is faulted. The faulting is thrust faulting in many cases. It is extremely complex, and the only way in which you can actually determine how much oil and gas is present is through the drilling of numerous wells.

The CHAIRMAN. Could you get access to the reserves in the sanctuary from directional drilling out side the boundaries?

Mr. JACKSON. No, sir. We can drill roughly, depending on the depth of the hole, about 1½ miles from a surface location. This boundary would be about 3 miles. We could reach something less than half of the distance into the sanctuary from our directional wells.

The CHAIRMAN. Thank you, gentlemen. Thank you both very much. We appreciate it. Next we will take Dr. Walter Adey, Director of Marine Systems Laboratory, Smithsonian Institution.

STATEMENT OF DR. WALTER H. ADEY, DIRECTOR, MARINE SYSTEMS LABORATORY, SMITHSONIAN INSTITUTION

Dr. ADEY. You have my written statement. It is short. If you have a few minutes to read through it, I would simply like to make a few extemporaneous remarks.

There is probably not a person in the room today who would not ideally accept the concept of the marine sanctuary. The thought of investment in our future, in terms of natural resources, is something that everybody accepts. If there is any problem at all with regard to the establishment of any sanctuaries for that matter, it is a matter of concern over competing interests. This is perhaps a difficult time in terms of the sanctuaries idea, in that we have economic problems, and we are particularly concerned about oil and gas development.

It is easy to think that perhaps the sanctuary program is a luxury that we can perhaps set aside, at least for a time. I would like to make two points before going on. I don't think the marine sanctuary is a luxury at all. It is something that we should have done even as much as several centuries ago. We set aside great national parks in the western part of the country nearly one century ago, and the coastal areas of our country have been in use for many centuries. The coastal sanctuary should have been started long ago, if we were to produce the same protective effect.

It is essential in terms of development of natural resources as well. It is easy to forget about our biological resources. We just had some comment on that area, although I would disagree with those conclusions.

The other side of it is that properly managed, properly established, I don't think there is any real reason for conflict between this sanctuaries concept and development of our natural resources, including oil and gas.

If what we are really trying to do with our sanctuaries program—and this is what I believe we should be doing—is to protect and manage our biota for our future use, our future enjoyment, what have you. It is unlikely that particular sites are really necessary for sanctuaries.

The CHAIRMAN. Say that again. "It is unlikely that" what?

Dr. ADEY. To give you an example, the coasts of our country can be divided up naturally into biogeographic regions. The Subarctic Atlantic zone is a biogeographic region that begins in the southern part of the Gulf of Maine and extends to the east. The biota is more or less consistent over that zone. There are perhaps 50 to 70 sites that could be set aside; a half dozen, perhaps 10, set aside in that area would effectively preserve the biota. There is no particular site that it is necessary for us to establish.

If you're interested, I could go on and comment with regard to the potential Flower Gardens sanctuary and how I foresee the conflict there, which I think is unnecessary. I think the same applies to the

Georges Bank problems. In both cases, there are other suitable sites for marine sanctuaries that could have been established. Also, I think that we can consider a pattern of rotation, if it is subsequently determined in a few cases that there are particular sites that we need to set aside, where they also compete with oil and gas interests. We could set up a rotating drilling program, for instance, where one after the other could be drilled and then returned to sanctuary status.

I see I am running low on time; let me finish up with a summary that would express my feelings for the problem that we are dealing with.

All of us who have a stake in the biological resources of the oceans, and I think that is really all of us, need to be concerned with the establishment of sanctuaries. We are not just dealing with food; we are dealing with a complex of organic chemicals that we are just beginning to derive from organisms. We are dealing with the possibilities of biomass energy. We are also dealing with something very important that we have hardly touched on here, and that is with the concept of aquaculture. The National Aquaculture Act was passed last year, and we are beginning to look to the possibility of management of coastal resources.

If we don't protect our biota, by the time we get around to effective aquaculture, we will have lost a good part of the biota, and we will have lost a good part of the possibility of proper development of aquaculture.

Thank you.

[The statement follows:]

STATEMENT OF WALTER H. ADEY, DIRECTOR, MARINE SYSTEMS LABORATORY,
SMITHSONIAN INSTITUTION

Without making any implications regarding the recreational, esthetic or ethical values of establishing marine and estuarine sanctuaries, I would like to particularly stress the need for sanctuaries for the purpose of protecting and managing our marine resources.

In the future, the biological resources of the sea will certainly play an increasingly important role in the production of food, natural products (particularly complex organic chemicals) and perhaps even biomass energy. Millennia ago we began the process of improving our use of the biological resources of the land, and that has of course led to the miracle of modern farming. However, to a large extent we still carry out the very inefficient and sometimes resource-damaging process of hunting in the sea.

We have barely scratched the surface of aquaculture, particularly in this country, and, with modern approaches to breeding and genetic engineering, the potential is truly enormous. It is not possible to guess at this time which organisms are going to be important to us in the future—indeed, perhaps all of our marine biota has that potential in one way or another. It is essential that we quickly establish a means of protecting this biota.

The oceans and seas form the largest part of the surface of our earth. It is hard to imagine human activity having any long-lasting effect on this mass of water. Yet, we now know that we are introducing changes into the ocean itself. More immediate, however, is the very direct and obvious effects of human activities on our coastal areas. A very large percent of the ocean's species and most of our biological resources are derived from the same narrow band that we so easily influence in a wide variety of ways. Over a century ago when we were thinking of carving national parks out of our western wilderness, our East and Gulf Coasts had been extensively used for fishing, shipping and dumping for two centuries and the West Coast fur traders were rapidly reducing the stocks of sea mammals. On the other hand, to look to the future, it is the very aquaculture that

we must practice which is likely to have the most direct and long-lasting effects on the marine biota. It is plain that if we are to maintain the resource potential of what is by far the most productive part of the ocean, we must look to both resource protection and managed marine farming.

Our coastal biota cannot be protected and managed one organism at a time as obvious problems develop. There is too much complex interaction between organisms and with their environment to generally allow that approach. Our coastal areas must be managed regionally, in terms of biological communities and as functioning ecosystems.

The scientific knowledge exists to establish a rational pattern for maximizing biotic preservation in protected and managed areas. The biogeography, or distributive pattern, of the coastal biota is reasonably well-known and has a theoretical base. The distribution of habitats, and the biological communities that occupy them, is also well-known. Within some limits, area and number requirements for such sanctuaries can be established. Most important, an approach to sanctuary establishment that is based on the regional protection and management of biota probably only rarely needs to be site specific, and the current conflict between the need for oil and gas development and sanctuary establishment may well be unnecessary and is surely undesirable. There may be cogent reasons for establishing protection of specific sites for which development is planned. Hopefully, existing endangered species and other legislation managed through the Bureau of Land Management, the Environmental Protection Agency, and other state and federal agencies can manage protection in those cases. However, conflict of competing interests should not be allowed to damage the critical, large-scale protective and management role of the marine or estuarine sanctuaries program in any way.

The great National Parks of our continent were established long ago. Equivalent coastal sanctuaries should have been established in the 18th century. They were not, and what we must do at this time is somewhat different in function. In any case, we can wait no longer to get on with this long-overdue process, and I urge the support of all of you in continuing and expanding the marine and estuarine sanctuary programs.

The CHAIRMAN. What is your opinion regarding oil and gas drilling in the Channel Island sanctuary? Is it dangerous? Not dangerous? In between?

Dr. ADEY. Since I'm sorry to say, I'm not familiar with that area, I could comment either on the Flower Gardens situation or the George's Bank situation. My feeling in a general sort of way is that it is probably possible to work in both the needs of the sanctuary and the needs of oil, gas drilling in that case. But to come back to the reef situation, Flower Gardens was set aside as a sanctuary, because it is a rather unique site in the Gulf of Mexico, a unique reef site. In fact, there are many better developed reef sites in the Caribbean that are under American control. The Virgin Islands, for example.

If our primary concern is to preserve reef sites, to set them aside for protection and management, we should be working in the Virgin Islands, not in Flower Gardens.

The CHAIRMAN. What would be the effect of terminating the sanctuary program?

Dr. ADEY. The effects are going to be primarily to reduce our loss of species, to reduce the rate at which we lose species. I would think of that as—

The CHAIRMAN. The effect of terminating the sanctuary program.

Dr. ADEY. It would be disastrous. As I said earlier, I think we are several centuries too late in establishing this program. I cannot imagine the thought of terminating the program.

The CHAIRMAN. Thank you.

STATEMENTS OF GARY MAGNUSON, ASSISTANT DIRECTOR FOR RESOURCES, STATE OF CALIFORNIA; ACCOMPANIED BY MICHAEL FISCHER, EXECUTIVE DIRECTOR FOR THE CALIFORNIA COASTAL COMMISSION; AND DR. ELTON GISSENDANER, EXECUTIVE DIRECTOR, FLORIDA DEPARTMENT OF NATURAL RESOURCES

Mr. MAGNUSON. Mr. Packwood, good afternoon. My name is Gary Magnuson. As assistant director for resources of California, Governor Brown's Washington Office, I appreciate the opportunity to appear before you today on behalf of the Governor, in support of legislation to reauthorize title III of the Marine Protection Research and Sanctuaries Act.

Appearing with me today, Mr. Chairman, is Mr. Michael Fisher, executive director for the California Coastal Commission.

At this time, I respectfully request that my prepared statement and attachments be made part of the hearing record.

This statement indicates our support of the national marine sanctuaries program, provides details on the two California marine sanctuaries and presents justifications for the exclusion of hydrocarbon development within such designated sanctuaries.

I will highlight our concerns.

As Mr. Knecht noted, two sanctuaries have been designated offshore of California. Both are unique and nationally significant marine areas which complement adjacent national park or wilderness areas on land. The Santa Barbara-Channel Islands Marine Sanctuary, designated September 21, 1980, surrounds the new Channel Islands National Park. The Point Reyes-Farallon Islands Marine Sanctuary, designated January 16, 1981, ties together a pristine marine area bounded on the landward side by the Point Reyes National Seashore and on the seaward side by the Farallon Islands, a national wildlife refuge.

In the past, a need for the national marine sanctuary program was not apparent in California, as activity around the Santa Barbara Channel Islands and between Point Reyes and the Farallon Islands was relatively sparse, and posed no serious threat to the preservation of either area's marine resources. The remoteness of the islands, generally rough offshore water conditions throughout these areas, and the mainland coast's dominant recreational/wilderness character all discouraged intensive development. But this is changing as coastal access improves, tanker traffic increases from Alaskan oil transshipment, and California OCS lease sales are planned with increasing frequency.

The designations were the culmination of nearly unanimous local government endorsements, widespread public support and active backing of the California congressional delegation, including Senator Cranston, and Governor Brown. The State of California supports the need for the continuation of national marine sanctuaries program, proposed by the administration in its budget for fiscal 1982, and its primary objective of providing comprehensive long-term protection of unique marine environments.

We believe NOAA activities under the program complement other related statutory authorities to offer a total management umbrella to preserve unique marine resource areas.

In the State of California, we enthusiastically look forward to working with NOAA, the National Park Service, and others to provide beneficial public interpretative programs of the sanctuaries.

To this end, we urge the members of the committee to seek adequate funding support for the national marine sanctuaries program.

I will sum up here, Mr. Chairman. The State of California has sought a balance between protecting its distinct and valuable offshore marine resources and the need to develop California OCS oil and gas resources. It has been determined that in order to protect the particularly vulnerable and significant seabird rookeries, marine mammals breeding grounds, commercial sports fisheries, and other resources, regulations to prohibit oil and gas development within the sanctuary boundaries are justified.

It should be emphasized that State will continue to work with the Department of Interior and private enterprise in a safe and beneficial development of the Outer Continental Shelf.

In sum, the State of California supports legislation to reauthorize the marine sanctuary program. As we rely more and more on the Nation's nearshore ocean waters for food, energy, transportation, recreation, and numerous other uses, we must set aside a few representative marine areas to be preserved in their natural state for the enjoyment and education of future generations.

That completes my summary. I am sorry I went over the time limit a little bit. Mr. Fisher and I would be glad to entertain any questions you may have.

[The statement follows:]

STATEMENT OF R. GABY MAGNUSON, ASSISTANT DIRECTOR FOR RESOURCES, STATE OF CALIFORNIA, WASHINGTON OFFICE

INTRODUCTION

On behalf of California Governor Edmund G. Brown, Jr. and the California Coastal Commission, I appreciate the opportunity to appear before you today to present the views of the State of California with respect to the reauthorization of Title III of the Marine Protection, Research, and Sanctuaries Act of 1972 and more specifically, the continuation of the National Marine Sanctuary Program.

The State of California has been working closely with the National Oceanic and Atmospheric Administration (NOAA) to establish marine sanctuaries in three areas offshore of California. The marine sanctuary program offers this State, as well as the rest of the Nation, an opportunity to set aside unique marine areas for the enjoyment and education of future generations, much as the National Park System does on land. No other statute or program has as its primary objective the comprehensive long-term protection of unique marine environments. Therefore, I strongly urge reauthorization of Title III of the Marine Protection Research and Sanctuaries Act of 1972, as amended.

Rather than comment on Title III section by section, I would like to briefly describe the contribution of the National Marine Sanctuary Program to California and to highlight the benefits we feel can be accrued from the continuation of the program. Also included as attachments to my statement are narratives providing details on the marine sanctuary program in California and the issue of excluding future oil and gas development within California's two marine sanctuaries.

As you are aware, two sanctuaries have recently been designated offshore of California. Both are unique and nationally significant marine areas, which complement adjacent National Park or wilderness areas on land. The Santa Barbara Channel Islands Marine Sanctuary, designated September 21, 1980, surrounds the new Channel Islands National Park. The Point Reyes-Farallon Islands Marine Sanctuary, designated January 16, 1981, ties together a pristine marine area

bounded on the landward side by the Pt. Reyes National Seashore and on the seaward side by the Farallon Islands, a National Wildlife Refuge.

Widespread public support for designation resulted not only from recognition of the need to set aside and comprehensively manage these ocean areas, but also as a result of NOAA's exemplary outreach program for public and agency participation in the designation process during the past three years. Two issues which were raised very early in the designation process were need for the program and cost. Initial concern that the program might duplicate existing Federal programs was dispelled by findings on the part of several State agencies which found no other Federal or State program or statute which provided both for comprehensive management and long-term protection of a geographically-specific marine area. Such findings were recently substantiated by a report issued by the United States General Accounting Office (GAO-CED-81-37), which concluded that "although Title III of the Marine Protection, Research, and Sanctuaries Act overlaps to some extent with these other laws, it complements their authority by offering environmental protection benefits not provided under such laws."

It has become clear that the multiple agency approach to regulation is inadequate as development pressures build. No agency now coordinates the diverse permitting and regulatory authorities of the many agencies which have some responsibility in these areas. In addition, funds for enforcement of existing regulations are inadequate. A major benefit of the marine sanctuary program is the coordination of the various regulatory authorities and additional funds for enforcement.

This directly relates to the cost of the program, which will be minimal as a direct result of reliance on existing regulatory agencies for management and enforcement, with a coordinator role performed by a single sanctuary manager to avoid unnecessary duplication of responsibility.

In the past, the need for the National Marine Sanctuary Program was not apparent in California as activity around the Santa Barbara Channel Islands and between Pt. Reyes and the Farallons was relatively sparse and posed no serious threat to the preservation of either area's marine resources. The remoteness of the Islands, the generally rough offshore water conditions throughout these areas and the mainland coast's dominant recreational/wilderness character all discouraged intensive development. But this is changing as coastal access improves, tanker traffic increases from Alaskan oil transshipment, and California OCS lease sales are planned with increasing frequency.

The California coastline is visited each year by people of the State, the Nation, and numerous other countries, as well. Their interest in the marine environment is evidenced by severely overburdened recreational and interpretive facilities which allow them access to, and inform them about marine life. The need for additional interpretive facilities is particularly acute in the area encompassed by the proposed Monterey-Big Sur Marine Sanctuary. Each day the California Department of Parks and Recreation has to turn away visitors from its Point Lobos Underwater Park and from its facility at Ano Nuevo Island which allows the public to observe breeding colonies of seals and sea lions.

It is our sincere hope that reauthorization of Title III will result in adequate funding support for NOAA to continue its exemplary public outreach program in the development of management and interpretive programs for the Channel Islands and Point Reyes-Farallons National Marine Sanctuaries.

The State of California is blessed with unique, sensitive, and bountiful marine resources within its ocean waters including sea otters, seals and sea lions, six pinniped species listed as endangered or threatened under provisions of the Endangered Species Act of 1973, the endangered blue fin and humpback whales, and the endangered brown pelican. The marine sanctuary program for California has been a success, not only because it has obvious benefits to the state's resource management and protection programs, but also because of the opportunity it has provided for positive public action in behalf of resource protection.

In sum, the State of California supports legislation to reauthorize the marine sanctuary program. As we rely more and more on the Nation's nearshore ocean waters for food, energy, transportation, recreation and numerous other uses, we must set aside a few representative marine areas to be preserved in their natural state for the enjoyment and education of future generations.

ATTACHMENT 1.—THE MARINE SANCTUARY PROGRAM IN CALIFORNIA

In his 1977 Environmental Message to Congress, President Carter included reference to the Marine Sanctuaries Program. He stated that "Existing legislation allows the Secretary of Commerce to protect certain estuarine and ocean resources from the ill effects of development. I am, therefore, instructing the Secretary of Commerce to identify possible sanctuaries in areas where development appears imminent."

The program was thus billed as general compensation to the coastal states for the increasing industrial development occurring off their coastline, especially offshore oil development. This gave impetus to the program which had been dormant since its inception in 1972 with the passage of the Marine Protection, Research and Sanctuaries Act. OCZM was delegated the responsibility for administering the program for NOAA, and with a fresh directive from the President, they proceeded rapidly to develop an extensive list of suitable candidate sites.

The State became involved in late 1977 when OCZM requested nominations of suitable sites from all interested parties. In response, State agency staff members developed a list of ten candidate sites using criteria developed by OCZM. The California Coastal Commission staff submitted the list to NOAA on behalf of the Resources Agency. After analyzing the merits of the numerous sites recommended by Federal and State agencies, local authorities and private interests, five sites were selected by NOAA for further study. In order to solicit early public response to the program and gather information about the sites, NOAA held workshops in April 1978 jointly with the California Coastal Commission to consider possible sanctuaries offshore San Diego, Tanner and Cortes Banks, the Santa Barbara Channel and Islands, Monterey Bay, and Point Reyes/Farallon Island. After the workshops were held, NOAA gathered and analyzed the data on each of the sites, with the objective of distributing a White Paper on five sites. The White Papers were intended to stimulate further discussion and public comment on the desirability of marine sanctuaries at these various sites, after which the feasibility of each site would be reviewed.

NOAA's experience with the White Paper on the Flower Garden Banks offshore Louisiana and Texas in the summer of 1978 dictated a change in approach. The White Paper was too detailed in its description of possible regulations without including the necessary supporting information, which would be equivalent to that of a Draft Environmental Impact Statement.

NOAA therefore decided that the first formal document on a possible marine sanctuary site should be a DEIS. However, the State requested written materials describing the candidate areas and a range of alternative regulatory approaches upon which the California Coastal Commission could hold public hearings.

In December 1978, NOAA published an Issue Paper on Possible California Marine Sanctuary Sites. This was the culmination of a long series of communications between the Coastal Commission, as state lead agency for the marine sanctuary program, the NOAA's Office of Coastal Zone Management. The NOAA issue paper, which was sent to over 2,000 interested parties, responded to California's request for early public and state participation in the process for marine sanctuary site selection and designation.

The three areas selected by NOAA as active marine sanctuary candidates were the waters around the northern Channel Islands and Santa Barbara Island; the Point Reyes/Farallon Island area; and the Monterey Bay area. After March and April public hearings on the NOAA Issue Paper in 1979, the Coastal Commission, as State lead agency for the program, recommended that NOAA proceed with the designation process by preparing a DEIS for all three candidate areas.

THE SANTA BARBARA CHANNEL ISLANDS MARINE SANCTUARY

In their formal recommendation to NOAA to proceed with designation in three offshore areas, the Coastal Commission urged that the Channel Islands candidate be given priority because the Interior Department was considering leasing tracts around the Islands for oil and gas development in Outer Continental Shelf (OCS) Lease Sale #48. The State of California, which had consistently recommended against leasing of tracts adjacent to the Channel Islands, wanted the D.O.I. to be aware of the states continuing interest in setting aside these areas for their recreational and wildlife values.

In June 1979 NOAA held informal public meetings in Santa Barbara and Ventura, California, to discuss preliminary drafts of certain chapters of the DEIS on the Channel Islands site. Strong public sentiment against the industrialization of the waters surrounding the Islands came out of these meetings. On the basis of public testimony and research conducted for the DEIS, both NOAA and the State requested deletion of tracts immediately around the Northern Channel Islands. Secretary of the Interior Andrus deleted 24 tracts around the Islands from the sale in recognition of strong public support for the proposed Marine Sanctuary.

In November 1979, NOAA issued proposed regulations and the DEIS for public review. NOAA held public hearings on the DEIS in Ventura and Santa Barbara on January 10 and January 11, 1980, and accepted written comments until January 23. The comment period was extended to February 4, 1980, and again to March 7, 1980, to assure receipt and consideration of comments from the maximum number of interest parties.

On January 9, 1980 the Coastal Commission adopted a preliminary position on the proposed Channel Island Marine Sanctuary which favored a 12 mile boundary rather than NOAA's 6 mile boundary around the islands and inclusion of the entire Santa Barbara Channel within the sanctuary to give recognition to the important interrelated marine resources of the area. Despite this recommendation for larger boundaries; NOAA published a FEIS for the proposed sanctuary which adhered to their original 6 mile buffer zone around the islands, which was favored by the largest number of commenters.

Governor Brown wrote OCZM on May 22, 1980 pledging his support for inclusion of the marine areas under state jurisdiction within the proposed sanctuary.

On June 19, 1980, the California Coastal Commission resolved to strongly support Presidential designation of the Marine Sanctuary for the waters around the four northern Santa Barbara Channel Islands. In their resolution they noted that these islands and their surrounding waters are one of the last areas offshore California where marine mammals and seabirds can breed, feed and rest with little disturbance from human activity. They further endorsed the basic purposes of the proposed Sanctuary to prohibit industrial activity such as oil and gas development near the islands to enhance enforcement of existing wildlife protection regulations; and to coordinate and highlight research and education activities.

The Commission noted that Governor Edmund G. Brown, Jr. had already stated his support for the Sanctuary and for inclusion of marine areas in the State's jurisdiction within it and the Commission urged President Carter to join with Governor Brown in establishing the Channel Islands Marine Sanctuary.

On September 21, 1980, the President did approve the designation of the Channel Islands National Marine Sanctuary including the waters within six nautical miles of the northern Channel Islands (San Miguel, Santa Rosa, Santa Cruz, and the Anacapas) and Santa Barbara Island off the coast of Southern California; a total area of approximately 1252 square nautical miles.

The state is now working closely with NOAA and other interested Federal agencies to plan for management, research and educational activities in the sanctuary.

THE POINT REYES-FARALLON ISLANDS MARINE SANCTUARY

In response to the Commission's April 3, 1979 recommendation to NOAA to proceed with the designation process for the Pt. Reyes-Farallons Sanctuary Proposal, preliminary drafts of the major DEIS Chapters were distributed to interested parties. Representatives of the Sanctuary Program Office within NOAA held a public meeting in Point Reyes Station, California, on November 5, 1979, to discuss these chapters and answer questions about the program. The DEIS for the Point Reyes/Farallon Island area was distributed in March 1980. Public hearings were held on May 13, 1980, in San Francisco and Point Reyes, California.

Concurrently, the California Coastal Commission, as part of its regularly scheduled meeting held a public hearing. As a result of favorable public testimony and their staff recommendation, the Commission adopted a position on the Draft Environmental Impact Statement on the Proposed Point Reyes-Farallon Islands Marine Sanctuary which strongly supported the objectives of the National Oceanic and Atmospheric Administration's Marine Sanctuary Program for Cali-

fornia, and the Point Reyes-Farallon Islands Marine Sanctuary which was proposed as part of the program. The Commission also commended NOAA for the excellent quality of the DEIS which constituted the most thorough and up-to-date catalogue of resources and resource uses ever published for the area. On May 22, 1980, Governor Edmund G. Brown, Jr. wrote Mr. Michael Glazer, Assistant Administrator for NOAA in support of both the Point Reyes-Farallon Islands Marine Sanctuary and the Santa Barbara Channel Islands Marine Sanctuary, noting that "Establishment of these two sanctuaries will provide the needed, overall management that will insure protection of the abundant seabirds, whales, and other marine life that inhabit these unique areas."

Extension of the comment period on the DEIS publication of the Final Environmental Impact Statement until September 26, 1980. The FEIS incorporated several changes suggested in both state and federal level hearings during the extended comment period.

Following the comment period on the FEIS, consultation with affected Federal agencies and approval by the Secretary of Commerce, it was forwarded to the President.

On January 16, 1981, the long cooperative process between NOAA and the State of California culminated in Presidential approval of the designation of the Point Reyes-Farallon Islands National Marine Sanctuary. The sanctuary boundaries encompass a 948 square nautical mile area off the California Coast between the mainland shore just North of San Francisco and the Farallon Islands, twenty miles to the west.

The waters off Point Reyes and around the Farallon Islands are especially noteworthy for the seabird and marine mammal populations that thrive there. The Farallon Islands support the largest seabird rookeries in the contiguous United States, including 12 of the 16 known species of seabirds found on the West coast. The waters also provide substantial recreational and commercial fishing opportunities.

ATTACHMENT 2

THE OIL AND GAS DEVELOPMENT ISSUE

While a prohibition on future oil and gas development may not be appropriate for all sanctuaries, it is crucial in both California sanctuaries.

SANTA BARBARA CHANNEL ISLANDS SANCTUARY

The Resources Agency of the State of California recommended consideration of the Santa Barbara Channel Islands as a marine sanctuary based on strong evidence of need presented in an extensive analysis of the effects of offshore oil and gas development on Southern California published by the Governor's Office of Planning and Research in 1977, the Environmental Impact Statements for OCS Lease Sale 35 and several of the "baseline studies" carried out for the Lease Sales. These reports all document that many important species found in the Southern California Bight are sensitive to petroleum development activities as well as to oil spills resulting from these activities. Marine mammals and seabirds breeding on the Channel Islands and foraging in surrounding waters are especially vulnerable, because the California mainland has become almost totally inhospitable to the breeding, feeding and resting of marine mammals and many kinds of seabirds. The Channel Islands and adjacent waters offer the last relatively undisturbed natural areas in the Southern California region for such marine life to flourish or regenerate. According to the findings of BLM's baseline studies, many seabird populations are already in jeopardy. An oil spill during the nesting season could devastate those populations.

The DEIS and FEIS for the Santa Barbara Channel Islands Sanctuary thoroughly discussed the advantages of keeping such development beyond six nautical miles of the islands. These advantages included provision of a buffer area to increase response time for oil spill cleanup efforts and provision of a buffer area between noise and visual disturbances and important marine life habitats. Therefore, the State of California strongly supports the sanctuary policy of prohibiting new Interior Department leasing of OCS tracts within six nautical miles of the islands. Secretary Andrus deleted 24 tracts north of the Channel Islands from OCS Lease Sale 48, in recognition of the wildlife value of the islands and adjacent waters. But the Interior Department has recently included tracts within six nautical miles of the south sides of the Islands for consideration in Lease Sales 68 and 78.

Only Presidential designation of this sanctuary assured that these specific water areas would never be leased for petroleum development. This kind of assurance, that the most valuable marine resources areas will never be leased, is needed for OCS petroleum development to proceed in an orderly and balanced manner under the OCS Lands Act Amendments of 1978.

POINT REYES-FARALLON ISLANDS MARINE SANCTUARY

The prohibition on oil and gas activities in the Point Reyes-Farallon Islands Sanctuary also establishes this marine area as a buffer between possible oil spills occurring outside the sanctuary as a result of Lease Sale 53 or future sales, and the highly sensitive island and mainland coastal and intertidal habitats. These habitats range from protected marsh areas to unprotected coastal rocks, and are vital to the rich bird, fish, marine mammal, and intertidal populations in the area. Particularly vulnerable are the Farallon Islands which support the largest seabird rookeries in the contiguous United States.

The existence of a buffer zone ensures that in the event of an oil spill, the oil would have to undergo a minimum amount of weathering before reaching more sensitive nearshore and intertidal areas. The weathering process would allow the more toxic fractions of the petroleum to evaporate and would permit some natural dispersion to occur. Also, San Francisco Bay-based contingency crews would have more time to reach the spill site and deploy containment equipment either at sea or around entrances to highly vulnerable lagoons and estuaries.

The prohibition on future oil and gas development within the sanctuary complements the existing oil and gas prohibition on Federal OCS leasing within 15 miles of the Pt. Reyes Wilderness. This prohibition excludes the major portion of sanctuary waters. Leasing in the remainder of the sanctuary would not be consistent with the intent of the OCS Land Act Amendments which recognize the incomparable scenic and wildlife values of the area.

Permanent inclusion of these waters in the sanctuary is considered to be the only way to assure the marine mammal and seabird colonies of the area are given permanent federal protection from industrial development in adjacent waters.

While the prohibition on future oil and gas development could represent a loss of potentially recoverable hydrocarbon reserves, all available data indicates that the resources are not significant. None of the tracts selected for consideration for Lease Sale 53 fall entirely within the marine sanctuary, however, two tracts fall partially within the sanctuary. Since the resources underlying these two tracts would almost certainly be at least partially recoverable by means of directional drillings, this prohibition would have little impact on the amount of hydrocarbons extracted from Federal leases in the area.

Mr. GISSENDANNER. The State of Florida appreciates this opportunity to appear before you to present its views on the national marine sanctuary program, and its administration by the National Oceanic and Atmospheric Administration.

Florida is fortunate to have Key Largo in the upper Keys and Looe Key in the lower keys. Key Largo Marine Sanctuary is adjacent to a State park established in 1961, named for John Pennekamp, for the protection of these coral reefs in State waters. In 1972, Congress enacted the Marine Protection and Research in Sanctuaries Act. And the reef system off Key Largo, adjacent to the State park, was nominated for sanctuary status. We received our first NOAA grant for the sanctuary in 1976 and 1977.

The Key Largo Sanctuary encompasses 100 square miles of submerged coral architecture, part of the most extensive living coral reef system in the continental United States. The sanctuary extends from the 3-mile offshore boundary of adjacent John Pennekamp Coral Reef State Park to the 300-foot line, some 8 miles at sea. It stretches along 20 miles of tropical waters. The reef is a breakwater that shelters land against the violence of ocean storms and hurricanes. The reef also

offers food and habitat to more than 500 species of fish. Reef areas are the most biologically productive and diverse of all of the natural marine communities, thus making the sanctuaries a living research laboratory. Protection of the coral reef resources cannot be accomplished without effective surveillance of the area and enforcement of the regulations.

These functions are handled at the Coral Reef National Marine Sanctuary by the Florida Department of Natural Resources and the U.S. Coast Guard. The second national marine sanctuary, Looe Key, has recently been designated. The 5-square-mile sanctuary is small, but includes an important area of the reef track, including the main reef and associated patch reefs and reef flat areas. It includes all of the major communities associated with Florida Keys' Coral Reef.

I might mention that we believe that the impact of these sanctuaries has not and will not negatively impact the commercial fisheries of the State of Florida. We also believe there will be no detriment or hindrance to the recovery of oil and gas resources that might be present under these reefs which could be recovered in this instance by slanted drilling.

Finally, the State of Florida believes that it must protect and respect the vital resources of the State which are the amenities which bring in new residents and which encourage visitors to return to enjoy the Sunshine State. The marine sanctuary program has proven to be a useful program in meeting these goals.

I have a recent wire report. Palm Beach County citizens formed themselves into an organization called the Reef Rangers. This is an international society. And while the Florida Marine Patrol appreciates all the help we can get, we believe that the resources of the area are so important that they should not be relegated to perhaps a vigilante-type action. And besides, in Florida, they might run into some smugglers and get hurt. We urge you to reauthorize this program, and we look forward to continued good relationships with NOAA and the coastal zone office.

[The statement follows:]

STATEMENT OF DR. ELTON J. GISSENDANNER, EXECUTIVE DIRECTOR, FLORIDA
DEPARTMENT OF NATURAL RESOURCES

Good morning, Chairman Packwood, and members of the committee. I am Elton J. Gissendanner, Executive Director of the Florida Department of Natural Resources.

The State of Florida appreciates this opportunity to appear before you to present its views on the National Marine Sanctuary program, and its administration by the National Oceanic and Atmospheric Administration.

The Florida Keys are paralleled by a magnificent living coral reef. This unique geological configuration combined with its pleasant weather make the Keys a haven for tourists and winter residents. Tourism is a major industry in the Keys where the clear warm water and beautiful coral formations attract thousands for swimming, boating, fishing, skin diving and sight seeing. But the reef tract already shows signs of damage. South Florida is one of the fastest growing urban areas of the country. While the effects on the reef from dredging and filling, channelization, industrial discharges and air pollution associated with this growth are unclear, the impact on the reef tract of 400,000 visitors a year is visible: broken and overturned corals, discarded beverage containers and fishing line, and scarred patches on grassy areas all attest to improper operation of boats and carelessness or ignorance on the part of some visitors.

Corals are delicate structures and are vulnerable to abuse from divers. Even a small scrape from divers standing or rubbing on coral is enough to cause terminal infection of the coral by blue-green algae. Coral collection and wreck hunting damages the reef as do anchorings and boat surroundings.

The coral reefs are actually the skeletal deposit produced by billions of invertebrate life forms over thousands of years. While this history suggests durability, the reef itself is a fragile and vulnerable structure. Without careful attention to the coral reef's environmental needs, its continued healthy existence will be threatened.

Protection and management of these valuable and beautiful coral reefs is made especially difficult because portions of the reef are in State waters while major portions of the main reef tract are in Federal waters.

The National Marine Sanctuary program provides a unique service to the State of Florida. Through this program, the State can look forward to the long-term protection and management of some of the most outstanding areas of this important resource.

Unlike other programs, the Marine Sanctuary designation allows protection of the entire habitat and ecosystem. Such protection is critical to a coral reef which is a highly integrated and interdependent living system.

Florida is fortunate to have two marine sanctuaries near its waters: Key Largo Marine Sanctuary in the upper Keys and Looe Key Marine Sanctuary in the lower Keys.

Key Largo Marine Sanctuary is adjacent to the John Pennekamp Coral Reef State Park. The State Park was established by the State of Florida in 1961 to insure protection of coral reefs in State waters. In 1972, Congress enacted the Marine Protection, Research and Sanctuaries Act, and the reef system off Key Largo adjacent to the State Park was nominated for marine sanctuary status to protect and preserve the coral reef ecosystem in its natural state, oversee activities within the sanctuary, insure the health and well being of the coral and associated flora and fauna, and guarantee the continuance of the areas aesthetic and recreational appeal. The Florida Department of Natural Resources received its first NOAA grant for the Sanctuary in 1976-77.

The Key Largo Coral Reef National Marine Sanctuary, encompassing 100 square miles of submerged coral architecture, is part of the most extensive living coral reef system in the continental United States.

The Sanctuary extends from the three-mile offshore boundary of the adjacent John Pennekamp Coral Reef State Park to the 300-foot depth line, some eight miles at sea. Its length stretches along 20 miles of clear tropical waters.

The structure and color of the coral formations are breathtaking and lure more than 400,000 visitors a year who come for the abundant sport fishing or spectacular snorkeling and scuba diving opportunities in the diverse marine ecosystem.

Not only important for its beauty, however, the reef acts as a self-repairing breakwater that shelters the land against the violence of ocean storms and hurricanes. The reef also offers food and habitat to more than 500 species of fish. Reef areas are the most biologically productive and diverse of all the natural marine communities thus making the sanctuary a living research laboratory. Rarely are such varied species of fish, crustaceans, mollusks and other marine organisms found within such easy reach. Scientists from all over the world have conducted research at the sanctuary.

Protection of the coral reef resources cannot be accomplished without effective surveillance of the area and enforcement of the regulations. These functions are handled by the Florida Department of Natural Resources and the U.S. Coast Guard. Currently, only the Coast Guard personnel have enforcement authority because, until recently, it was not possible to delegate Federal enforcement authority to State law enforcement officers. We have now requested NOAA to assist us in seeking a delegation of authority from the Coast Guard in order to achieve greater protection of the resource which can be provided because State employees are able to be present in the areas daily.

Our grant request for the Key Largo National Marine Sanctuary for 1981-82 includes continuation of a biologist to continue the current level of management of the sanctuary and the addition of a marine mechanic so that there will be an adequate level of maintenance for patrol and work boats necessary to sanctuary management. Other funding involves improving the level of resource monitoring,

data collections and resource management consistent with the objectives outlined in the Sanctuary Management Plan.

The second national marine sanctuary, Looe Key, has only recently been designated. The 5.05 square mile national sanctuary is small but includes a beautiful and important area of the reef tract, including the main reef and associated patch reef and reef flat areas. The area includes all the major communities associated with the Florida Keys coral reef.

The State, in cooperation with NOAA, is now underway with developing management plans and locating a site for the sanctuary headquarters and visitors' center. Educational and natural resources groups and local citizens have shown considerable interest in the sanctuary. We believe that the designation of Looe Key as a National Marine Sanctuary has already begun to serve as a catalyst for Federal, State and local cooperative efforts.

If funding for the Marine Sanctuaries Program were to be abolished, this one-of-a-kind resource would not receive the same level of management, protection or interpretation. Research on how best to manage this unique system would be discontinued, or reduced. Without NOAA management, protection of the reef in Federal waters—where, as I have mentioned, the most important coral formation occur—would significantly diminish. The elimination of funding would suspend NOAA's research on water quality in the sanctuary. Recent scientific studies by NOAA have turned up a discovery of an additional deep area and have provided baseline data on all reefs within the sanctuary.

In regards to fishing, the landings of the commercial fishermen in Florida have not been impacted by the designation of the sanctuaries, and they will not be.

Before closing, I would like to take the opportunity to acknowledge the work of NOAA and its Office of Coastal Zone Management. Their work has always been helpful and has continually been cooperative in blending their program with the interests and goals of the State of Florida.

Finally, the State of Florida believes that it must protect and respect the vital resources of the State which are the amenities which bring it new residents and which encourage its visitors to return again and again to enjoy the Sunshine State. The Marine Sanctuary Program has proved to be a useful program in meeting those goals and in protecting this national treasure.

We urge you to re-authorize this program, and we look forward to continued good relations with NOAA and the Office of Coastal Zone Management.

Thank you.

The CHAIRMAN. Thank you very much.

Do you want to expand a bit on your statement that the marine sanctuaries have not had any adverse effect on commercial fishing? Do they agree with that conclusion of yours.

Mr. GISSENDANNER. The Key Largo, which is the oldest one associated—a joint State-Federal effort. If there are any concerns, they were resolved in 1961 and 1972. And certainly there is no evidence any commercial fishermen are trying to reenter that area to fish. We do allow lobster fishing there. We do allow hook-and-line fishing. We do not allow spear fishing, which we don't think is a sport really.

At Looe Key, however, we do not allow any commercial fishing. If there is any area that would be detrimental, it would be the 5-square-mile area of Looe Key, which someone might say has been taken out of the fishery. However, let me hasten to emphasize that the lobster fishery there is well over capitalized. Our figures show that with 40 percent of the catch effort, you could take every legal lobster in the Florida Keys. It is more symbolic than substantive.

The CHAIRMAN. You have a reasonably good working relationship with the Federal Government in these sanctuaries. You have one right next to them.

Mr. GISSENDANNER. Yes, sir, very good. We need a little more Coast Guard help. Until we can get a joint agreement with Federals for joint enforcement, we have to depend on the Coast Guard.

The CHAIRMAN. That is one area where I hope we can give you some help. This committee has jurisdiction over the Coast Guard. I am delighted to say President Reagan's budget in that area is up from President Carter's budget. What we have done with the Coast Guard is stretch them and stretch them and stretch them until they finally cannot do everything that we have asked them to do. Either we have got to cut back on what they are required to do, or we have got to give them more manpower and money.

Let me ask you, Mr. Magnuson, it is your feeling that the Channel Island Sanctuary is adequate, not too big. You know the complaints about the size of it.

Mr. MAGNUSON. I am well aware of them, Senator Packwood. Based on the information in the final environmental impact statement, the 6-mile buffer zone was arrived at since the State territorial waters go out 3 miles from the islands themselves. And for four of the five islands in 1955 the State legislature designated those to be oil and gas sanctuaries. Santa Barbara Island was excluded at that time because the State legislature did not feel that the area was that large to be protected. When the Federal Marine Sanctuary came to be and the designation of the Channel Islands in December, it included Santa Barbara Island.

To answer your question, we do feel it is a reasonable area to provide adequate time to respond to an oilspill. It is based on information of lease sale 35 and its final environmental impact statement.

Mr. FISHER. Just a brief addendum. The complaints that we hear in California are that the marine sanctuary is far too small. Frankly, it was only several days ago that I overheard a complaint that the marine sanctuary was too large.

The CHAIRMAN. That's interesting. You didn't even hear that from your petroleum industries in California?

Mr. FISHER. No; it is quite characteristic of the petroleum industry to refrain from participation in public.

The CHAIRMAN. Mr. Magnuson, I take it the State of California does not view with enthusiasm the regulations permitting the drilling. You do not look at that with enthusiasm.

Mr. MAGNUSON. That's correct. The proposed amendment to the final regulation does not leave the State much option to comment within the next 15 days. It is either, as I understand it, that the prohibition is suspended, pending the economic review, or there is an interim prohibition while the economic review goes on. Those are the two choices.

We will be supporting the interim prohibition until the economic review is completed.

Mr. FISHER. For California, the marine sanctuaries are worth very little without the prohibition of oil and gas development. Unlike the Florida situation, there are no special regulations against the taking of commercial fishing that is not an endangered, threatened species in these sanctuaries. But it is the threat of industrial development to the pinnipeds and breeding grounds, seabird breeding grounds that we are most interested in. Without the prohibition against oil and gas development, the sanctuaries off California mean very little.

The CHAIRMAN. Thank you. I have no more questions.

Doctor, thank you for coming up from Florida. I understand you used to be in the legislature at one time?

Mr. GISSENDANNER. Yes, sir. We would like to have you come down and look at the nice sanctuary when you have time.

The CHAIRMAN. Thank you.

[The following information was subsequently received for the record:]

QUESTION OF THE COMMITTEE

Question. As representatives of states with marine sanctuaries, have you found that the marine sanctuaries program has kept your states well informed, and has worked to consult fully with local governments, industry and private groups affected by the sanctuary proposals? Do you have suggestions in this regard?

ANSWER OF MR. GISSENDANNER

Answer. Staff members of the Marine Sanctuary Program have been very helpful to this Department in working closely with on-site managers for Key Largo Marine Sanctuary. They have been involved with on-site inspections and very helpful in preparing the annual budget. In addition they have met with local interests and discussed ways in which public interests can be better served as that relates to the use of the sanctuary. Those local interests include conservation groups, dive boat operators and fishing guides. In essence, we have found representatives of the program very helpful to us in carrying out our duties and responsibilities as managers of the sanctuary.

ANSWER OF MR. MAGNUSON

Answer. As outlined in attachment 1, p. 37, of our prepared testimony, the marine sanctuary program conducted an exemplary outreach program for public and agency participation in the marine sanctuary designation process during the past three years which culminated in the designation of the Channel Islands and Pt. Reyes-Farallon Islands marine sanctuaries in California. We recommend no suggestions for improvement at this time.

The CHAIRMAN. Has Mr. Blount arrived yet?

If not, we will terminate the hearing. We will put his statement in the record.

[Whereupon, at 3:20 p.m., the hearing was adjourned.]

ADDITIONAL ARTICLES, LETTERS, AND STATEMENTS

STATEMENT OF PEGGY STAMEY, CHAIRWOMAN, SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL, CHARLESTON, S.C.

Mr. Chairman, Ladies, and Gentlemen, I am Peggy Stamey, Chairwoman of the South Atlantic Fishery Management Council. I appreciate the opportunity to appear before this committee.

Marine Sanctuary designation can be a distinct advantage to fishery resource management of specific areas of unique and high value habitat.

A wider range of activity can be regulated under a Fishery Management Plan.

As an example, special protection for habitat essential to our reef fishes, Red Snapper, Grouper, Sea Bass, Tilefish and others.

These fish do not migrate over a wide range. The fish stocks are in an area subjected to heavy fishing pressures; therefore, special management measures are necessary.

Marine Sanctuaries offer necessary habitat protection for the spawning stock. Controls could perhaps be more readily implemented under Marine Sanctuary provisions.

The South Atlantic Fishery Management Council and the Marine Sanctuary Office have a memorandum of Understanding that provides for reciprocal cooperation. We have enjoyed a cooperative exchange of ideas and advice.

The South Atlantic Fishery Management Council takes the position that under Magnuson Fishery Conservation and Management Act, along with National Marine Fisheries Service, we should have management responsibilities for the living marine resources in the Fishery Conservation Zone in the area of our jurisdiction according to the law (in Section 102). With the increased dependence of our Nation and the world on protein, wise fishery management is essential to the United States commercial and recreational fishermen as well as seafood processors and consumers.

The Shrimp Industry is in difficult economic circumstances partially due to increased fuel prices. The reef dwelling fish offer a less fuel intensive fishing opportunity.

Increased and stabilized fishing of species that benefit from Marine Sanctuaries habitat will improve our fishing economy.

Marine Sanctuaries can also provide management and protection to areas having historic values. Values which can and should be preserved to the benefit of the citizens of the United States now and for generations to come. Wise, long-range planning of a common property resource of this Nation is cost effective management.

STATEMENT OF DEFENDERS OF WILDLIFE

Defenders of Wildlife ("Defenders")¹ is pleased to submit the following statement concerning the reauthorization of Title III of the Marine Protection, Research and Sanctuaries Act of 1972 (the "Act").

I. INTRODUCTION

Title III, which established the National Marine Sanctuary Program (NMSP), resulted from the introduction of eleven separate bills in the House of Representatives during 1968.² These bills expressed a growing concern over the increasing evidence of degradation of the marine environment. The resulting Title III reflected the firm belief that certain ocean areas of particular "con-

¹ Defenders of Wildlife is a national, nonprofit, tax-exempt organization with a membership of over 50,000 citizens nationwide, and is dedicated to the protection of the Nation's wildlife resources and the natural environment.

² Center for Natural Areas, "An Assessment of the Need for a National Marine Sanctuaries Program, Phase I of: Study of the Framework of the Marine Sanctuaries Program," Contract No. CNA/OCZM 7-35118, Apr. 11, 1977, p. 32.

ervation, recreational, ecological, or esthetic" values must be protected from the adverse effects of coastal and offshore development. But Title III then and now represents much more than an effort to prevent environmental degradation of ocean areas. The National Marine Sanctuary Program also provides the opportunity for comprehensive planning and management of such areas, and for needed research and educational efforts to ensure their long-term protection and enjoyment. It is concerning these specific opportunities that Defenders of Wildlife strongly believes two things: (1) the NMSP embodies a concept whose time has clearly come; and (2) the NMSP has not, unfortunately, been given the chance to adequately implement this concept.

II. NATIONAL MARINE SANCTUARY PROGRAM BENEFITS

By 1990, 75 percent of this nation's population will be residing within the coastal zone (up to 50 miles inland).³ Millions of persons in addition will annually visit our seashores' warm beaches or rocky shorelines. They will actively enjoy swimming, boating, diving, fishing, or simply "breathing the salt air." By that same time, of course the diversified pressures on coastal waters will also be greatly increased. These pressures include a real need to develop domestic energy resources on the Outer Continental Shelf; an increased demand on commercial fisheries development; and increased shipping traffic attendant to these and other activities. These commercial and recreational activities and their potential effects on the marine environment speak to an element of the NMSP which has not as yet received the attention it deserves.

It is perhaps this element which makes Title III unique among a myriad of other environmental legislation. The NMSP is designed to comprehensively manage and preserve for future generations distinctive ocean ecosystems. In doing so, the Program fills existing "holes" in the protective coverage offered by other laws. Achieving these objectives does not mean closing off special areas to all commercial and recreational uses. Rather, the Program identifies anticipated detrimental activities in such areas; recognizes the changing needs of such areas; and remains sensitive to local states' interests in such areas. The result is a Program whose purpose is both the comprehensive protection of distinct ecosystems, and the active encouragement of their wise use and enjoyment. The potential of such concept has been likened to the establishment of marine wildlife refuges.⁴

The value of this all-encompassing consideration of marine environmental protection has been recognized by a number of studies. For instance, the Center for Natural Areas found that:

Title III . . . became the first, to date the only broad-based, comprehensive federal legislation capable of striking a balance between the need to develop and utilize and the need to protect and conserve the nation's marine resources.⁵

These findings are also echoed in two additional analyses of the NMSP:

The marine sanctuaries provision is an environmental protection law that has offers [*sic*] a positive approach to protection of marine areas of recognized importance. It is a multiple-use provision that was designed to protect a site, rather than stop certain activities or eliminate adverse impacts.

Without the sanctuary provision, sites could only be protected indirectly (and probably less completely) through a maze of federal programs. . . . the long-term protection or restoration of marine sites for conservation, recreational, ecological or esthetic values without the direct approach of a sanctuary program is likely to be . . . difficult.⁶

And most recently:

Title III authorizes the only Federal program to comprehensively manage and protect marine areas as units, . . ."

* * * if comprehensive protection of the marine environment is desired in selected areas; that is, if certain areas merit special treatment, whether due to unique characteristics or recreational value or some other pertinent

³ Natural Resources Defense Council, "Paving the Way for Coastal Development: Resource Management and Waste of Tax Dollars," October 1980, p. 9.

⁴ Bean, Michael J., *The Evolution of National Wildlife Law*, Council on Environmental Quality Report, 1977, p. 191.

⁵ Center for Natural Areas, p. 37.

⁶ Congressional Research Service, "The Contributions of Marine Sanctuaries Provision to Environmental Management," Feb. 14, 1980, pp. 12-13.

factor, Title III would seem to be an appropriate way to provide it to accomplish the basic objectives the Congress envisioned in establishing an effective marine sanctuaries program."⁷

This country's past efforts to protect the marine environment have resulted in a series of regulatory authorities which are primarily single-purpose in nature. Among these are:

The Fishery Conservation and Management Act of 1976, which is designed to conserve and manage commercial and sport fishery resources. Regional fishery management councils are established to accomplish these objectives through regulations. The Act does not, however, extend to non-commercial resources.

The Outer Continental Shelf Lands Act Amendments of 1978 limits its environmentally protective measures to oil and gas-related activities at individual sites. It does not cover oil and gas-related spills resulting from tanker collisions, for instance.

The Federal Water Pollution Control Act Amendments of 1972 regulate the discharge of pollutants (including oil and other hazardous substances) into state waters, the "contiguous" zone (from state waters, or 3 miles, outward to 12 miles from the U.S. coastline), and the ocean beyond. However, the Act applies only to discharges into navigable waters that can additionally be proven an imminent and significant danger to public health and welfare. It does not consider the health and welfare of specific marine ecosystems.

The Port and Tanker Safety Act of 1978 mandates the Coast Guard to reduce tanker and tank barge pollution through improved design and construction standards.

The Deepwater Port Act of 1974 provides for protection of marine and coastal environments only to the extent of preventing or minimizing possible adverse impacts of deepwater port development activities.

Moreover, although well-intentioned, these laws sadly tend to emerge only after the occurrence of some environmental catastrophe—such as the oil rig blow-out at Santa Barbara, California in 1969, as a result of which over one million gallons of oil were lost into the ocean and over 30 miles of beaches were subsequently fouled.⁸

Sometimes—especially when viewed from the perspective of achieving a particular or singular objective—the purposes of these laws come into apparent conflict. This perceived conflict in a large sense has been a major stumbling block to the smooth and timely implementation of the National Marine Sanctuary Program's objectives. Defenders of Wildlife steadfastly believes that conflicts in these areas need to exist. With proper management, all reasonable uses of the ocean can be accommodated without sacrificing the integrity of areas critically important to marine species and to human livelihoods and enjoyment. With responsible leadership, the various statutes affecting control and marine activities can be implemented in a complimentary fashion, without overlap or conflict.

III. PROGRAM IMPLEMENTATION AND ITS PROBLEMS

Although the NMSP was established in late 1972, no marine sanctuaries were designated until 1975. During that year, two areas were set aside: a one-square-nautical-mile area surrounding the *Monitor*, a Civil War ironclad warship sunk in 1862 off the coast of Cape Hatteras, North Carolina; and a 20-mile-long section of coral reef off the southern Florida Coast. In both cases, the sanctuaries were rather limited in scope due primarily to the nature of the resources being preserved.

The NMSP received little or no attention until 1977, when the Carter Administration committed itself to a more vigorous pursuit of marine sanctuary designations. In response to a call for nominations from states and the public of possible candidates for marine sanctuary status, the Program received over 100 such nominations. The initial list was soon reduced to approximately 70 possibilities, of which the NMSP may now realistically consider 25 to 30 to be real candidates.⁹

⁷ General Accounting Office, "Marine Sanctuaries Program Offers Environmental Protection and Benefits Other Laws Do Not," CED-81-37, Mar. 4, 1981, pp. 12, 22-23.

⁸ Natural Resources Defense Council, "Offshore Oil Leasing," October 1980, p. 14.

⁹ General Accounting Office, "Impact of Regulations—After Federal Leasing—On Outer Continental Shelf Oil and Gas Development," EMD-81-48, Feb. 27, 1981, p. 32.

In 1978, the NMSP proposed for designation a biologically unique coral system known as the Flower Garden Banks, off the coasts of Louisiana and Texas, in the Gulf of Mexico. The nomination was originally offered in 1973, and later submitted, (in 1977) by Texas State Senator A. A. ("Babe") Schwartz in conjunction with the Texas Coastal and Marine Council. The Flower Garden Banks coral reefs are well-known and admired by sport divers, but little understood scientifically. They are the only well-developed, tropical coral reefs in the northwest Gulf of Mexico. They are among the last relatively pristine reefs remaining in U.S. waters due to their distance from shore (approximately 110 nautical miles SSE of Galveston). Their special qualities have been noted by the Council on Environmental Quality:

About 350 species are known from the Flower Gardens but closer examination would likely triple the number. Many of the species occur nowhere else within hundreds of miles, some may occur nowhere else, and at least one species new to science was first collected at the Flower Gardens. Many of the invertebrates belong to groups which produce organic chemicals of special interest as potential anticancer, antiviral and antihypertensive drugs. Red and vermillion snappers are fished commercially, and hundreds of divers visit the Banks annually.¹⁰

The marine sanctuary proposal to provide protection for these fragile resources envisions approximately 173 square nautical miles.

Almost from its inception, however, progress on the proposal was stymied by intense objections from oil and gas development interests. Although numerous concessions were made to accommodate these interests, including that of allowing hydrocarbon operations in the area, regulatory conflicts emerged which have yet to be resolved. In the meantime, the Flower Garden Banks coral system lies unprotected by sanctuary designation as OCS development activities begin to proceed nearby.

The effect of these conflicts surrounding the Flower Gardens proposal unfortunately, was to cloud the future of other proposed designations during 1980. Two Program proposals during that year involved areas off the California coast which were of some interest to the oil and gas industry: the Channel Islands ecosystem, off the coast of Santa Barbara; and the Point Reyes/Farallon Islands ecosystem, off of San Francisco.

The waters around the four northern Channel Islands and Santa Barbara Island are noted for an exceptionally high biological productivity. Home and migratory waters are provided for over thirty species of marine mammals. Extensive kelp beds and a surprising accumulation of coral reef communities provide food and shelter to a myriad array of fish and invertebrate species. Not surprisingly, the area is additionally frequented by thousands of seabirds, as well as a healthy population of commercial fishermen.

To the north, the Point Reyes/Farallon Islands area also provides refuge and safe passage to over twenty marine mammal species, including the world's entire population of gray whales. Half of California's nesting seabirds are found on the Farallon Islands. The Point Reyes National Seashore, designated in 1909, is now visited by over 1.5 million persons annually.

Both proposals for designation included prohibitions on oil and gas development activities within sanctuary boundaries. At this point, the future of the Program itself became seriously threatened not only the demands of the oil and gas industry, which claimed huge portions of the OCS would be "locked up" by sanctuary designations, but also by the Department of the Interior (DOI), which claimed exclusive jurisdiction of and regulation over the OCS.

Due primarily to massive public, state, and Congressional support, the two California sanctuaries were designated by President Carter with the prohibitions on oil and gas development operations intact. Presidential designation, however, did not resolve arguments that the Program is duplicative and unduly restrictive in nature. Nor has the oil and gas industry relented in its unfounded claims that large areas of the OCS will be closed off by future sanctuary designations.

As discussed earlier, Defenders of Wildlife firmly believes the NMSP is not duplicative, because of its multiple-use, ecosystem approach to management and protection. The General Accounting Office in fact, makes a similar conclusion:

* * * the marine sanctuaries program . . . is providing, or has the potential to provide, marine environmental protection over and above that which is or can be provided under other Federal Statutory authorities.¹¹

¹⁰ Letter from Gus Speth, Council on Environmental Quality to Douglas Costle, Environmental Protection Agency, Feb. 18, 1980, p. 1.

¹¹ General Accounting Office, Marine Sanctuaries Program report, CED-8;-37, p. 1.

Further, the Outer Continental Shelf is not about to be closed off to all, or even significant, development. An area proposed for sanctuary designation will not necessarily prohibit all oil and gas activities. Moreover, the potential for oil and gas resources in an area is among the potential "uses" of an area examined by the Program before that area is seriously considered for sanctuary designation.¹²

Two additional National Marine Sanctuaries were designated during 1980: a five-square-nautical-mile section of the spectacular coral reef system at Looe Key, Florida; and a 16.68-square-nautical-mile area around the "live bottom" reef system at Gray's Reef, Georgia. Both areas will be the subject of research and monitoring efforts, which will answer many questions about the complexities of reef systems and the habitats they provide for fish and sea turtle species. The public will continue to enjoy these areas for their extensive diving and photography opportunities; and in the case of Gray's Reef, for its fishing opportunities.

It is important to note that all of these proposals evolved from the desires of state governments, who understand the benefits to the state and to local communities of National Marine Sanctuary designation. The day-to-day management of a sanctuary is a cooperative, on-site venture, usually planned through the state department of natural resources.

In this regard, it is particularly appropriate to mention the flexibility and responsiveness of the Program to states' interests, as evidenced by the current work on a "Program Development Plan" (PDP). This Plan will serve as a framework for the Program's future activities. A major feature is the role of "regional resource evaluation teams" in proposing truly suitable candidates for sanctuary designation.

In total, there are now six National Marine Sanctuaries designated. Regulations implementing two Sanctuaries—Channel Islands and Point Reyes/Farallon Islands—are currently subject to the recently-imposed cost-effectiveness review by the Reagan Administration. The Program will now turn much of its efforts to putting into effect the educational and management objectives for all of these areas.

IV. THE FUTURE

In considering the future of the National Marine Sanctuary, the following points should be remembered:

The Program has the ability to accomplish its objectives, which include systems protection and multiple-use management;

Those objectives cannot be achieved by any other existing authority;

There is an overriding need, expressed through public and state support, for this government to be informed and sensitive to preserving the integrity of marine ecosystems for the future use and enjoyment of all citizens, particularly as industrial and commercial uses of these areas increase.

In many ways, the oceans are the new—and perhaps the last—frontier for this nation. There is much about them we do not yet know or fully understand. It is both fitting and necessary that appropriate efforts be made to ensure the continuing availability of all their vast resources.

It is therefore critically important that the National Marine Sanctuary Program be reauthorized with no amendments to Title III. The current law is a good one, and should now be given the chance to work. A reauthorization for a minimum of three years will enable the NMSF to implement the benefits of its designated areas. Finally, the Program should be funded at levels at least equal to its 1981 budget, which is \$2.25 million.

STATEMENT OF CLAIR GHYLIN, GENERAL MANAGER OF LAND, WESTERN REGION, CHEVRON, USA, INC., ON BEHALF OF THE WESTERN OIL AND GAS ASSOCIATION

1. INTRODUCTION

My name is Clair Ghylín. I am General Manager of Land for the Western Region, Chevron USA, Inc., headquartered in San Francisco, California. I am appearing today as Chairman of the Public Lands Committee of the Western Oil and Gas Association, a trade association representing companies which explore for, develop and market petroleum and petroleum products in the Western United States. In summary, WOGA members have no objection to the marine sanctuaries program as it was originally adopted by Congress. WOGA members object strongly, however, to the implementation of the marine sanctuaries program offshore California. It is not being used to protect areas of special and

¹² General Accounting Office, Outer Continental Shelf report, EMP-81-48, p. 32.

unique significance, as contemplated by the statute. Rather, it is being used to stop oil and gas development from federal lands offshore. In our view, the thrust of the program should be changed or the program should be abolished.

Under the Marine Sanctuaries Act, in order to designate an area as a marine sanctuary, the designation must be

* * * necessary for the purpose of preserving or restoring such areas for their conservation, recreational, ecological or aesthetic values. (16 U.S. Code § 1432.)

Legislative history shows that use of the term "necessary" was no accident. Marine sanctuaries legislation was at one time opposed on the floor of the House on the ground that it would result in the "unnecessary locking up" of offshore resources, particularly oil. (Cong. Rec. House, Sept. 9, 1971, p. 31134.) The sanctuaries legislation was defended by Congressman Lennon, the bill's sponsor, on the basis that:

The Secretary must find that oil exploration or extraction cannot be conducted consistent with the purpose for which the sanctuary was established.

Congressman Dingell emphasized: This legislation is not going to halt oil drilling." (Page 31136.) The stated intent of Congress at the time it enacted the legislation was to protect unique ocean areas, and only to interfere with energy development when it was demonstrably inconsistent with the purpose of the sanctuary. A perfect example of a sanctuary which fulfills this purpose is the Marine Sanctuary to protect the historic U.S.S. *Monitor*.

The federal government's implementation of the marine sanctuaries program on the West Coast has been in direct conflict with this stated purpose. On September 22, 1980, President Carter approved the Channel Islands Marine Sanctuary. More recently, on January 16, 1981, the President approved the Point Reyes/Farallon Islands Marine Sanctuary. The geographic areas are separate, but the designations have one major aspect in common. The regulation proposed by the Department of Commerce to implement both sanctuaries prohibit oil and gas operations on all new leases within the sanctuary area. (45 Fed. Reg. 65198, October 2, 1980; 46 Fed. Reg. 7936, Jan. 26, 1981). At the same time, all other existing uses within the sanctuaries would still be allowed.

2. THE CHANNEL ISLANDS MARINE SANCTUARY

Let me focus for a moment on the Channel Islands Marine Sanctuary. The final environmental impact statement ("EIS") for the sanctuary describes the project in some detail. It shows that there are only two major differences between regulations of the Channel Islands and Santa Barbara Island as a sanctuary and without that status. The first is that the sanctuary designation adds an additional layer of bureaucracy to the already approximately eighteen federal agencies, implementing twenty-one statutes and other authorities in the area.

The EIS gives a chart of the agencies which have authority over the sanctuary area. They include, among others, the Marine Mammal Commission, the National Marine Fishery Service, the U.S. Geological Survey, the Fish and Wildlife Service, the United States Coast Guard and the Historic Resources Commission. Further, at the time of sanctuary designation, a three-nautical mile state oil and gas sanctuary already existed around the islands, and the Channel Islands National Park had been created shortly before the sanctuary designation was approved. Finally, the California Coastal Commission was empowered by the Commerce Department with consistency review and veto over all activities in the coastal zone. It is beyond our understanding why a sanctuary is needed with all these other agencies already exerting major responsibilities, especially where most of the agencies are oriented wholly or in large part to environmental protection. The EIS acknowledges that there are quite a number of agencies with regulatory authority, but finds that yet another is needed to preserve the Islands' resources.

The EIS says in this regard:

Maintaining the status quo and failing to designate a marine sanctuary in the vicinity of the northern Channel Islands and Santa Barbara Island will eliminate the potential for positive management of the rich marine area. In the absence of a sanctuary, there will be less ecosystems research, no new education or public awareness programs directed at users of the area, and no institutional mechanism to focus on long term planning and coordination issues for this particularly valuable geographic area.

Presently, 11 Federal, 7 State, and a multitude of regional and local government agencies are vested with some regulatory authority over certain activities within the area. These authorities provide a considerable degree of protection for marine resources in general; the Channel Islands National Park and the Ecological Reserves around San Miguel, Santa Barbara, and Anacapa Islands protect the resources within those areas in particular. In general, however, each of the statutes described above and the agencies administering them are directed at a single purpose, region or activity. No entity look to the welfare of all the living resources or the ecosystem of this marine area. Cumulative impacts on the resources, arising from various activities subject to the jurisdiction of separate agencies, may escape the attention of any agency.

Although certain uses of the area do not now seriously threaten resource quality here, they could have more significant impact if and when activity intensities grow. The current multitude of regulatory authorities, many of which have different objectives and jurisdictions, may not be able to respond on the basis of ecosystem issues to future activities. Furthermore, some agencies suffer from limited enforcement resources. Because these waters contain so many valuable resources which in turn support so many beneficial uses, they require the special acknowledgement and study possible in a marine sanctuary to ensure that they are used and preserved in the future as effectively as possible. (Final EIS, pp. F-50-52.)

Research and public awareness programs and the unquantified threat of harm from possible future activities are not sufficient reason for the need for a sanctuary altogether.

As I mentioned a few moments ago, sanctuary status for the Channel Islands area will have a second major impact: a prohibition on oil and gas exploration and development on new leases within the sanctuary. The Department of Commerce never assessed the significance of this impact and it is considerable. In the Santa Barbara Channel area, over 900 wells have already been drilled and 436,000,000 barrels of oil and gas have been produced. In fact, the Santa Barbara Channel, adjacent to and in part occupied by the proposed sanctuary, is presently the richest offshore oil producing province in the western United States. The potential in the Channel area may amount to about 5 percent of our total daily domestic production.

It is simply no excuse to prohibit oil and gas operations on the grounds of environmental protection. Safeguards in the Outer Continental Shelf Lands Act and implementing regulations of the Department of the Interior are designed directly to answer this concern. Environmental studies are required by the Federal Government before any exploration, development and production activities are allowed. The Interior Secretary has authority to suspend or prohibit these activities if pursuit of such activities poses a serious threat to the marine environment.

In sharp contrast to Carter's call for sacrifice, President Reagan has made it clear that his administration will emphasize energy production rather than conservation. Echoing this view, new Secretary of Energy Edwards said recently that:

Most Americans now agree that we must increase production of our own energy resources . . . by the private sector. (1981 Congressional Quarterly, January 30, 1981.)

The Outer Continental Shelf still remains one of our last great frontiers for finding new domestic supplies. No attempt has been made by the Department of Commerce to evaluate the impact of the marine sanctuaries program on the oil and gas shortage in this country. In view of this national energy policy, we recommend the following:

3. RECOMMENDATIONS

First, we recommend that these subcommittees take a comprehensive look at the individual and cumulative effect on energy of the sanctuaries proposed and implemented by NOAA before reauthorizing this legislation.

Second, we recommend that wherever a sanctuary designation will have an impact on oil and gas activities that the Department of Interior must review and affirmatively find the regulations do not duplicate and are not in conflict with its own regulations before they are approved.

Third, we urge that the Channel Islands Marine Sanctuary be rescinded on the grounds that the area does not qualify for sanctuary status.

Fourth and finally, we recommend that if there is to be a Channel Islands Marine Sanctuary that the regulations proposed for the sanctuary be renoticed and readopted in a form which does not include a blanket prohibition of oil and gas operations on OCS leases. Perhaps a short explanation is in order. The Channel Islands Marine Sanctuary does not itself regulate permitted and prohibited activities within the designated area. Rather, implementing regulations do this. Regulations which ban oil and gas development will become effective on or about March 26, 1981 if no further action is taken by the Commerce Department. We strongly request that these subcommittees recommend to the Commerce Department that proposed regulations not be issued.

Let me end on this note. As you all know, the Office of Management and Budget has proposed drastic cuts in the budgets of almost every agency. These cuts are being made despite cries that they will affect necessary programs and needed services. In view of this situation we respectfully request that if the marine sanctuaries program is maintained that it be restored to its original purpose: preservation of unique treasures.

Thank you for listening to and considering these comments.

