

## MARINE RESOURCES PUBLIC OPINION POLLS

The Alliance of Communities for Sustainable Fisheries (ACSF) has conducted opinion surveys among businesses, community leaders, tourism professionals, and the public regarding the management of marine resources and the importance of recreational and commercial fisheries to coastal communities. The ACSF believes these surveys provide valuable public feedback that can assist the Council in making informed decisions on a variety of fishery-related issues including marine protected areas and the management of fishing and other human activities within National Marine Sanctuaries.

The ACSF was formed to allow for an organized community voice for fishing and fisheries and advocates for the heritage and economic value of fishing to California Coastal Communities. The ACSF has partnered with Responsive Management, a public opinion and attitude survey research firm specializing in natural resource and outdoor recreation issues, to conduct surveys at both national and local levels to gather public opinions and attitudes on marine resource management and the value of recreational and commercial fishing to coastal communities and their heritage. Since 2007, five polls have been conducted and the results have been summarized in a compendium report (Agenda Item C.1.b, Attachment 1). Complete reports on these five surveys are readily available on the ACSF website at [www.alliancefisheries.com](http://www.alliancefisheries.com).

Ms. Kathy Fosmark, ACSF Co-Chair and former Council member, and Mr. Martin Jones, Senior Research Associate with Responsive Management, will present an overview of the surveys and respond to questions.

### **Council Task:**

### **Discussion.**

### Reference Materials:

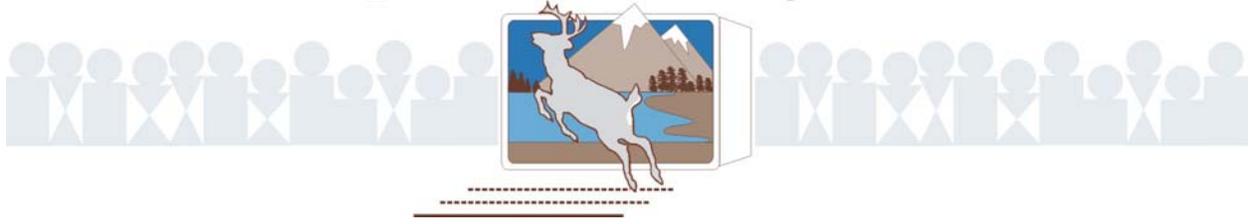
1. Agenda Item C.1.b, Attachment 1; *Compendium of Three Reports Regarding the Monterey Bay Area Fisheries, Data from Five Surveys Conducted 2007-2009 (Executive Summary only)*, the full document is on the September Briefing Book CD in electronic format).
2. Agenda Item C.1.d, Public Comment.

### Agenda Order:

- a. Agenda Item Overview
  - b. Report on Poll Results
  - c. Reports and Comments of Management Entities and Advisory Bodies
  - d. Public Comment
  - e. Council Discussion
- Mike Burner  
Kathy Fosmark, Martin Jones

PFMC  
08/17/09

# Responsive Management



## **COMPENDIUM OF THREE REPORTS REGARDING THE MONTEREY BAY AREA FISHERIES**

**DATA FROM FIVE SURVEYS CONDUCTED 2007 – 2009**

**Conducted for the Alliance of Communities for Sustainable Fisheries**

**by Responsive Management**

**2009**

# **COMPENDIUM OF THREE REPORTS REGARDING THE MONTEREY BAY AREA FISHERIES**

**OVERVIEW OF FIVE SURVEYS CONDUCTED FROM 2007 TO 2009**

**2009**

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## **EXECUTIVE SUMMARY**

Over the past two years, Responsive Management has interviewed more than 2,200 people in five separate surveys, asking them hundreds of questions regarding issues pertaining to the coastal communities of California. This report is a distillation of the multiple surveys conducted from March 2007 to February 2009.

Specifically, the five surveys are as follows:

- A telephone survey of California residents 18 years old and older
- A multi-modal survey of tourism professionals and community leaders
- A multi-modal survey of visitors to the three California coastal communities of Crescent City, Monterey, and Morro Bay
- A nationwide telephone survey of U.S. residents
- A telephone survey of residents of a four-county area centered on Monterey Bay: San Mateo, Santa Cruz, Monterey, and San Luis Obispo Counties

Note that the last section of this report has a detailed description of the surveys and the methodologies used in collecting and analyzing the data.

## **ATTITUDES TOWARD CALIFORNIA'S COASTAL WILDLIFE AND FISHERIES**

More than 2 out of 5 California residents rate their level of concern about the environment at a 9 or 10. Also, Californians in general give low ratings of the health of the state's natural resources, particularly anything directly related to water.

Of the six potential threats asked about, pollution is the top-ranked threat to marine waters, habitat, and fisheries: 92% of California residents say that water pollution is a high or moderate threat. Nonetheless, just below pollution is corporate commercial fishing companies (73%), far exceeding family-run commercial fishing boats (44%) and recreational fishing (29%).

Additionally, when California residents who thought that at least one species of fish or sea animal was depleted, threatened, or endangered were asked to indicate the cause of the problem, pollution was the top-named cause, but it was closely followed by overfishing/overhunting.

This is not to say that there is widespread opposition to fishing, however. The overwhelming majority of U.S. residents support legal recreational fishing (90%) and commercial fishing (86%), and a large majority support using, or harvesting, U.S. ocean resources.

### **ATTITUDES TOWARD MANAGEMENT OF COASTAL AREAS, WILDLIFE, AND FISHERIES**

In addition to support for or opposition to fishing, the surveys explored opinions on whether fishing harms ocean fisheries. In the most general terms, California residents were asked if they thought that “fishing harms the ocean.” The majority disagree (65%), while a fourth (25%) agree (the remainder give a neutral answer). When asked about recreational fishing, 76% disagree that people who fish recreationally are harming the ocean’s fisheries, while only 16% agree.

The same line of questioning also asked about large corporate commercial fishing companies and about family-run commercial fishing boats in California. The former are seen as more of a threat: 59% agree that large corporate commercial fishing companies in California are harming the ocean’s fisheries, compared to only 29% who think that family-run commercial fishing boats are harming the ocean’s fisheries.

The surveys also found that support for protecting ocean waters, habitat, and fisheries is tempered by moderation. When presented with various scales from complete protection/no use of ocean resources to no protection/completely unregulated use, U.S. and California residents most commonly choose the middle of the scale—some protection/some use. In other questions, they show that they favor management options for ocean areas that allow for regulated fishing and sustainable use. In other words, in general, people favor protection *and* sustainable use, consuming seafood harvested from the ocean, but showing much concern that the seafood they eat is sustainably harvested. In fact, in their very definition of “protect,” they show moderation, overwhelmingly perceiving “protect” to mean that the resources can be used in a sustainable way.

Part of the people’s opinions regarding sustainable use are influenced by their desire, in general, *not* to be wholly dependent on foreign sources of seafood. When asked how important it is to

them that the U.S. maintain its ability to supply some seafood to U.S. residents and not be dependent on foreign sources, an overwhelming majority (89%) say it is important, with 70% saying it is *very* important. As part of the issue of sustainable use, some change (but not *damage*) to the natural biodiversity of U.S. ocean waters to guarantee a continued food supply is considered acceptable among a large majority of U.S. residents (71% agree that this is acceptable).

The surveys also delved into issues pertaining to marine sanctuaries. There is widespread support for the establishment of marine sanctuaries, although this does *not* translate into wanting *no* use made of ocean resources. When presented management options for marine sanctuaries, more Monterey Bay area residents choose “sustainable use of ocean resources” (52%) than choose “preserving ocean resources” (34%). When asked specifically about the Monterey Bay Marine Sanctuary, results are closer, but still more choose sustainable use (47%) over preservation (45%).

In managing the Monterey Bay Marine Sanctuary, a large majority of local residents want to ensure that the needs of communities/people who use the ocean are accommodated. And they also want sanctuary managers to obtain the support of local fishing groups and organizations in making fishing regulations pertaining to the sanctuary.

### **ATTITUDES TOWARD CALIFORNIA’S FISHING INDUSTRY**

The fishing industry in California is considered moderately important to the state’s economy. When asked to rate its importance on a scale of 0 to 10, California residents give a mean rating to commercial fishing that is above the midpoint (6.51 mean rating). Looked at another way, a large majority (79%) rate its importance at or above the midpoint. When the importance of commercial fishing to the economies of the three coastal communities in the survey (Crescent City, Monterey, and Morro Bay) was rated, it received fairly high ratings (a mean of 7.98). (Note that recreational fishing’s importance also was highly rated, with a mean of 7.87.) Other questions showed that the importance of jobs created by the fishing industry is considered quite important by tourism professionals and community leaders in these coastal communities, as is the fishing industry’s link to community heritage and culture.

There is an important nuance regarding California's commercial fishing industry. Many Californians, when asked what they think of when the term "commercial fishing" is applied to California, think primarily of large foreign factory ships or large U.S. corporations; a small minority think primarily of small family-run fishing boats.

The surveys examined perceptions of the effects of commercial fishing on the ocean ecosystem. While most Californians *disagree* that fishing itself harms the ocean, a majority of them agree that large corporate commercial fishing companies are harming the ocean's fisheries. Californians also, in general, perceive large corporate commercial fishing companies much more negatively than small family-run commercial fishing boats vis-à-vis harm to the ocean's fisheries.

The surveys also explored the health of businesses. Californians express much more concern for the health of small family-run businesses than they do for large corporations.

### **ATTITUDES TOWARD THE TOURISM INDUSTRY IN CALIFORNIA**

Tourism is considered highly important to the California economy, as well as to the economies of the three coastal communities in the survey. Additionally, ocean access, ocean resources, and seafood are intrinsically connected to tourism. Visitors give high ratings to being able to access the ocean and the beach and being able to go to a restaurant as factors in their decisions to visit coastal California. Furthermore, visitors to Monterey and Morro Bay give high ratings to being able to get fresh local seafood as a factor. Note that from 87% to 93% of visitors to the coastal communities visited a restaurant while there, and from 55% to 85% had eaten seafood in a restaurant while there. Finally, actual fishing participation as a factor in tourism is not insubstantial, as from 7% to 26% of visitors to the three communities had fished near the community at some time.

The waterfronts of the coastal communities are also important for the tourism industry. Overwhelming majorities of tourists went to the waterfront when they visited these communities: 80% of Crescent City visitors, 93% of Monterey visitors, and 97% of Morro Bay visitors. Furthermore, visitors to Monterey and Morro Bay more often indicated that being able to visit a

working waterfront was important rather than unimportant to them when they decided to visit these communities (Crescent City visitors were split on this). Note that California residents, however, overwhelmingly agree (71%) rather than disagree (7%) that they seek out and enjoy going to working waterfronts in communities that have them.

Lastly, in a very specific topic relating to tourism, Californians overwhelmingly want opportunities to use charter boats, given that charter boats allow people to go out on the water who would otherwise not be able to do so. They also want state and local governments to work toward ensuring that charter boat opportunities remain available.

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## **INTRODUCTION**

Over the past two years, Responsive Management has interviewed more than 2,200 people regarding issues pertaining to the coastal communities of California. The surveys collectively asked hundreds of questions about various coastal-related topics, including tourism, recreational and commercial fishing, coastal wildlife and fisheries, seafood harvesting and consumption, and coastal management. This report is a distillation of the multiple surveys conducted from March 2007 to February 2009.

Specifically, this report is a compendium of three separate studies about coastal issues:

- *California Residents' Opinions on and Attitudes Toward Coastal Fisheries and Their Management*, dated 2007.
- *California Tourism and Fishing Heritage Assessment*, dated 2008.
- *Public Opinion on the Management of Ocean Resources and the Monterey Bay National Marine Sanctuary*, dated 2009.

These reports were based on five surveys:

- A telephone survey of California residents 18 years old and older, conducted in 2007, referred to as the “California resident survey.”
- A multi-modal survey of tourism professionals and community leaders, conducted in late 2007, referred to as the “professional/leader survey.”
- A multi-modal survey of visitors to three California coastal communities: Crescent City, Monterey, and Morro Bay, conducted in 2008, referred to as the “visitor survey.”
- A nationwide telephone survey of U.S. residents 18 years old and older, conducted in 2009, referred to as the “national survey.”
- A telephone survey of residents of a four-county area centered on Monterey Bay: San Mateo, Santa Cruz, Monterey, and San Luis Obispo Counties, conducted in 2009, referred to as the “Monterey Bay area resident survey.”

The surveys pertained to four broad themes, and this compendium is structured around these themes:

- Attitudes Toward California's Coastal Wildlife and Fisheries

- Attitudes Toward Management of Coastal Areas, Wildlife, and Fisheries
- Attitudes Toward California's Fishing Industry
- Attitudes Toward the Tourism Industry in California

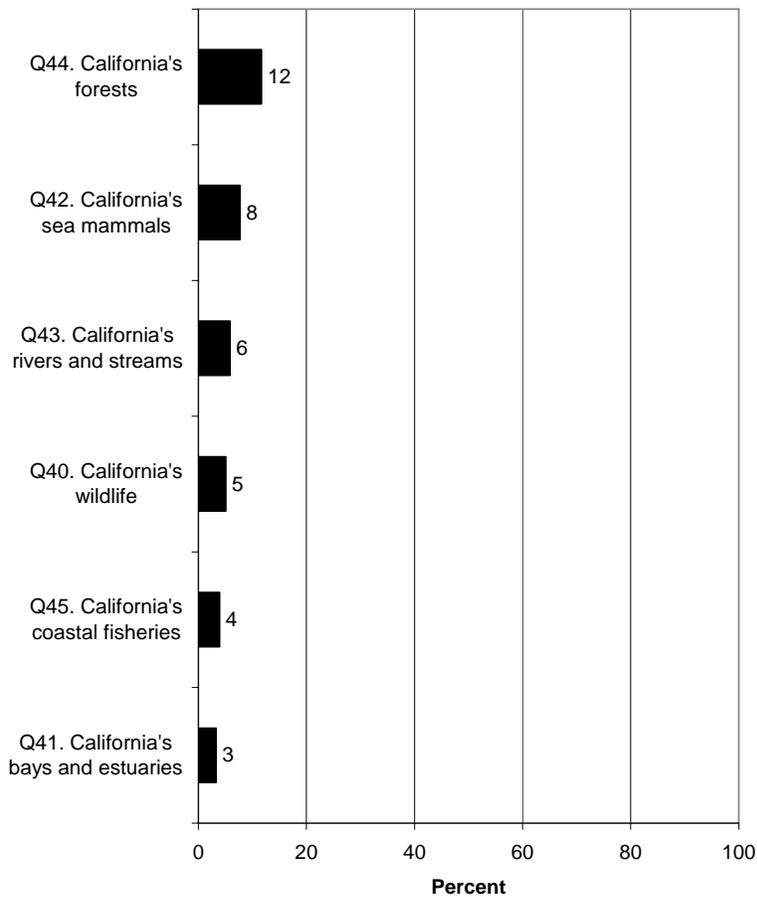
The final section of this report provides a detailed description of the methodology.

# 1. ATTITUDES TOWARD CALIFORNIA’S COASTAL WILDLIFE AND FISHERIES

California residents do not perceive the ecological health of California’s natural resources positively, particularly anything directly related to water. Illustrative of their perceptions is that no more than 12% gave a rating 9 or 10 for the health of any of the six resources about which the California resident survey asked, as shown on the graph (on a scale of 0 to 10, with 0 being not at all healthy and 10 being very healthy) (Figure 1.1). The mean ratings ranged from a low of 4.78 (for California’s coastal fisheries) to a high of 6.14 (for California’s forests).

**Figure 1.1. California Residents’ Ratings of Ecological Health of Six Natural Resources**

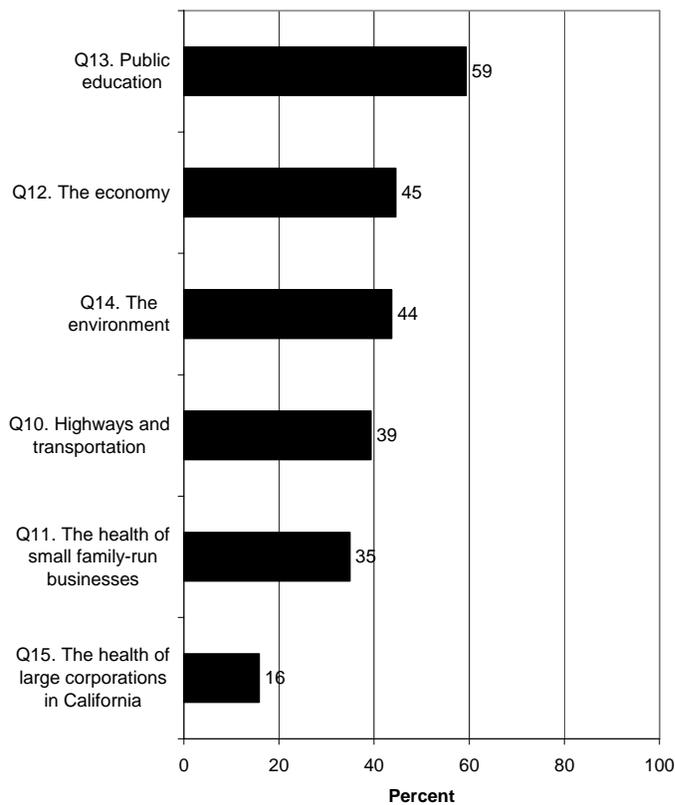
**Q40-45. Percent rating the ecological health of each of the following as a 9 or 10.**



Another line of questioning found that overall concern for the environment can be considered in the middle of the pack among broad concerns of California residents—lower than some other social concerns (e.g., public education), but slightly higher than concern for the health of business interests in general. The 2007 California resident survey found that Californians showed concern for the environment that was commensurate with concern for the economy and highways/transportation (Figure 1.2). (One could expect that “the economy” would rise in rank due to economic issues in late 2008 and 2009, if the survey were to be conducted now.) Not to be lost in the overall numbers, however, is that a substantial percentage of California residents (44%) rated their concern for the environment at a 9 or 10.

**Figure 1.2. California Residents’ Concern About Issues California Faces**

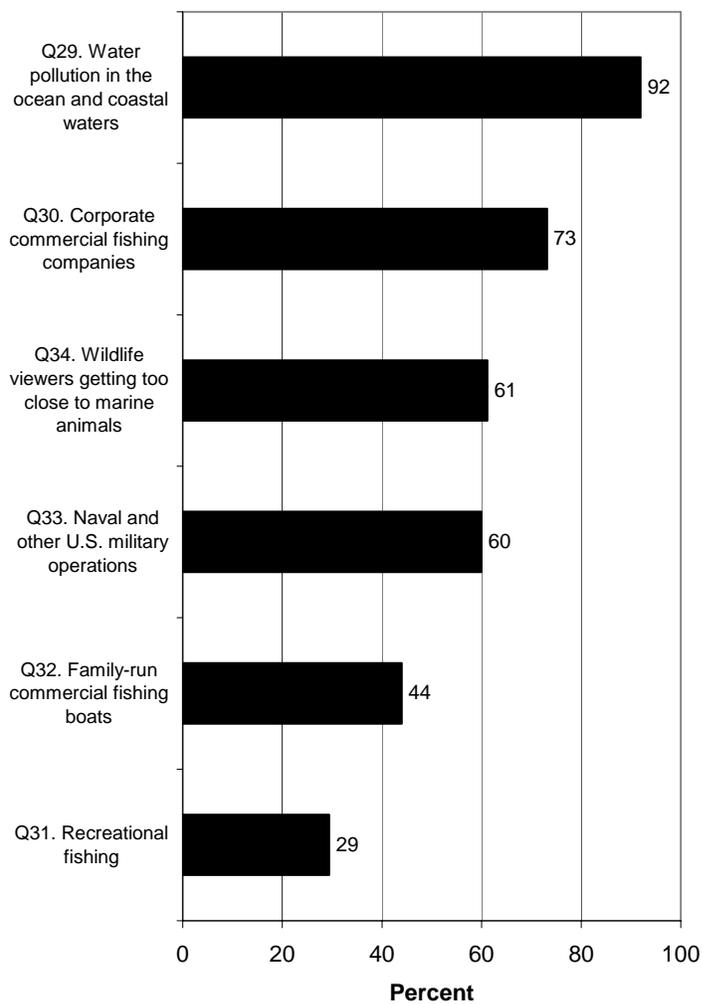
**Q10-15. Percent giving a rating of 9 or 10 regarding their concern about each of the following issues that California faces.**



Regarding water-related resources directly, the public perception in the state is that water pollution is the greatest threat to California’s marine waters, habitat, and fisheries (Figure 1.3). Nonetheless, corporate commercial fishing companies also are seen by many California residents as threatening the state’s marine waters, habitat, and fisheries. Note that the survey asked about both *corporate commercial fishing companies* and *family-run commercial fishing boats*, and the former were much more likely to be seen as a threat than the latter.

**Figure 1.3. California Residents’ Ratings of Threats to State’s Marine Waters, Habitat, and Fisheries**

**Q29-34. Percent saying that each of the following is a high or moderate threat to California's marine waters, habitat, and fisheries.**



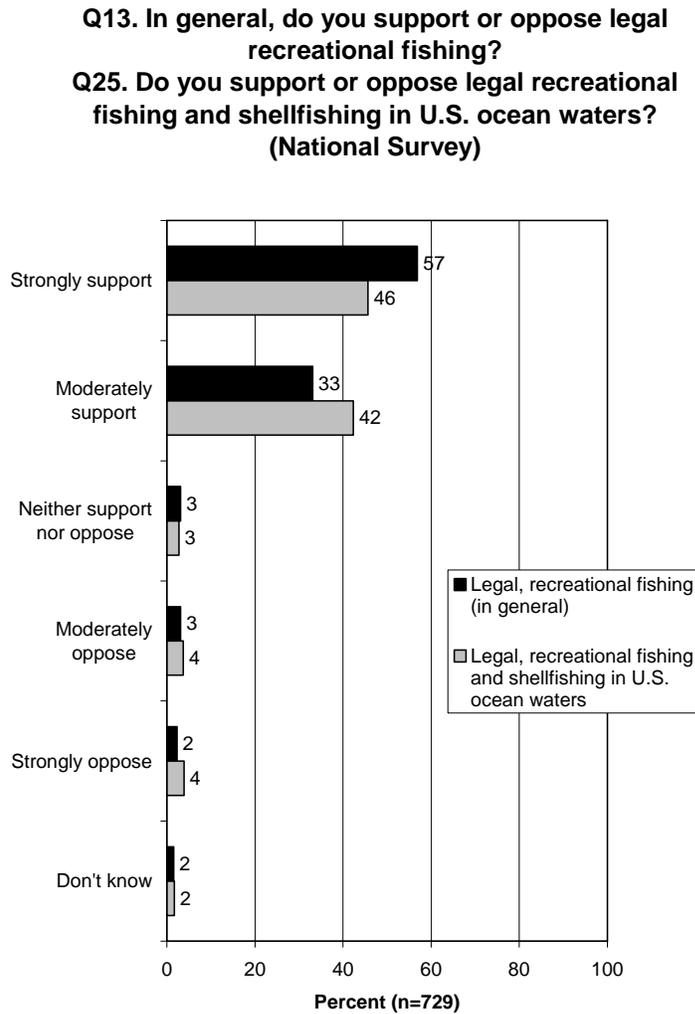
Another finding of the California resident survey is also illustrative of pollution's preeminent place as a perceived threat. When California residents who thought that at least one species of fish or sea animal was depleted, threatened, or endangered were asked in follow-up to say why that species was that way, pollution was the top-named culprit. Pollution was closely followed by overfishing/overhunting as a culprit, a finding that echoes the perception above that corporate commercial fishing companies are a threat to California's marine waters, habitat, and fisheries.

Other questions in the California resident survey found that residents were most concerned that the following water-related species were depleted, threatened, or endangered: sea lion/seal, otter, whale, salmon, abalone, dolphin, tuna, and shark. It is interesting that the top-ranked species is sea lion, as the population of sea lions is robust, with some people thinking it is perhaps too robust. (This report discusses more about sea lions shortly.)

In examining attitudes toward California's coastal wildlife and fisheries, it is pertinent to examine attitudes toward fishing, both recreational and commercial. Regarding the former, the national survey found that an overwhelming majority of U.S. residents (90%) support legal recreational fishing in general, with most of that being *strong* support (57% *strongly* support); only 5% oppose (Figure 1.4). Also in Figure 1.4, an overwhelming majority of U.S. residents (88%) support legal recreational fishing and shellfishing in U.S. ocean waters, with only 8% opposing. The same survey found that support for *commercial* fishing was at 86%, with only 11% opposing. Likewise, the overwhelming majority of U.S. residents (81%) support using, or harvesting, U.S. ocean resources, such as fish and other ocean life; only 13% oppose.

Also, recreational fishing is not perceived as a great threat to California's marine waters, habitat, and fisheries. In 2007, only 5% of California residents rated recreational fishing as a high threat, while 66% said it is a low threat or not a threat at all.

**Figure 1.4. U.S. Residents’ Support/Opposition to Legal, Recreational Fishing**



As previously mentioned, one of the studies discussed sea lions specifically. U.S. residents were asked in 2009 about the management of sea lions, after being informed about them. The survey first informed them that the “California sea lion is a marine mammal whose population has grown from about 50,000 sea lions in the Pacific Ocean in the early 1800s to about 320,000 sea lions today. The population is likely to continue to grow. This growth is because the sea lion’s natural predators, such as orcas or killer whales and white sharks, have been reduced. Today, the sea lion population is primarily controlled by cycles of disease or starvation when there is not enough food to feed the entire population. Some ocean managers believe the continued growth of the sea lion population makes it necessary to control the population to prevent disease and

starvation.” Then the survey asked respondents to choose from among three approaches for managing sea lions (including the “no management” approach). The most commonly chosen approaches were “legalization of hunting or other removal methods, under specific limits, to control the sea lion population” (39%) and “legalization of non-lethal methods to control the sea lion population, such as birth control” (37%). The third approach (the “no management” option) was chosen by 13%.

## 2. ATTITUDES TOWARD MANAGEMENT OF COASTAL AREAS, WILDLIFE, AND FISHERIES

The following discusses opinions on management of coastal resources. It first discusses this topic in general terms. It then examines specific issues regarding opinions on marine sanctuaries and managing coastal resources.

### GENERAL ATTITUDES TOWARD MANAGEMENT OF COASTAL RESOURCES

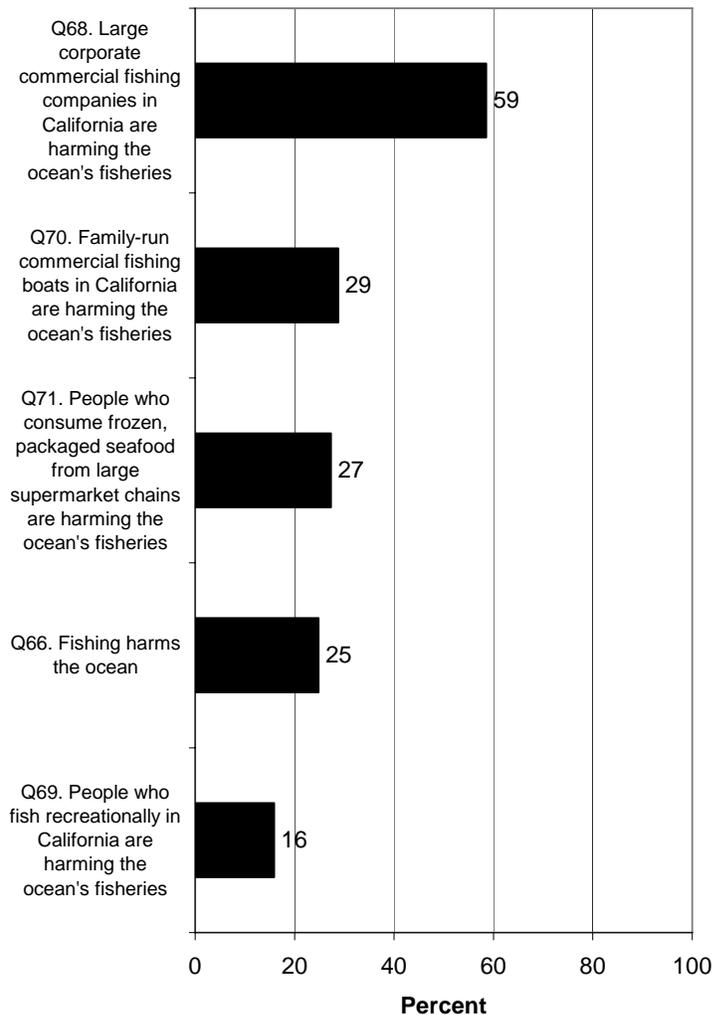
In a most basic finding, U.S. residents overwhelmingly support protecting U.S. ocean waters and ocean life: 78% *strongly* support doing so, and another 17% *moderately* support it, for a sum of 95% in support; only 3% indicated that they oppose.

Another very basic finding that pertains to management of coastal areas and fisheries was already discussed: support or opposition to fishing itself. As previously reported and shown in Figure 1.4, support for legal, recreational fishing is high. In the national survey, 90% of U.S. residents support legal recreational fishing in general, and 88% support legal recreational fishing and shellfishing in U.S. ocean waters. Additionally, the overwhelming majority of U.S. residents (86%) support legal *commercial* fishing and shellfishing in U.S. ocean waters, while only 11% oppose, and the overwhelming majority of U.S. residents (81%) support using, or harvesting, U.S. ocean resources, such as fish and other ocean life, and only 13% oppose.

The California resident survey had a question with a slight nuance difference, asking about whether respondents thought that fishing harms ocean fisheries (Figures 2.1 and 2.2). The most broad question asked whether the respondent agreed or disagreed that “fishing harms the ocean”: 65% disagreed, but 25% agreed (10% gave neutral answers). Recreational fishing fared even better: 76% disagreed, and only 16% agreed that “people who fish recreationally in California are harming the ocean’s fisheries.”

**Figure 2.1 Agreement That Various Activities Harm Ocean Resources (Among California Residents)**

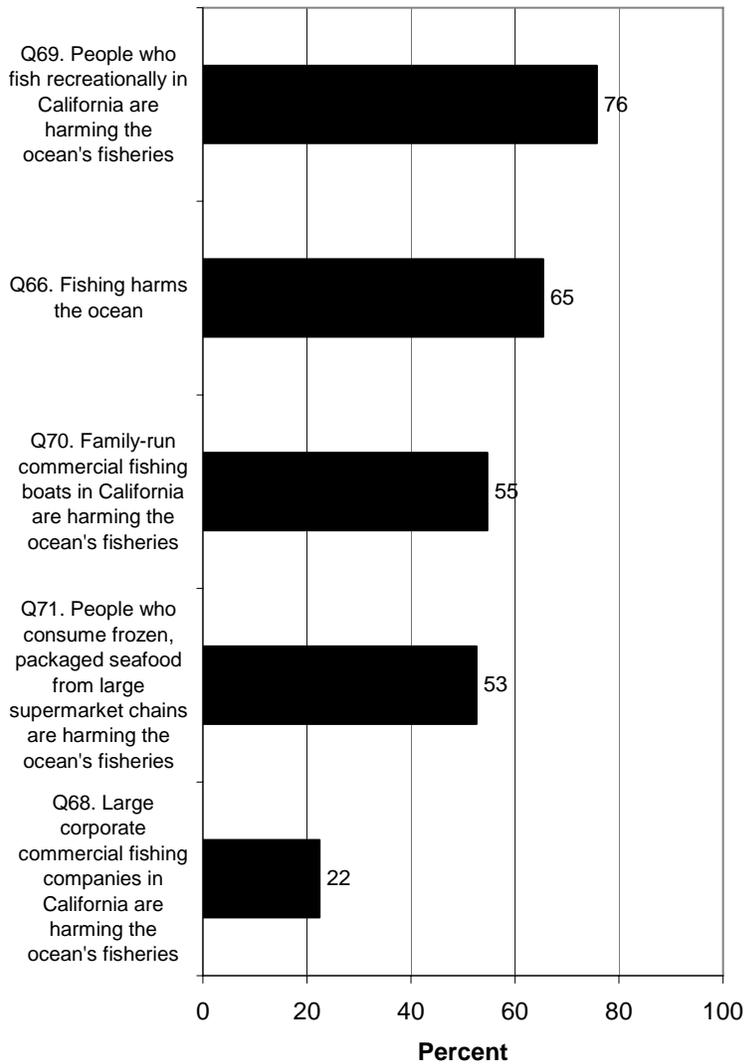
**Q66, 68-71. Percent who strongly or moderately agree with the following.**



As Figures 2.1 and 2.2 show, the same line of questioning also asked whether “family-run commercial fishing boats are harming the ocean’s fisheries” and whether “large corporate commercial fishing companies in California are harming the ocean’s fisheries.” Family-run commercial fishing boats are seen favorably; not so for large corporate commercial boats. Regarding family-run boats: a majority of California residents in 2007 disagreed (55%) that

**Figure 2.2 Disagreement That Various Activities Harm Ocean Resources (Among California Residents)**

**Q66, 68-71. Percent who strongly or moderately disagree with the following.**

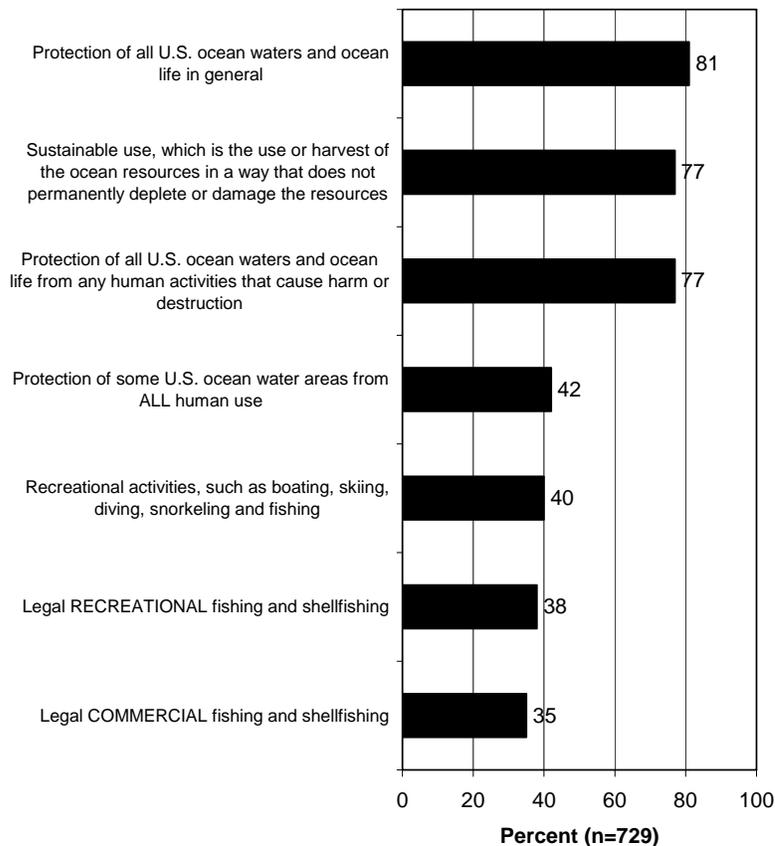


family-run boats are harming the ocean's fisheries, while 29% agreed that they are doing harm. The results flip-flop for commercial boats: a majority (59%) *agreed* that large corporate commercial fishing companies in California are harming the ocean's fisheries, while 22% disagreed.

The national survey also asked a series of questions about the importance to the respondent of knowing that U.S. ocean waters are managed to allow seven items. As shown in Figure 2.3, the survey found that protection of ocean waters, ocean life, and sustainable use are considered more important than recreational activities.

**Figure 2.3. U.S. Residents' Opinions on Uses and Management of U.S. Ocean Waters**

**Q32-38. Percent who indicated that it is very important to them to know that U.S. ocean waters are managed to allow for each of the following:  
(National Survey)**

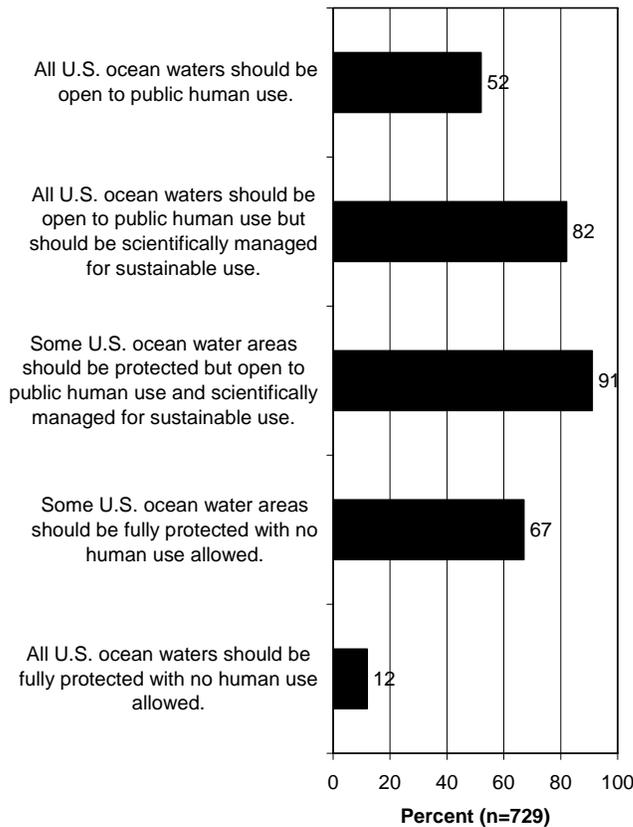


This support of protecting ocean waters is tempered by moderation. When U.S. residents were read five statements that are in a scale from virtually no restrictions to complete restrictions on using the ocean, agreement was highest for the statements in the middle of the scale: 91%

agreed that “some U.S. ocean water areas should be protected but open to public human use and scientifically managed for sustainable use,” and 82% agreed that “all U.S. ocean waters should be open to public human use but should be scientifically managed for sustainable use” (Figure 2.4). The extremes of the scale (complete restrictions or virtually no restrictions) had the lowest agreement.

**Figure 2.4. U.S. Residents’ Opinions on Restrictions Versus No Restrictions in Management of U.S. Ocean Waters**

**Q41-45. Percent who strongly or moderately agree with the following statements about U.S. ocean waters:  
(National Survey)**

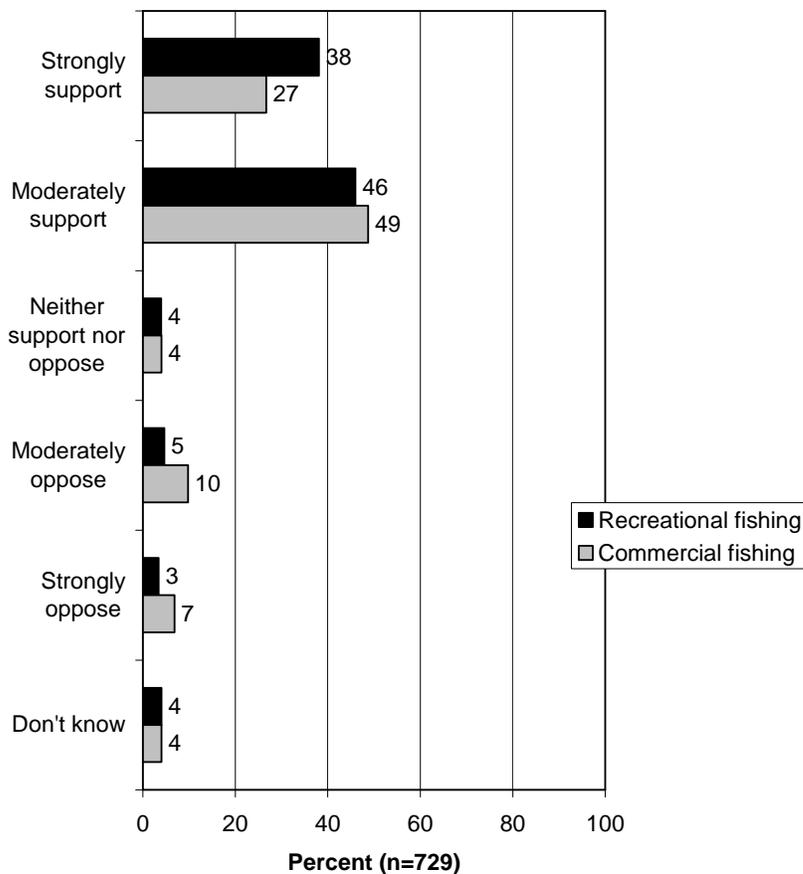


As is shown in Figure 2.4, U.S. residents favor moderate restrictions. The national survey also found that U.S. residents value recreational and commercial fishing and shellfishing. They support options for managing ocean waters and fisheries that allow for both recreational and

commercial fishing, when presented with competing management options that provide similar protection of the ecosystem. For each type of fishing, a large majority support (84% for recreational; 76% for commercial) the management option that allows it, if asked to choose between competing options that provide similar support (Figure 2.5).

**Figure 2.5. U.S. Residents' Support for or Opposition to Management Options That Allow for Recreational or Commercial Fishing**

**Q49/50. Ocean resource managers have several options for managing ocean resources. If each ocean management option provides about the same amount of protection and similar benefits for U.S. ocean resources, would you support or oppose the option that allows recreational/commercial fishing and shellfishing?  
(National Survey)**



In a similar line of questioning, the national survey asked U.S. residents if they would support or oppose recreational or commercial fishing and shellfishing in U.S. ocean waters that were protected but scientifically managed for sustainable use. Both had majorities in support: 71% (recreational) and 58% (commercial) would support fishing in U.S. ocean waters that were protected but scientifically managed for sustainable use. Opposition stood at 23% (recreational) and 35% (commercial), with neutral answers making up the remainder.

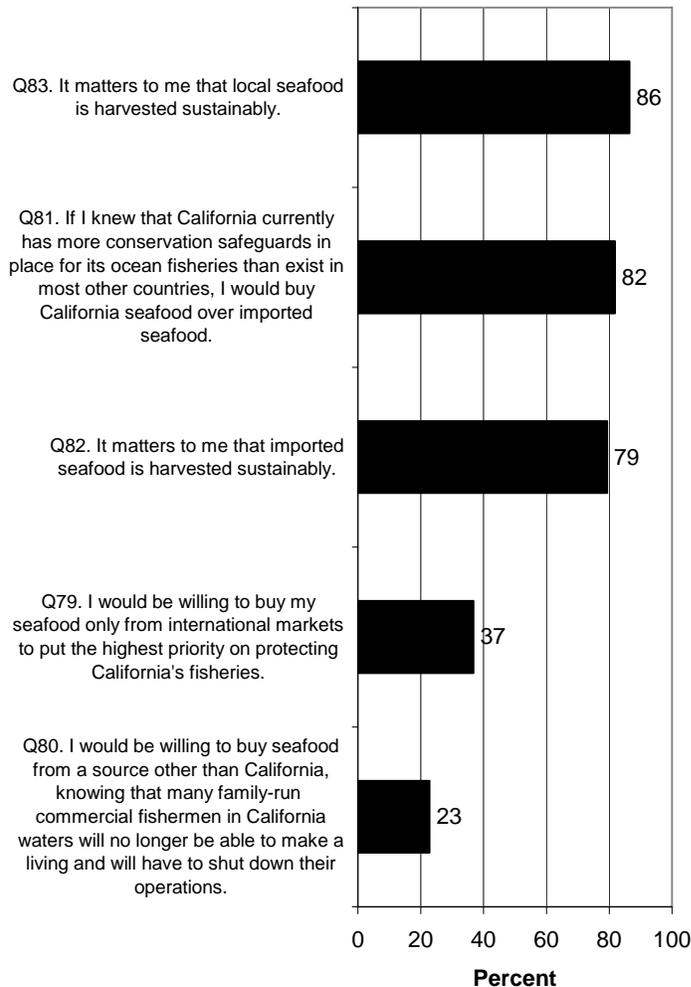
One of the five surveys that make up this compendium asked directly about the *harvesting* of ocean resources. In simple terms, there is support for the sustainable harvesting of seafood. The California resident survey found that they show concern both for having their seafood harvested sustainably as well as for ensuring that California's seafood industry not be unduly harmed (Figure 2.6). In that survey, overwhelming majorities of those who eat seafood agree that it matters to them that local seafood is harvested sustainably (86% agree) and that imported seafood is harvested sustainably (79% agree). However, a low percentage of them (23%) agree that they would be willing to buy their seafood from non-California sources if they knew that doing so would likely force many family-run commercial fishermen out of business in California.

National results mirror the California results regarding sustainable harvest. The national survey asked U.S. residents to indicate how important it is to them that seafood be harvested in a sustainable manner, and 96% say it is important, with 80% saying it is *very* important, that *domestic or U.S.-harvested* seafood be harvested in a sustainable manner. Similar results were found regarding imported seafood being harvested in a sustainable manner (92% say it is important, and 74% say it is *very* important).

To summarize thus far, the overwhelming majority of people want to protect sea life and habitats, but they favor moderate measures for doing so. In particular, they do not favor extreme positions regarding the management of the ocean's fisheries. In their very definition of "protect," they show moderate opinions. The California resident survey sought to determine exactly how Californians perceive the term, "protect," as in "We should protect the ocean." They overwhelmingly perceive "protect" to mean that the resources can be used in a sustainable

**Figure 2.6. California Residents' Opinions Regarding Harvest of Seafood**

**Q79-83. Percent who strongly or moderately agree with the following.) (Asked of those who eat seafood at least once a month.)**

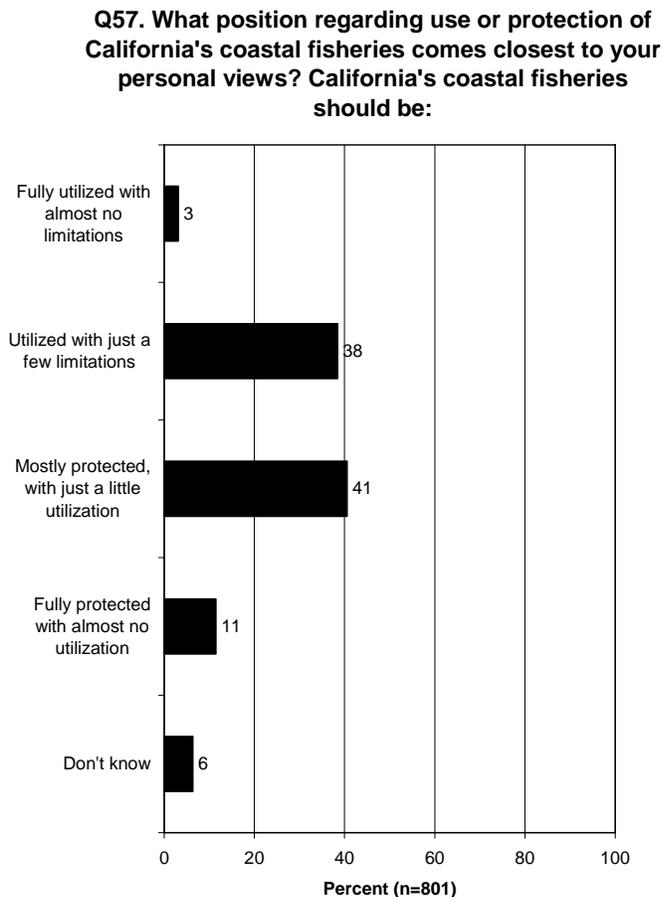


way (87%) rather than not used at all (8%). This is an important consideration when examining statements and statistics about whether Californians want to protect the ocean.

There is another excellent example of the moderate position that the public holds. The California resident survey found, in a question directly about use or protection of California's coastal fisheries, that Californians are in the middle: they favored the moderate answers ("utilized with just a few limitations" and "mostly protected with just a little utilization") over the extreme

answers (“fully utilized with almost no limitations” and “fully protected with almost no utilization”) (Figure 2.7). Furthermore, the two moderate answers are supported by nearly equal percentages. Overall, this question shows an almost even split between moderate utilization and moderate protection.

**Figure 2.7. California Residents’ Utilization Versus Protection of California’s Coastal Fisheries**



Likewise, the California resident survey asked about opinions on use versus protection of California’s coastal fisheries. There was much more support (by more than 2 to 1) for allowing fishing in all areas, with science-based limits on the total harvest (68% supported this position), over fully protecting (i.e., prohibiting *all* harvesting in) some areas with the concomitant result that fishermen would concentrate their fishing in remaining open areas (24%).

The opinions on sustainable use are tempered and influenced by U.S. residents' desire to *not* be wholly dependent on foreign sources of seafood. The national survey, after informing respondents that approximately 85% of seafood consumed in the U.S. is imported, asked U.S. residents how important it is to them that the U.S. maintain its ability to supply some seafood to U.S. residents rather than to depend entirely on imported seafood. U.S. residents rate this quite high: 89% say it is important to them, with most of them saying it is *very* important (70%).

Another line of questioning delved into opinion on commercial fishing with conditions attached. In the national survey, U.S. residents were asked if they agree or disagree that some change to the natural biodiversity in U.S. ocean waters is acceptable to guarantee a continued food supply through fishing and shellfishing: agreement (71%) far exceeds disagreement (20%).

### **CALIFORNIA RESIDENTS' OPINIONS REGARDING MARINE SANCTUARIES AND MANAGEMENT OF OCEAN WATERS**

The California resident survey had questions that pertained to a specific aspect of management of ocean waters: marine sanctuaries. In general, Monterey Bay area residents support marine sanctuaries. The Monterey Bay area resident survey gave respondents some background information about National Marine Sanctuaries (shown in the text box below). Monterey Bay area residents were then asked if they support or oppose the designation of certain areas of U.S. ocean waters as sanctuaries for special management to conserve the marine habitats and cultural features: the overwhelming majority of them (93%) support, with most of them (71%) *strongly* supporting.

The U.S. manages ocean waters up to 200 miles off the shore of the U.S. coastline. The National Marine Sanctuary Program was created by Congress and is managed by the National Oceanic and Atmospheric Administration or NOAA. The Program designates certain areas of ocean waters managed by the U.S. as sanctuaries for special management. These sanctuaries are managed to conserve rich and diverse marine habitats, as well as some cultural features such as historic shipwrecks.

This support for marine sanctuaries in general among Monterey Bay area residents does *not* translate into wanting *no* use made of ocean resources in sanctuaries. After hearing about

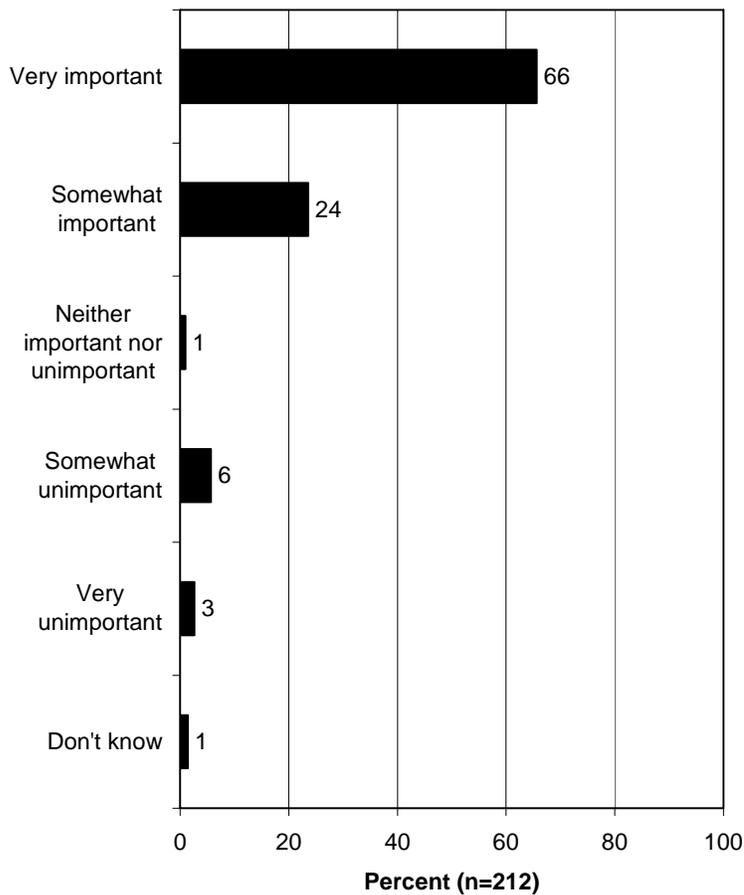
options for managing sanctuaries, Monterey Bay area residents were asked to choose among two management options for sanctuaries: a majority (52%) chose “sustainable use of ocean resources,” compared to 34% who chose “preserving ocean resources” (neutral answers accounted for the remaining 14%). When asked specifically about the Monterey Bay Marine Sanctuary, area residents are fairly evenly split: 47% chose “sustainable use of ocean resources,” and 45% chose “preserving ocean resources.” In short, there was more support for preserving ocean resources in the Monterey Bay Sanctuary than in sanctuaries in general, although “sustainable use” still exceeded “preservation.”

Other findings show the prevalent desire for sustainable use of ocean resources, even in marine sanctuaries. The survey of Monterey Bay area residents found that a large majority of them rate the importance of accommodating the needs of communities/people who use the ocean when making management decisions as important: 66% rate it *very* important, and 24% rate it *somewhat* important (a sum of 90%) (Figure 2.8). Additionally, a large majority (81%) agree, with most of them *strongly* agreeing (54%), that Sanctuary managers should obtain the support of local fishing groups and organizations if they want to change the agreement and make additional fishing regulations (Figure 2.9). Furthermore, an overwhelming majority of Monterey Bay area residents (88%) agree that Sanctuary managers, if they address a problem with the ocean resources or habitats in the Monterey Bay Sanctuary that affects fishermen in the area, should be required to work with leaders of local fishing groups and organizations to reach an agreement for a solution to the problem (Figure 2.9).

The Monterey Bay area resident survey had questions pertaining to the Advisory Council to the Monterey Bay Marine Sanctuary. One finding suggests that Monterey Bay area residents want the Advisory Council to be accessible and its decision-making process transparent. Agreement among Monterey Bay area residents is overwhelming (91%) that the Monterey Bay Sanctuary Advisory Council should be free to communicate with members of Congress, the media, the general public, or any other group to address issues regarding the Sanctuary (only 6% disagree). Additionally, Monterey Bay area residents feel more comfortable with having the County Boards of Supervisors select Advisory Council members to represent each county compared to having the superintendent of the Monterey Bay Sanctuary do so: a large majority of them (88%) agree

**Figure 2.8. Opinions on the Importance of Accommodating the Needs of Ocean Resource Users in Management Decisions (Among Monterey Bay Area Residents)**

**Q14. How important or unimportant is it to you to know that the sanctuary managers try to accommodate the needs of local communities and the people who use the ocean when making management decisions for the sanctuaries? (Monterey Bay Area Survey)**



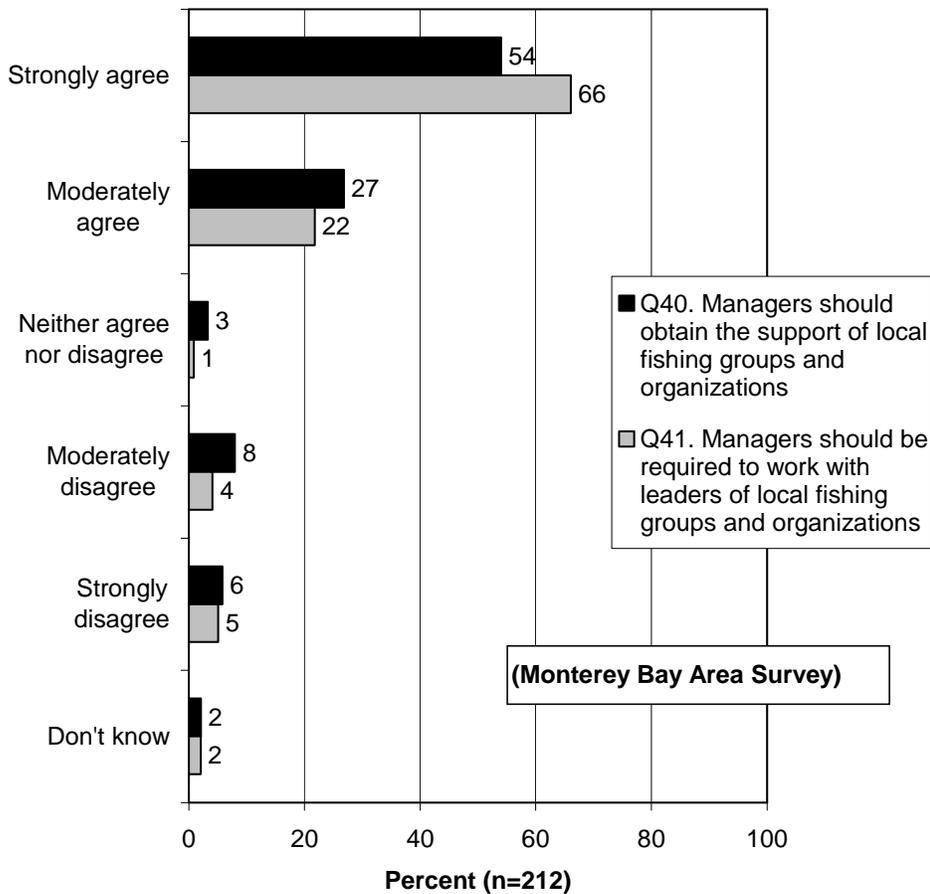
that their County Board of Supervisors should select a representative of the general public for the Advisory Council, while only 27% agree that the Sanctuary superintendent should be able to select whomever he or she wants to represent the general public.

**Figure 2.9. Opinion Regarding the Role of Local Fishing Groups in Regulatory and Management Decisions (Among Monterey Bay Area Residents)**

Do you agree or disagree that:

**Q40. ...the Sanctuary managers should obtain the support of local fishing groups and organizations if they want to change the agreement and make an additional fishing regulation?**

**Q41. ...if the Sanctuary managers address a problem with the ocean resources or habitats in the Monterey Bay Sanctuary that affects fishermen in the area, the managers should be required to work with leaders of local fishing groups and organizations to reach an agreement for a solution to the problem?**

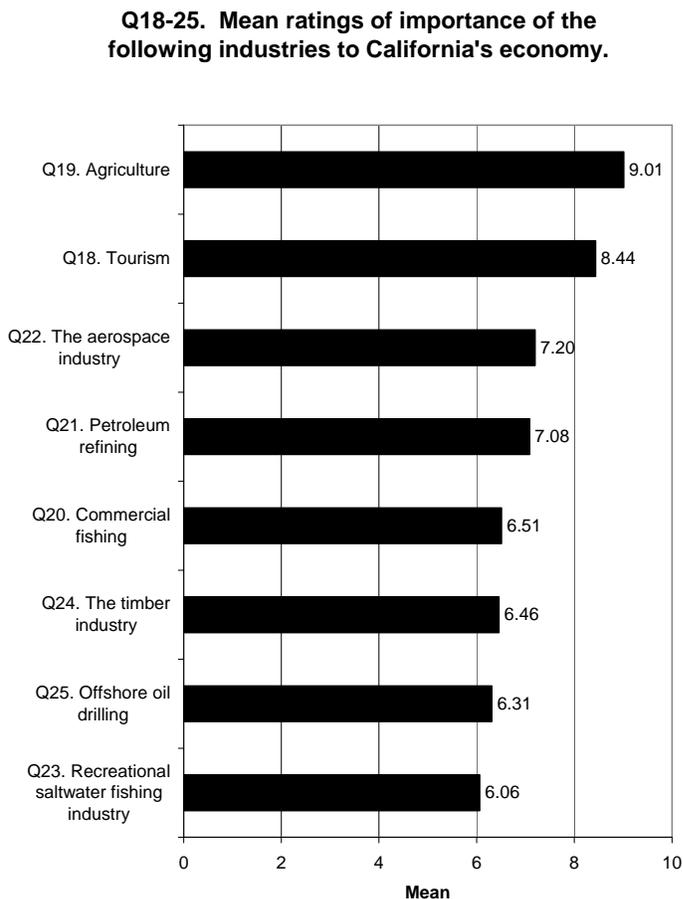


Finally, one question discussed the funding for the creation and management of Marine Protected Areas. Among Monterey Bay area residents, there was more opposition to (49%) than support for (45%) a tax increase to fund the creation and management of Marine Protected Areas.

### 3. ATTITUDES TOWARD CALIFORNIA'S FISHING INDUSTRY

The California resident survey sought to assess perceptions of the importance of various industries to the state's economy. The survey inquired about eight industries, asking respondents to rate the importance of each on a scale from 0 (unimportant) to 10 (most important) (Figure 3.1). By far, agriculture and tourism are perceived as the most important (mean ratings of importance of 9.01 and 8.44, respectively). Commercial fishing is in the middle of the eight industries about which the survey asked (mean of 6.51), below the aforementioned top two as well as the aerospace industry and petroleum refining, but above the timber industry, offshore oil drilling, and the recreational saltwater fishing industry. Not to be lost in this is that a large majority of Californians (79%) rated the importance of commercial fishing to California's economy at or above the midpoint, and only 17% rated it at less than the midpoint.

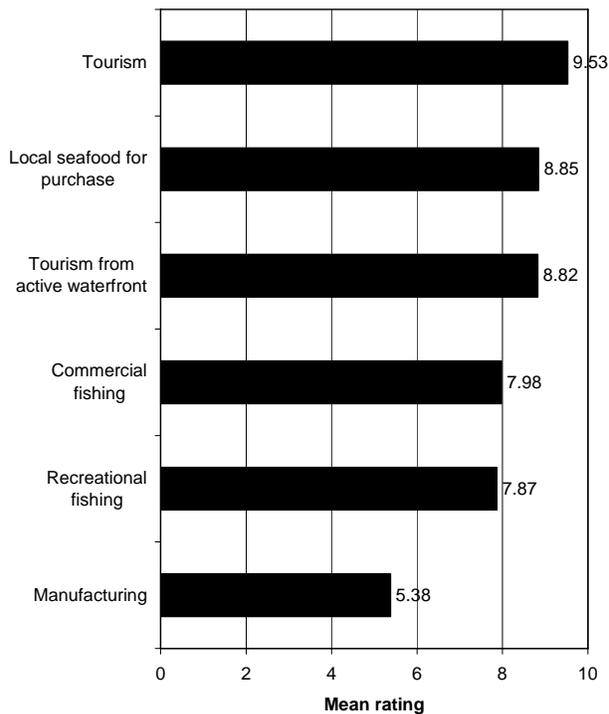
**Figure 3.1. California Residents' Perceptions of the Importance of Various Industries to California's Economy**



In a similar line of questioning but more focused on Monterey Bay, the professional/leader survey asked tourism professionals and community leaders from the three coastal communities (Crescent City, Monterey, and Morro Bay) to rate the importance six factors influencing their community’s economy, using a scale of 0 to 10, where 0 is not at all important and 10 is extremely important (the factors to be rated were manufacturing, commercial fishing, recreational fishing, tourism, the availability of local seafood, and tourism generated by having the public be able to see a working waterfront) (Figure 3.2). While tourism is the most important, having the highest mean rating (9.53), and having local seafood for purchase (8.85) and tourism from having an active waterfront (8.82) are important factors, both the fishing industries rate well above the midpoint in the ratings scale. Commercial fishing has a mean rating of importance of 7.98, and recreational fishing has a mean rating of importance of 7.87.

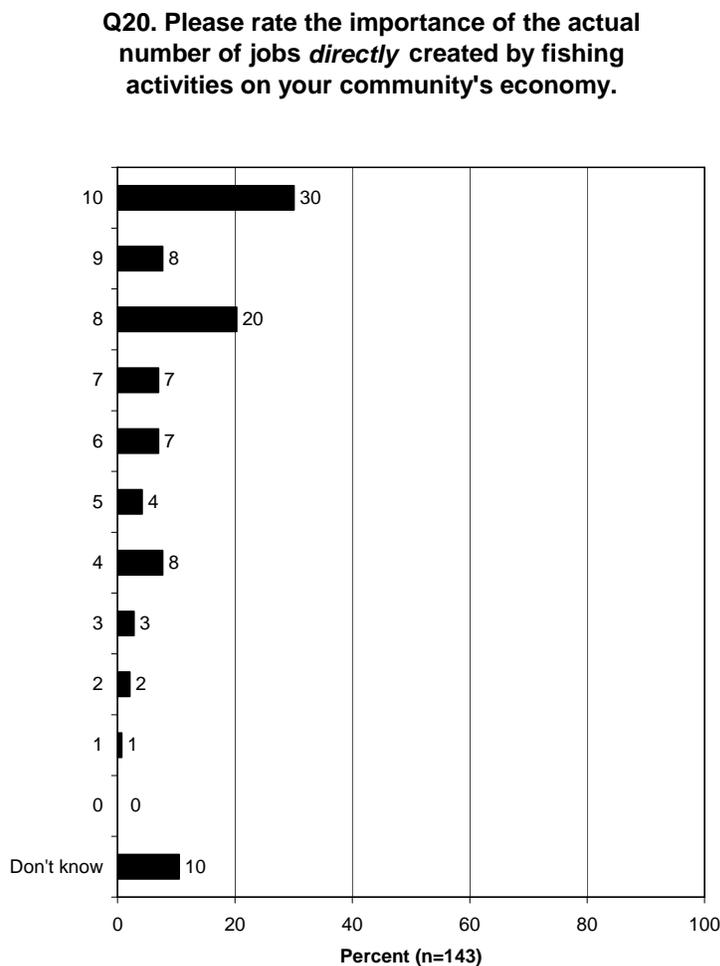
**Figure 3.2. Importance of Various Factors on Economies of Crescent City, Monterey, and Morro Bay (Asked of Tourism Professionals and Community Leaders)**

**Q14-19. On a scale of 0 - 10, where 0 is "not at all important" and 10 is "extremely important," the mean rating of importance for the following factors on the coastal community's economy.**



There is further evidence that tourism professionals and community leaders value commercial and recreational fishing. When asked about the jobs created by these industries in their community, 58% of tourism professionals and community leaders in 2007 indicated that the number of jobs *directly* created by fishing activities is of great importance to their community's economy (they rated it 8 or above on a scale of 0 to 10), and 29% gave a moderate rating (a rating of 3-7); only 3% indicated that the actual number of jobs *directly* created by fishing activities is of low importance to the community's economy (a rating of 0-2) (Figure 3.3). Note that there were nearly identical results concerning the importance of jobs *indirectly* created by fishing activities.

**Figure 3.3. Importance of Jobs Directly Created by Fishing Activities on the Economies of Crescent City, Monterey, and Morro Bay (Asked of Tourism Professionals and Community Leaders)**

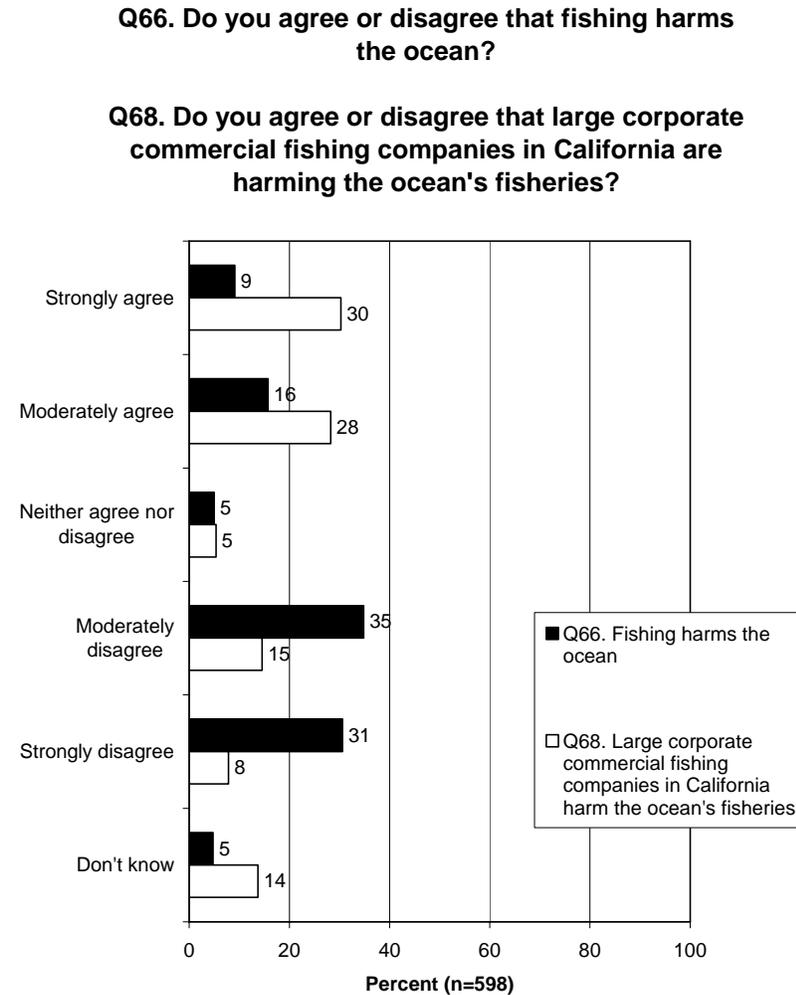


Similarly, nearly two-thirds of all tourism professionals and community leaders surveyed (63%) indicated that the fishing heritage of their community is of great importance in attracting business to their community (they rated it 8 or above); 31% rated its importance as moderate (a rating of 3-7); and only 3% indicated that fishing heritage is of low importance in attracting business to their community (a rating of 0-2). Additionally, the majority of all tourism professionals and community leaders surveyed (74%) indicated that having local, fresh seafood available is of great importance in attracting business to their community (a rating of 8 or above); 25% rated its importance as moderate (a rating of 3-7); and only 2% indicated that having local, fresh seafood available is of low importance in attracting business to their community (a rating of 0-2).

The above findings show opinions on the economic importance of commercial and recreational fishing. It is also important to examine attitudes specific to commercial fishing in California, particularly to have an idea of how Californians perceive commercial fishing. The California resident survey asked Californians what exactly they think of when the term “commercial fishing” is applied to California, and family-run commercial fishing boats are *not* primarily on their mind, as 59% think primarily of large foreign factory ships or large U.S. corporations; only 28% think primarily of small family-run fishing boats. This highlights the importance of making a distinction between small, family-run fishing boats versus large corporate fishing companies when discussing commercial fishing.

The above has discussed the importance of and effects on the economy of the recreational and commercial fishing industries. It is also important to examine public attitudes regarding the effect of fishing on the ecosystem (which also further demonstrates the differing attitudes toward small, family-run fishing boats and large corporate fishing companies). The California resident survey found that Californians do not perceive that fishing itself harms the ocean: in answer to a basic question, two-thirds of Californians (66%) disagree that fishing harms the ocean, and only 25% agree (Figure 3.4). However, the same graph shows that when asked about large corporate commercial fishing companies, the perception is more negative: 58% agree that large corporate commercial fishing companies are harming the ocean’s fisheries.

**Figure 3.4. California Residents' Perceptions Regarding Effects on the Ecosystem of Fishing and Large Corporate Fishing Companies**

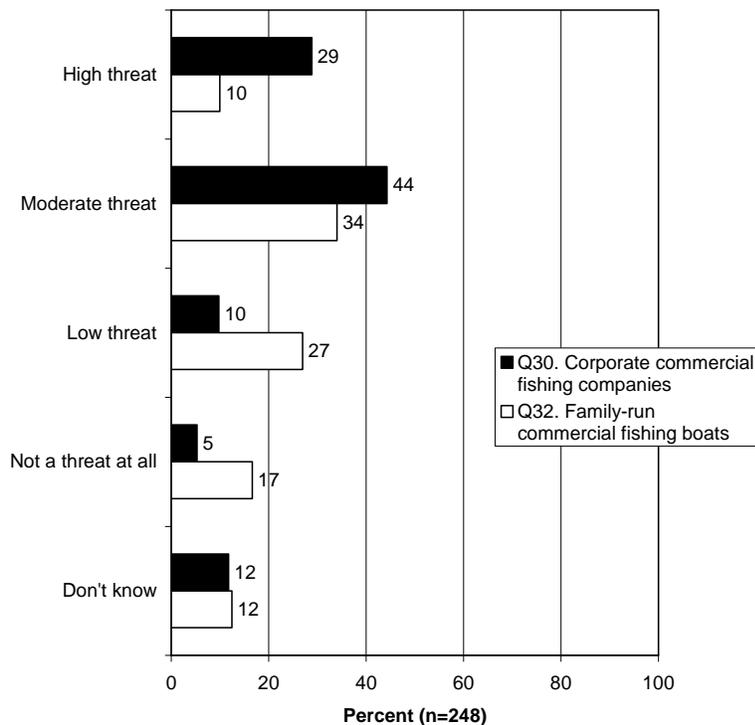


Another line of questioning in the California resident survey asked residents to indicate how much of a threat corporate commercial fishing companies and family-run commercial fishing boats are to California's marine waters. A large majority of Californians (73%) perceive corporate commercial fishing companies as being a high or moderate threat to California's marine waters, habitat, and fisheries; conversely, only 10% say that they are only a low threat, and 5% say that they are not a threat at all (Figure 3.5). Also in this graph, family-run commercial fishing boats are not perceived as being as great a threat, with opinion evenly split: 44% see them as a high or moderate threat to California's marine waters, habitat, and fisheries, and 44% see them as only a low threat or not a threat at all.

**Figure 3.5. California Residents' Perceptions of Threat Posed by Commercial Fishing**

**Q30. What about corporate commercial fishing companies? (How much of a threat are these to California's marine waters, habitat, and fisheries?)**

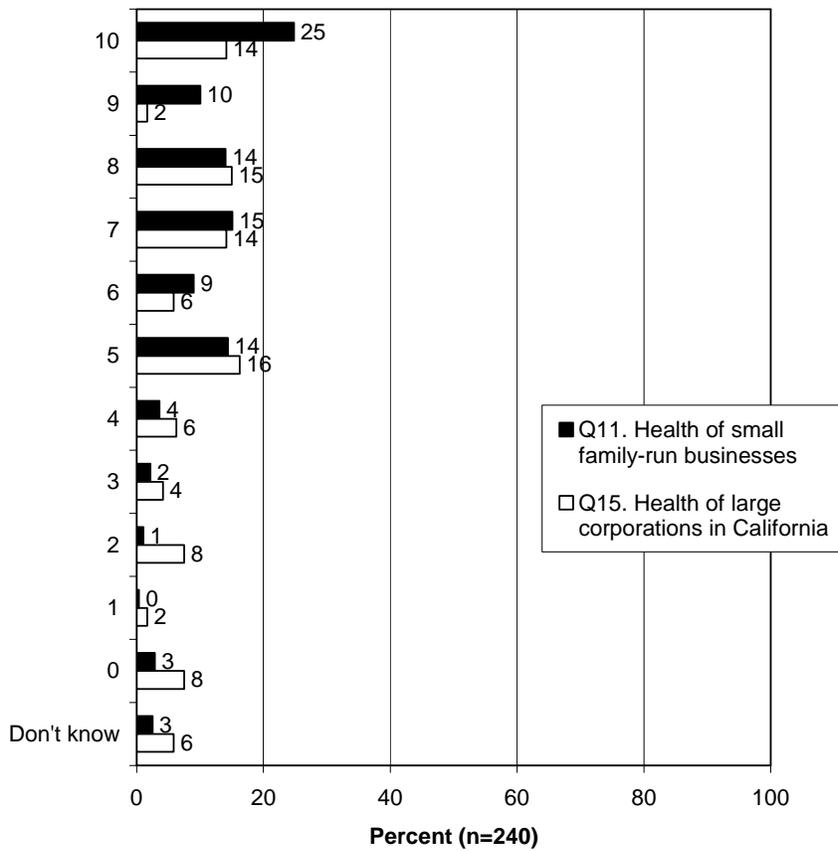
**Q32. What about family-run commercial fishing boats? (How much of a threat are these to California's marine waters, habitat, and fisheries?)**



The California resident survey also examined opinion on the health of small family-run businesses and of large corporations. That survey found that there was more concern (in 2007) for the health of small family-run businesses than for the health of large corporations in California, with the former having had much higher percentages expressing concern than did the latter (Figure 3.6). (Note that more recent economic events might have changed the perceptions of the health of small family-run businesses or larger corporations; nonetheless, in 2007 there was more concern for small family-run businesses.) Not to be lost in the overall numbers, however, is that substantial percentages of California residents show much concern for the health of small family-run businesses: 35% rated their concern for the health of small family-run businesses at a 9 or 10.

**Figure 3.6. California Residents' Concerns for Health of Family-Run and Large Corporate Business (in 2007)**

**Q11. What about the health of small family-run businesses?**  
**Q15. What about the health of large corporations in California?**  
 (How concerned are you about these on a scale of 0 to 10, where 0 is not at all important, and 10 is extremely important?)

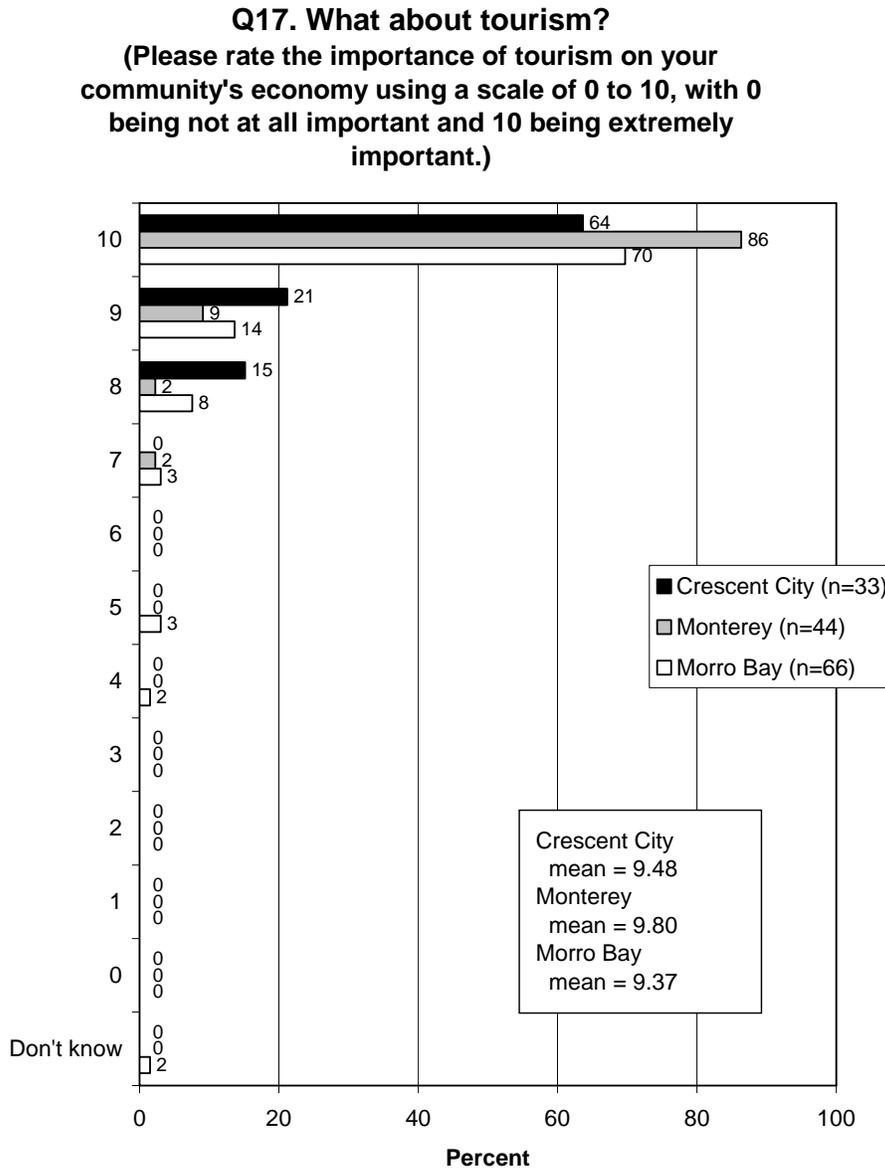


## **4. ATTITUDES TOWARD THE TOURISM INDUSTRY IN CALIFORNIA**

Two graphs discussed in the above section that pertain to the fishing industry also include information pertaining to the tourism industry. Figure 3.1 in the previous section showed California residents' ratings of the importance of eight industries to the state's economy, on a scale of 0 to 10, with 10 being the highest importance. Tourism ranked second in importance among the eight industries (below agriculture), with a mean rating of importance of 8.44, and well above the third-ranked of the eight industries, which had a mean rating of 7.20. Looking at it another way, a large majority (54%) rated the importance of tourism to California's economy at 9 or 10, and the overwhelming majority (94%) rated it at or above the midpoint of the scale. Only 4% rated it less than the midpoint.

Likewise, Figure 3.2 showed the ratings that tourism professionals and community leaders gave to the importance of six factors on the economy of Crescent City, Monterey, and Morro Bay, again using a 0 to 10 scale, where 0 is not at all important and 10 is extremely important. Tourism is the most important, having the highest mean rating (9.53) and having the highest percentage of professionals and community leaders giving it a rating of 10 (73% rated it 10). (These factors to be rated were manufacturing, commercial fishing, recreational fishing, tourism, the availability of local seafood, and tourism generated by having the public be able to see a working waterfront.) Tourism was considered particularly important to Monterey's economy, with 86% of respondents giving a rating of 10 (Figure 4.1).

**Figure 4.1. Importance of Tourism on the Economies of Crescent City, Monterey, and Morro Bay (Asked of Tourism Professionals and Community Leaders)**

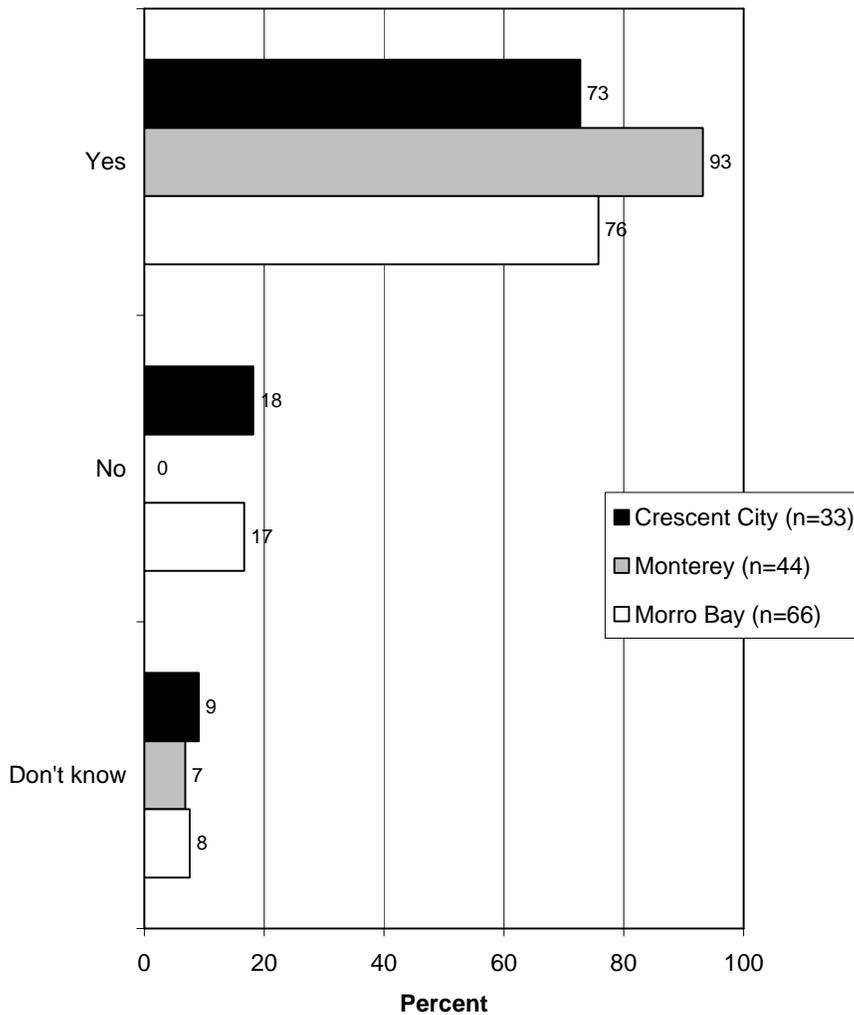


The above demonstrates the importance of tourism in general. The surveys also examined the factors that make a community a tourist destination. The surveys found that a community's culture and identity are important to its tourists. Visitors to the three coastal communities in the visitor survey were asked whether they agreed or disagreed with the statement, "A community's culture, such as its identity as a fishing village, is worth preserving." A large majority (73%) *strongly* agreed, and an overwhelming majority (92%) *strongly* or *moderately* agreed.

Fortunately for tourists, it appears that the governments of the three coastal communities in the study also appreciate their community’s culture and identity. High percentages of tourism professionals and community leaders in 2007 thought their community government appreciates its cultural resources (Figure 4.2). Almost identical results were found in the question, “Does your community government work to preserve its cultural identity?”

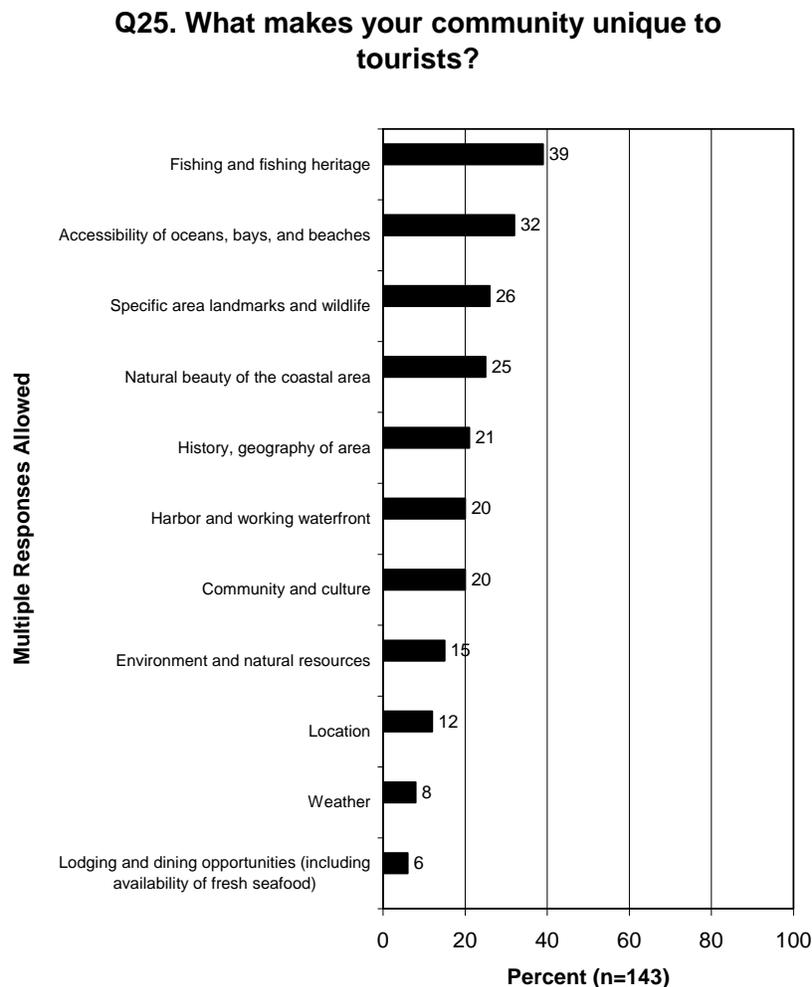
**Figure 4.2. Government’s Appreciation of Cultural Resources (Asked of Tourism Professionals and Community Leaders)**

**Q30. Do you think your community government appreciates its cultural resources?**



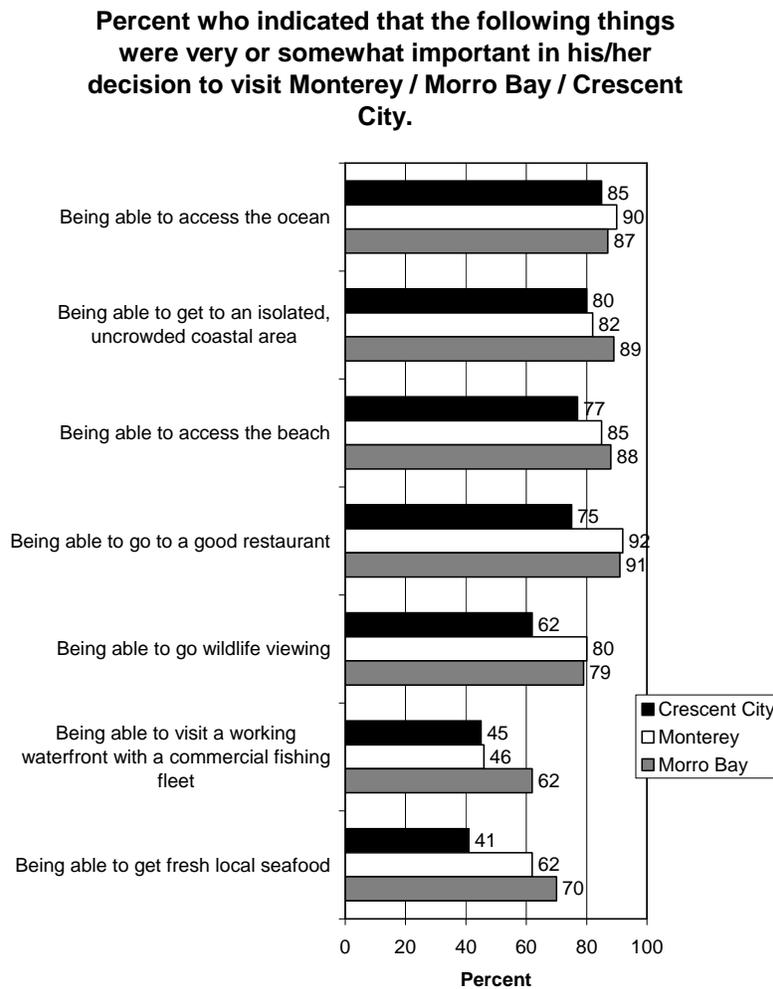
Tourism overall is perceived to be important, as demonstrated above. The research team further refined its knowledge of tourism by asking tourism professionals and community leaders to identify the things that make their community unique to tourists (Figure 4.3). The things cited include fishing and fishing heritage (39%), oceans, bays, and beaches (32%), specific area landmarks and wildlife (26%), the natural beauty of the coastal area (25%), history and geography of the area (21%), harbors and working waterfronts (20%), and the community and culture (20%).

**Figure 4.3. Things That Make Crescent City, Monterey, and Morro Bay Unique to Tourists (Asked of Tourism Professionals and Community Leaders)**



Another aspect of tourism is what factors tourists consider when deciding whether to visit a community, and this examination looked at them relative to one another. The visitor survey asked about the importance of seven factors when tourists had decided to visit Crescent City, Monterey, or Morro Bay, and the items were then ranked (Figure 4.4).

**Figure 4.4. Factors in Tourists’ Decisions on Whether To Visit Crescent City, Monterey, and Morro Bay**



As Figure 4.4 shows, Crescent City visitors as a whole place much importance on being able to access the ocean (85% say this is *very* or *somewhat* important), being able to get to an isolated, uncrowded coastal area (80%), being able to access the beach (77%), and being able to go to a good restaurant (75%). Monterey visitors place much importance on being able to go to a good

restaurant (92%), being able to access the ocean (90%), being able to access the beach (85%), being able to get to an isolated, uncrowded coastal area (82%), and being able to go wildlife viewing (80%). Finally, Morro Bay visitors place the most emphasis on being able to go to a good restaurant (91%), being able to get to an isolated, uncrowded coastal area (89%), being able to access the beach (88%), being able to access the ocean (87%), and being able to go wildlife viewing (79%).

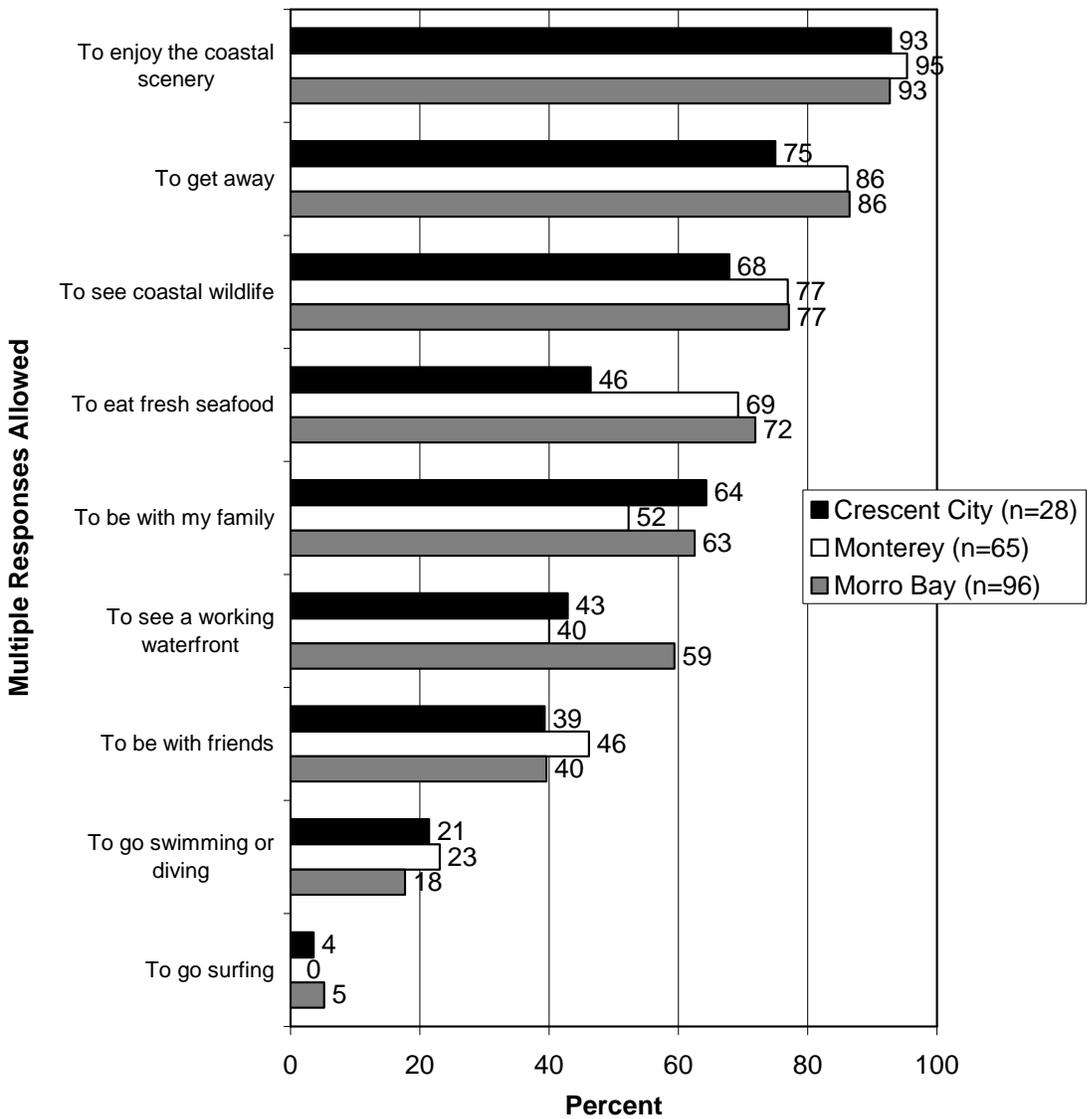
Motivations for visiting the coast for day trips were also explored. The visitor survey asked respondents who indicated that they often go on day trips to the coast for their motivations for going on day trips to the coast. Among visitors to each of the communities, enjoying the coastal scenery is an important reason for visiting the community. Also important are relaxing/getting away and seeing coastal wildlife. Of moderate importance are eating fresh seafood, being with family, and seeing a working waterfront (Figure 4.5).

For some visitors, fishing is a motivation for visiting Crescent City, Monterey, or Morro Bay (particularly Morro Bay). Although Figure 4.5 shows that 2% or less of visitors said they went to one of the three communities to go fishing, another question asked directly about their fishing participation near these communities: 7% of visitors to Crescent City, 10% of visitors to Monterey, and 26% of visitors to Morro Bay had fished near those communities at some time.

The Monterey Bay area resident survey asked about fishing participation: 78% of Monterey Bay area residents in the survey indicated that at some time they had been fishing, 34% had been freshwater fishing in the past 5 years, 30% had been saltwater fishing in the past 5 years, and 13% consider themselves to be anglers. This also suggests that fishing may have an important role in tourism in California's coastal communities.

**Figure 4.5. Motivations for Making Day Trips To Crescent City, Monterey, and Morro Bay**

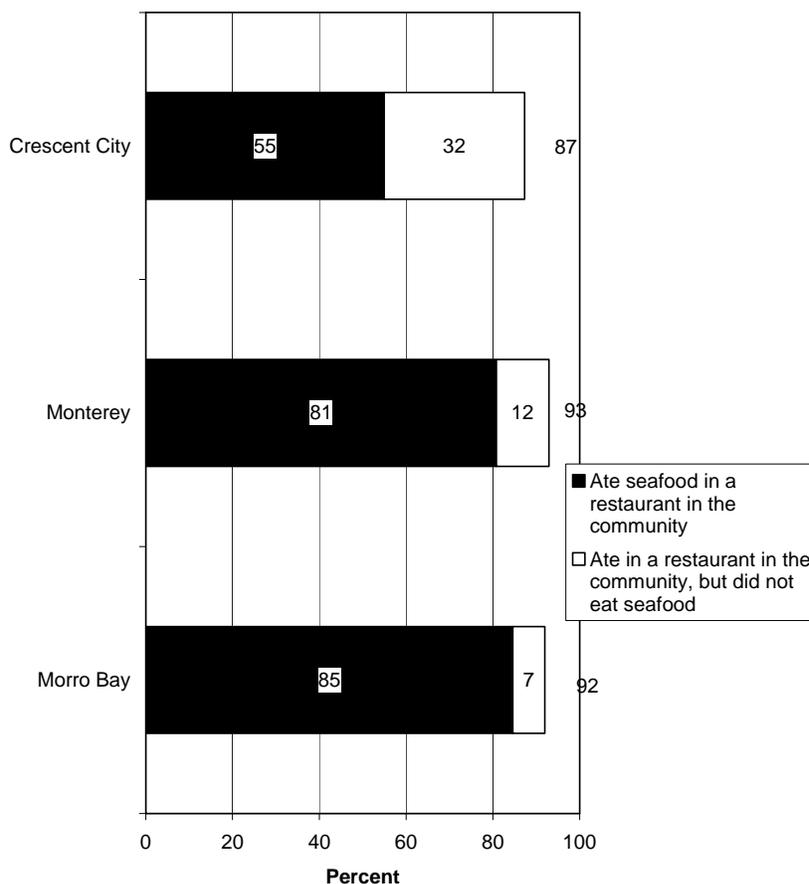
**Q79. You indicated that you often go on day trips to the coast. Please indicate if each is a reason that you visit the coast for a day. (Asked of those who often go on day trips to the coast.)**



The visitor survey of tourists to Crescent City, Monterey, and Morro Bay specifically explored the interaction of the tourism industry and the fishing/seafood industry, including visits to restaurants and overnight visits. The survey found that overwhelming majorities of visitors to each of the three communities went to a restaurant while there: 87% of Crescent City visitors, 93% of Monterey visitors, and 92% of Morro Bay visitors. Additionally, very large majorities of visitors to Monterey (81%) and Morro Bay (85%) ate seafood in a restaurant when visiting those communities, and a large majority of visitors to Crescent City (55%) ate seafood in a restaurant when visiting that community (Figure 4.6). Note that most of those who visited a restaurant in the community had visited more than one restaurant.

**Figure 4.6. Tourists' Restaurant Patronage in Crescent City, Monterey, and Morro Bay**

**Q14/21. Percent of visitors who ate in a restaurant and who ate seafood in a restaurant. (Among all respondents.)**



Also note that small but not insubstantial percentages of visitors to the three communities ate seafood purchased from a market or other non-restaurant source: 8% of Crescent City visitors, 14% of Monterey visitors, and 26% of Morro Bay visitors reported having done this.

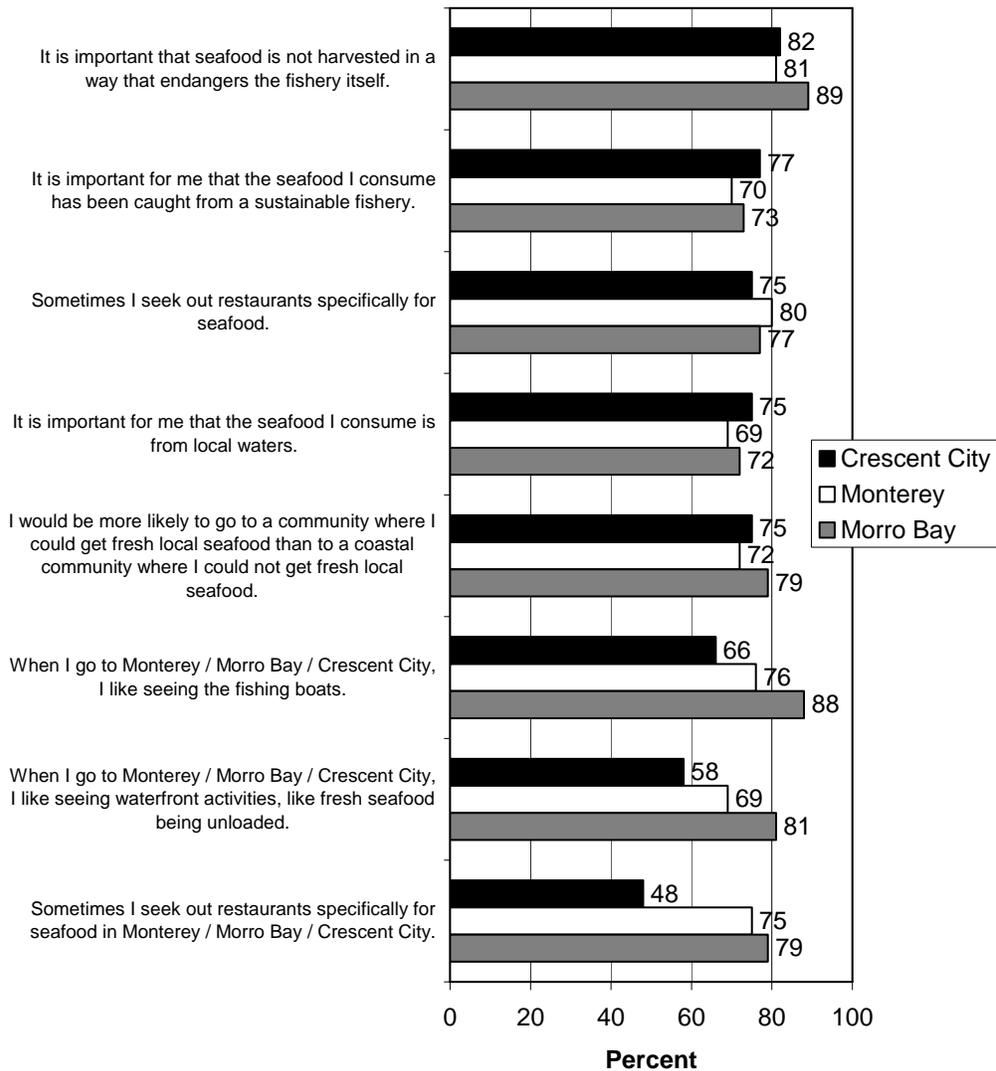
Along with restaurant visits, the visitor survey asked about overnight visits to Crescent City, Monterey, and Morro Bay. Large majorities of visitors to each community had stayed overnight in the respective community: 77% of Crescent City visitors, 81% of Monterey visitors, and 62% of Morro Bay visitors. Most of those visitors to Monterey and Morro Bay who took an overnight trip to these communities took more than one trip: 70% of Monterey visitors and 78% of Morro Bay visitors reported having done this. However, only 18% of Crescent City visitors who took an overnight trip took more than one trip.

Related to the topic above is the importance potential visitors place on being able to go to a good restaurant or to eat seafood. In a basic question, visitors were asked about the importance that they had placed on being able to go to a good restaurant in their decision to visit Crescent City, Monterey, or Morro Bay. Overwhelming majorities of visitors to the communities said that being able to go to a good restaurant was important—with most of those responses being *very* important—in their decision to visit those communities: 75% of Crescent City visitors, 92% of Monterey visitors, and 91% of Morro Bay visitors.

Furthermore, large majorities agreed that they sometimes seek out restaurants specifically for seafood; that they would be more likely to go to a community where they could get fresh local seafood than to a community where they could not get it; that when they go to one of the three cities, they like seeing fishing boats; and that when they go to one of the three communities, they like to see waterfront activities, like fresh seafood being unloaded (Figure 4.7). Additionally, in Monterey and Morro Bay, a majority of visitors agreed that sometimes they seek out restaurants specifically for seafood when they are in that community.

**Figure 4.7. Tourists' Opinions on Commercial Fishing, Seafood, and Eating in Restaurants**

**Percent who strongly or moderately agree with the following statements on seafood consumption.**

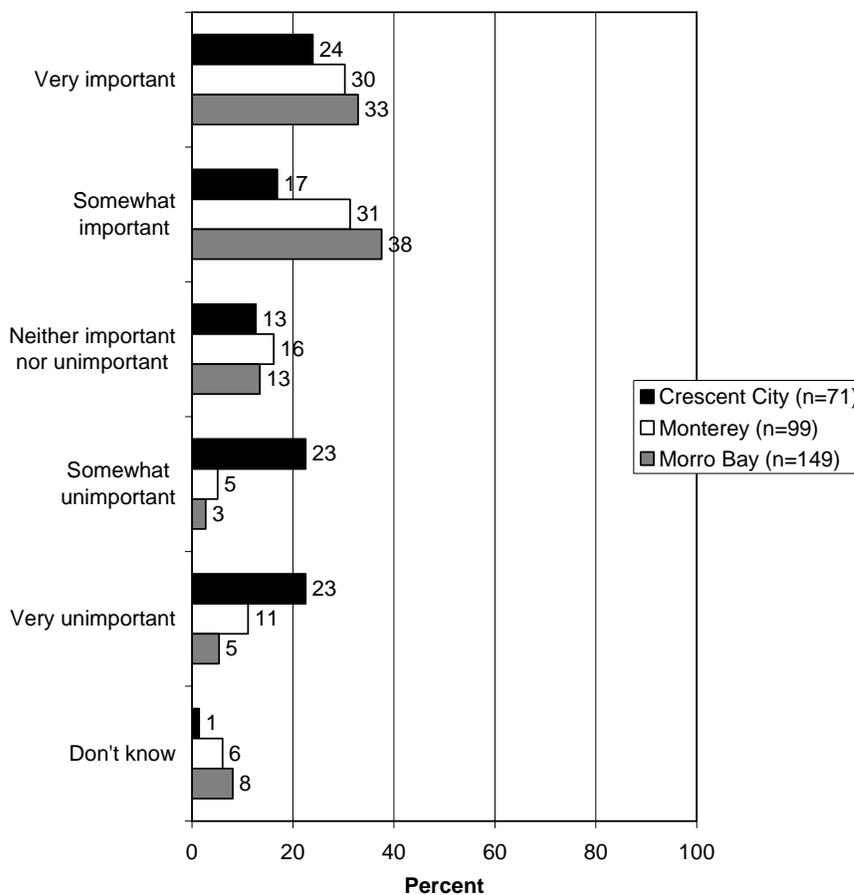


The visitor survey asked Crescent City, Monterey, or Morro Bay tourists to rate the importance of being able to get fresh local seafood when they had decided to go to those places. Being able to get fresh local seafood had been important to a majority of Monterey and Morro Bay visitors when they had decided to go to those places (61% and 71%, respectively), and in these communities, “important” responses far exceeded “unimportant” responses (16% and 8%,

respectively) (Figure 4.8). Crescent City visitors were split, with 41% who said that being able to get fresh local seafood had been important, and 46% who said it had been unimportant.

**Figure 4.8. Importance to Tourists of Being Able To Get Fresh Local Seafood in Crescent City, Monterey, and Morro Bay**

**Q32. What about being able to get fresh local seafood? (How important or unimportant was this when you decided to make your visit to Crescent City / Monterey / Morro Bay?)**

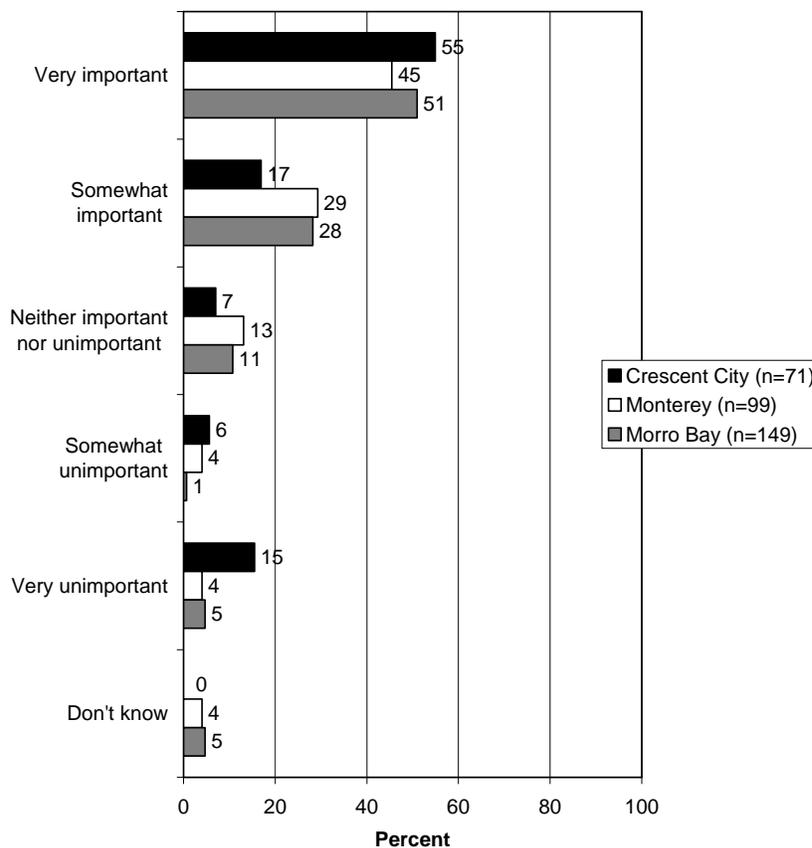


The survey also asked visitors about the importance of being able to get fresh local seafood when deciding to visit a restaurant in one of the three cities in the study. For each community, those who say being able to get fresh local seafood is important (72% of Crescent City visitors, 74% of Monterey visitors, and 79% of Morro Bay visitors) far exceed those who say this is unimportant

(21% of Crescent City visitors, 8% of Monterey visitors, and 6% of Morro Bay visitors) in their decisions to visit a restaurant (Figure 4.9).

**Figure 4.9. Importance to Tourists of Being Able To Get Fresh Local Seafood in a Restaurant in Crescent City, Monterey, and Morro Bay**

**Q40. What about being able to get fresh local seafood? (How important or unimportant would this be if you were to go to a restaurant in Crescent City / Monterey / Morro Bay?)**

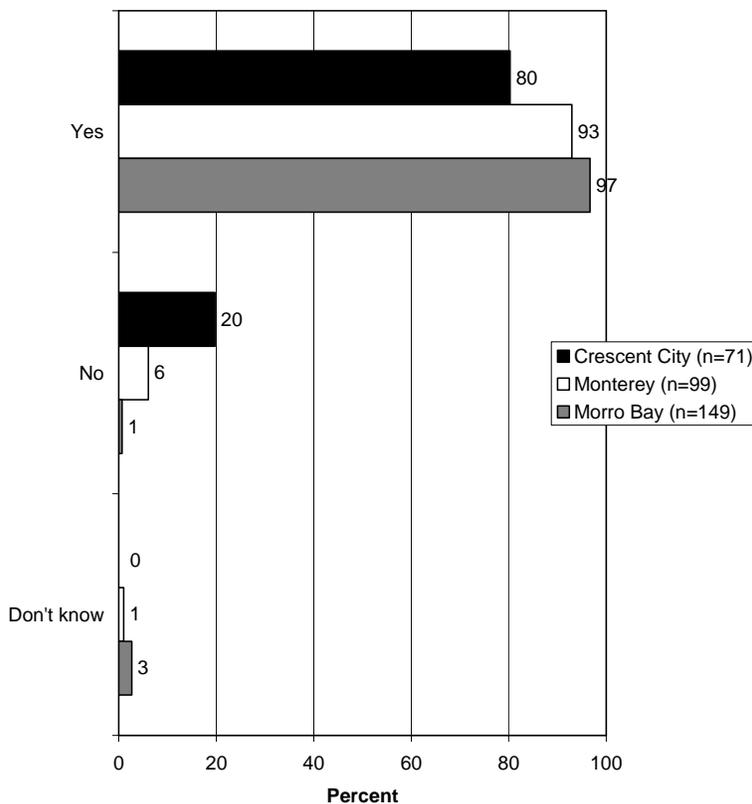


Regarding seafood specifically, tourists to the coastal communities in the visitor survey were presented a list of four types of foods. For each type, they were asked to rate its importance in their decisions regarding restaurant patronage, and the results were ranked. Being able to get “fresh local seafood” (72% said it was very or somewhat important) ranked above “good steaks” (54%), “vegetarian food” (24%), and “ethnic food” (21%).

The survey also asked visitors to Crescent City, Monterey, and Morro Bay specifically about visiting the waterfronts of those communities. Overwhelming majorities of visitors to the communities visited the waterfronts of those communities: 80% of Crescent City visitors, 93% of Monterey visitors, and 97% of Morro Bay visitors (Figure 4.10). The survey asked respondents how important was being able to visit a working waterfront with a commercial fishing fleet in their decision to visit Crescent City, Monterey, or Morro Bay. While visitors to Crescent City were evenly split (45% said it was important, and 45% said it was unimportant), visitors to Monterey and Morro Bay more often said it was important (46% of Monterey visitors; 62% of Morro Bay visitors) than unimportant (21% of Monterey visitors; 12% of Morro Bay visitors).

**Figure 4.10. Tourists’ Visits to Waterfronts in Crescent City, Monterey, and Morro Bay**

**Q30. Have you visited the waterfront while in Monterey / Morro Bay / Crescent City in the past 2 years?**



The California resident survey also specifically discussed the waterfronts of these communities. The survey found that working waterfronts are important for tourism in coastal towns, as a large majority of Californians (71%) agreed that they seek out and enjoy going to working waterfronts in communities that have them; only 7% disagreed.

Finally, the surveys had a few questions about charter boats and tourism. The California resident survey first provided some background information about charter boats, as shown in the parentheses. (Many coastal communities have charter boat businesses on their waterfront, which take people out on day trips. Typically, these charter boats enable people to go out on the water who otherwise cannot afford a boat of their own.) The survey then found that an overwhelming majority of Californians (84%) agree that the State of California and local governments should work to keep charter boat opportunities available to the public, given that charter boat businesses provide opportunities to people who otherwise would not be able to boat because they cannot afford a boat of their own.

The visitor survey also discussed charter boats. Large majorities of visitors agree that charter boats are an inexpensive way for those who do not own a boat to be able to go out on the water: 79% of Crescent City visitors, 58% of Monterey visitors, and 67% of Morro Bay visitors indicated this. This question was crosstabulated by those who recreationally fish. Not surprisingly, those who recreationally fish are much more likely than those who do not fish to agree that charter boats are an inexpensive way for those who do not own a boat to be able to go out on the water.

## **5. METHODOLOGY**

As stated previously, the data for this compendium is based on five different surveys:

- A telephone survey of California residents 18 years old and older, conducted in March 2007, referred to in the text as the “California resident survey.”
- A multi-modal survey (telephone and online) of tourism professionals and community leaders, conducted in November to December 2007, referred to in the text as the “professional/leader survey.”
- A multi-modal survey (telephone and online) of visitors to three California coastal communities: Crescent City, Monterey, and Morro Bay, conducted in December 2007 to May 2008, referred to in the text as the “visitor survey.”
- A nationwide telephone survey of U.S. residents 18 years old and older, conducted in January to February 2009, referred to in the text as the “national survey.”
- A telephone survey of residents of a four-county area centered on Monterey Bay: San Mateo, Santa Cruz, Monterey, and San Luis Obispo Counties, conducted in January to February 2009, referred to in the text as the “Monterey Bay area resident survey.”

The following describes the survey methodology.

### **TELEPHONE SURVEY METHODOLOGY**

For most of the surveys, telephones were selected as the preferred sampling medium because of the universality of telephone ownership and because telephone surveys typically provide high response rates compared to either Internet or mail surveys. In addition, a central polling site at the Responsive Management office allowed for rigorous quality control over the interviews and data collection. Responsive Management maintains its own in-house telephone interviewing facilities. These facilities are staffed by interviewers with experience conducting computer-assisted telephone interviews on the subjects of natural resources and outdoor recreation.

The telephone survey questionnaires were developed cooperatively by Responsive Management and the Alliance of Communities for Sustainable Fisheries. Responsive Management conducted pre-tests of all of the questionnaires to ensure proper wording, flow, and logic in the surveys.

The software used for data collection was Questionnaire Programming Language (QPL). The survey data were entered into the computer as each interview was being conducted, eliminating manual data entry after the completion of the survey and the concomitant data entry errors that may occur with manual data entry. The survey instrument was programmed so that QPL branched, coded, and substituted phrases in the survey based on previous responses to ensure the integrity and consistency of the data collection.

To ensure the integrity of the telephone survey data, Responsive Management has interviewers who have been trained according to the standards established by the Council of American Survey Research Organizations. Methods of instruction included lecture and role-playing. The Survey Center Managers and other professional staff conducted project briefings with the interviewers prior to the administration of each survey. Interviewers were instructed on type of study, study goals and objectives, handling of survey questions, interview length, termination points and qualifiers for participation, interviewer instructions within the survey instruments, reading of the survey instruments, skip patterns, and probing and clarifying techniques necessary for specific questions on the survey instruments. The Survey Center Managers and statisticians monitored the data collection, including monitoring of the actual telephone interviews without the interviewers' knowledge, to evaluate the performance of each interviewer and ensure the integrity of the data. After the survey interviews were obtained by the interviewers, the Survey Center Managers and/or statisticians checked each completed survey interview to ensure clarity and completeness.

Interviews for the telephone surveys were conducted Monday through Friday from 9:00 a.m. to 9:00 p.m., Saturday noon to 5:00 p.m., and Sunday from 5:00 p.m. to 9:00 p.m., local time. A five-callback design was used to maintain the representativeness of the samples, to avoid bias toward people easy to reach by telephone and to provide an equal opportunity for all eligible people to participate in each survey. When a respondent could not be reached on the first call, subsequent calls were placed on different days of the week and at different times of the day.

## **MULTI-MODAL SURVEY METHODOLOGY**

The surveys of tourism professionals/community leaders and of visitors to the coastal communities were conducted via telephone and online.

Telephone interviews with tourism professionals and community leaders were conducted on business days, Monday through Friday, between the hours of 9:00 a.m. and 1:00 p.m. Pacific Standard Time (PST). Interviewers were instructed to ask for the named respondent on the list provided; however, if the primary contact was unlisted (e.g., in the case of a restaurant, hotel, or inn where only a business name was available), the interviewer was instructed to request an owner or general manager to complete the survey. Interviewers were asked not to leave messages on answering machines but to continue to call during different times of the day in an attempt to reach the respondent; they were authorized to leave messages in person (i.e., not on voice-mail) and *only if* they contacted a person who could relay the message (e.g., office manager, administrative assistant, secretary). Interviewers were also instructed to obtain alternate numbers, if possible, and request a more convenient time to call the respondent. Telephone surveys of professionals and community leaders were conducted and the data collected using QPL.

Telephone surveys of Crescent City visitors were conducted on weekdays from 3:00 p.m. to 8:00 p.m., PST. The Crescent City/Del Norte County Chamber of Commerce provided names and addresses but not telephone numbers for visitors. Responsive Management performed a “telephone look-up” to match telephone numbers to the names and addresses. Interviewers were instructed to speak to the named respondent. A five-callback design was used to maintain the representativeness of the sample, to avoid bias toward people easy to reach by telephone, and to provide an equal opportunity for all to participate. When a respondent could not be reached on the first call, subsequent calls were placed on different days of the week and at different times of the day. This visitor survey was also administered, and data collected, using QPL.

A web-based survey instrument was developed for both the tourism professionals/community leaders survey and the visitors survey. Responsive Management designed the web-based survey using QPL and converted it to HTML for online access. Online survey data were collected using a Structured Query Language (SQL) database.

**SAMPLE SELECTION**

The sample for the 2007 survey of California residents was obtained using random digit dialing of California telephone numbers. A screener question ensured that only those 18 years old and older were interviewed. The interviewers obtained 801 completed surveys.

The samples of Crescent City and Monterey professionals and community leaders were obtained from community officials and through additional online research by Responsive Management. Each professional in each sample was contacted through e-mail about the upcoming survey to encourage their subsequent participation. They were then contacted by telephone, and the survey was administered via telephone. Responsive Management obtained 33 completed surveys of professionals and community leaders in the Crescent City area and 44 completed surveys of professionals and community leaders in the Monterey Peninsula.

For Morro Bay, the sample was obtained from community officials and through additional online research. These people were contacted through e-mail about the upcoming survey to encourage their subsequent participation, and they were then surveyed via telephone. However, for Morro Bay, community officials provided a supplemental listing of professionals and community leaders that included e-mail addresses only (no telephone numbers); these people were contacted via e-mail and then were surveyed online. Responsive Management obtained 66 completed surveys of professionals and community leaders in the Morro Bay area.

For Crescent City, the Crescent City/Del Norte County Chamber of Commerce provided a sample of visitors. These Crescent City visitors were surveyed via telephone. Responsive Management obtained 71 completed surveys of visitors to Crescent City.

For Monterey, the Monterey County Convention and Visitor's Bureau sent an online link through its newsletter to visitors. These visitors then completed the survey online. To encourage participation, an incentive was offered to those who completed the survey. Responsive Management obtained 99 completed surveys of visitors to Monterey.

For Morro Bay, the Morro Bay Community Promotions Committee sent visitors a link to the online survey. These visitors then completed the survey online. Responsive Management obtained 149 completed surveys of visitors to Morro Bay.

The sample for the 2009 survey of U.S. residents was obtained using random digit dialing, and the sample was obtained proportional to the U.S. population (i.e., so that each state was represented in the sample proportional to its population of adults). A screener question ensured that only those 18 years old and older were interviewed.

The sample for the telephone survey of residents of the four-county Monterey Bay area was obtained using random digit dialing of residents of the four counties of the study (San Mateo, Santa Cruz, Monterey, and San Luis Obispo Counties). This sample was also obtained to be proportional to the population of the respective counties.

## DATA ANALYSIS

The analysis of data was performed using Statistical Package for the Social Sciences software as well as proprietary software developed by Responsive Management.

Table 5.1 below shows the sampling errors, when they could be determined. When sampling errors could be determined, the findings are reported at a 95% confidence interval. Sampling errors were calculated using the formula on the following page.

**Table 5.1. Sampling Errors**

Survey	Sample Size	Population Size	Sampling Error
2007 survey of California residents	801	25,623,626	3.46
2007 survey of tourism professionals and community leaders	143	could not determine	NA
2008 survey of visitors to the three California coastal communities	319	could not determine	NA
2009 nationwide telephone survey of U.S. residents	729	225,013,734	3.63
2009 telephone survey of residents of a four-county area centered on Monterey Bay	212	1,246,514	6.73

### Sampling Error Equation

$$B = \left( \sqrt{\frac{N_p(.25) - .25}{N_s}} \right) (1.96)$$

Where: B = maximum sampling error (as decimal)  
 N<sub>p</sub> = population size (i.e., total number who could be surveyed)  
 N<sub>s</sub> = sample size (i.e., total number of respondents surveyed)

Derived from formula: p. 206 in Dillman, D. A. 2000. *Mail and Internet Surveys*. John Wiley & Sons, NY.

**Note:** This is a simplified version of the formula that calculates the maximum sampling error using a 50:50 split (the most conservative calculation because a 50:50 split would give maximum variation).

Note that some results may not sum to exactly 100% because of rounding. Additionally, rounding on the graphs may cause apparent discrepancies of 1 percentage point between the graphs and the reported results of combined responses (e.g., when “strongly support” and “moderately support” are summed to determine the total percentage in support).

## **ABOUT RESPONSIVE MANAGEMENT**

Responsive Management is a nationally recognized public opinion and attitude survey research firm specializing in natural resource and outdoor recreation issues. Its mission is to help natural resource and outdoor recreation agencies and organizations better understand and work with their constituents, customers, and the public.

Utilizing its in-house, full-service, computer-assisted telephone and mail survey center with 45 professional interviewers, Responsive Management has conducted more than 1,000 telephone surveys, mail surveys, personal interviews, and focus groups, as well as numerous marketing and communications plans, need assessments, and program evaluations on natural resource and outdoor recreation issues.

Clients include most of the federal and state natural resource, outdoor recreation, and environmental agencies, and most of the top conservation organizations. Responsive Management also collects attitude and opinion data for many of the nation's top universities, including the University of Southern California, Virginia Tech, Colorado State University, Auburn, Texas Tech, the University of California—Davis, Michigan State University, the University of Florida, North Carolina State University, Penn State, West Virginia University, and others.

Among the wide range of work Responsive Management has completed during the past 20 years are studies on how the general population values natural resources and outdoor recreation, and their opinions on and attitudes toward an array of natural resource-related issues. Responsive Management has conducted dozens of studies of selected groups of outdoor recreationists, including anglers, boaters, hunters, wildlife watchers, birdwatchers, park visitors, historic site visitors, hikers, and campers, as well as selected groups within the general population, such as landowners, farmers, urban and rural residents, women, senior citizens, children, Hispanics, Asians, and African-Americans. Responsive Management has conducted studies on environmental education, endangered species, waterfowl, wetlands, water quality, and the reintroduction of numerous species such as wolves, grizzly bears, the California condor, and the Florida panther.

Responsive Management has conducted research on numerous natural resource ballot initiatives and referenda and helped agencies and organizations find alternative funding and increase their memberships and donations. Responsive Management has conducted major agency and organizational program needs assessments and helped develop more effective programs based upon a solid foundation of fact. Responsive Management has developed websites for natural resource organizations, conducted training workshops on the human dimensions of natural resources, and presented numerous studies each year in presentations and as keynote speakers at major natural resource, outdoor recreation, conservation, and environmental conferences and meetings.

Responsive Management has conducted research on public attitudes toward natural resources and outdoor recreation in almost every state in the United States, as well as in Canada, Australia, the United Kingdom, France, Germany, and Japan. Responsive Management routinely conducts surveys in Spanish and has also conducted surveys and focus groups in Chinese, Korean, Japanese, and Vietnamese.

Responsive Management's research has been featured in most of the nation's major media, including CNN, ESPN, *The Washington Times*, *The New York Times*, *Newsweek*, *The Wall Street Journal*, and on the front pages of *The Washington Post* and *USA Today*.

Visit the Responsive Management website at:

**[www.responsivemanagement.com](http://www.responsivemanagement.com)**

# **PUBLIC OPINION ON THE USES AND MANAGEMENT OF OCEAN RESOURCES**



**Alliance of Communities for Sustainable Fisheries**  
**[www.alliancefisheries.com](http://www.alliancefisheries.com)**

# Methodologies

Responsive Management, an independent public opinion and attitude survey research firm, conducted:

- A telephone survey of California residents 18 years old and older, conducted in 2007 (n=801)
- A multi-modal survey of California tourism professionals and community leaders, conducted in late 2007 (n=143)
- A multi-modal survey of visitors to three California coastal communities: Crescent City, Monterey, and Morro Bay, conducted in 2008 (n=319)
- A nationwide telephone survey of U.S. residents 18 years old and older, conducted in 2009 (n=729)
- A telephone survey of residents of a four-county area centered on Monterey Bay: San Mateo, Santa Cruz, Monterey, and San Luis Obispo Counties, conducted in 2009 (n=212)

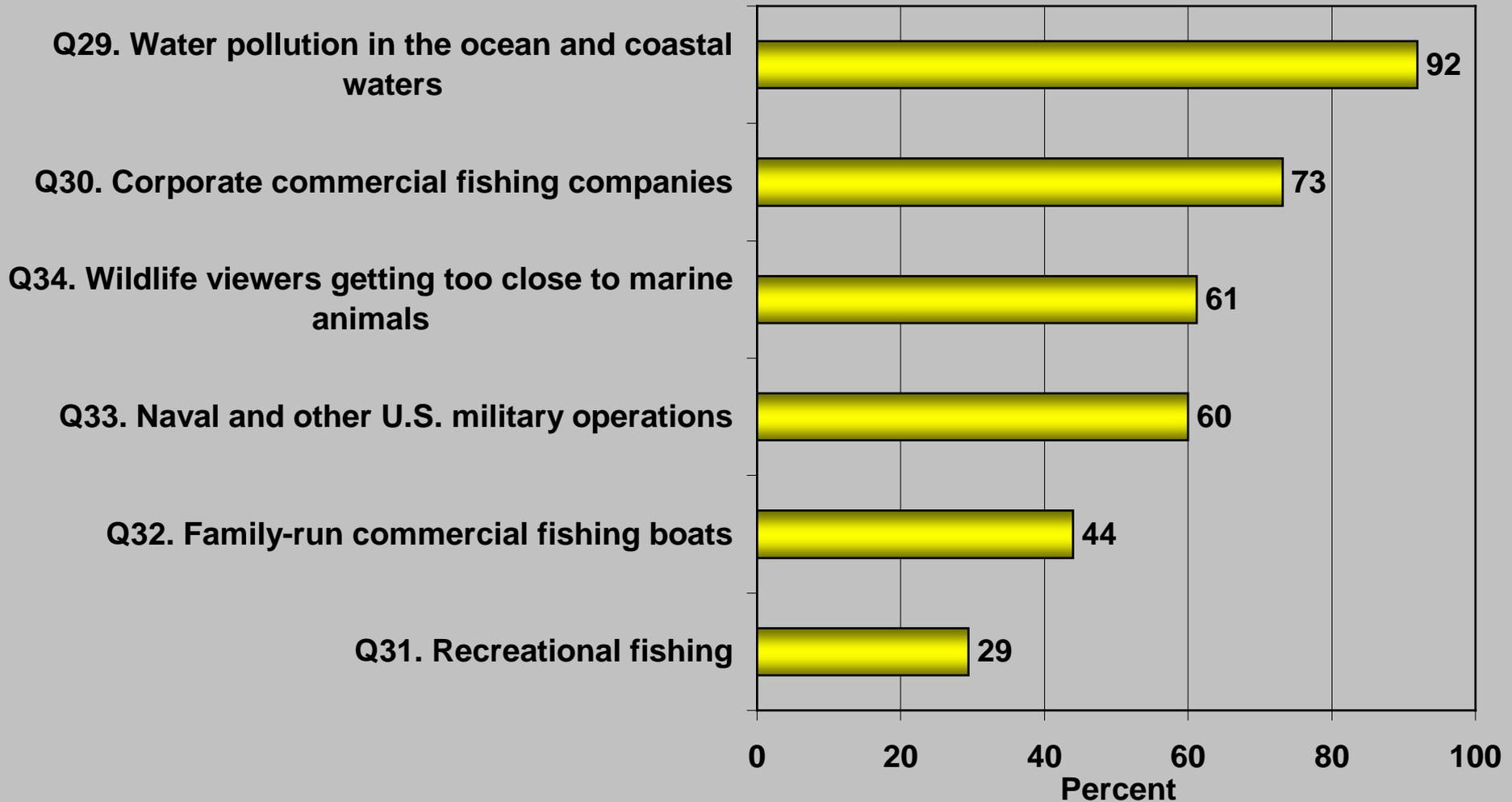
# California Residents Say Water Pollution Is Greatest Threat to Aquatic Resources

- Regarding water-related resources directly, the public perception in the state is that water pollution is the greatest threat to California's marine waters, habitat, and fisheries.

Photo courtesy of Alexander MacDougall



# Q29-34. Percent saying that each of the following is a high or moderate threat to California's marine waters, habitat, and fisheries.



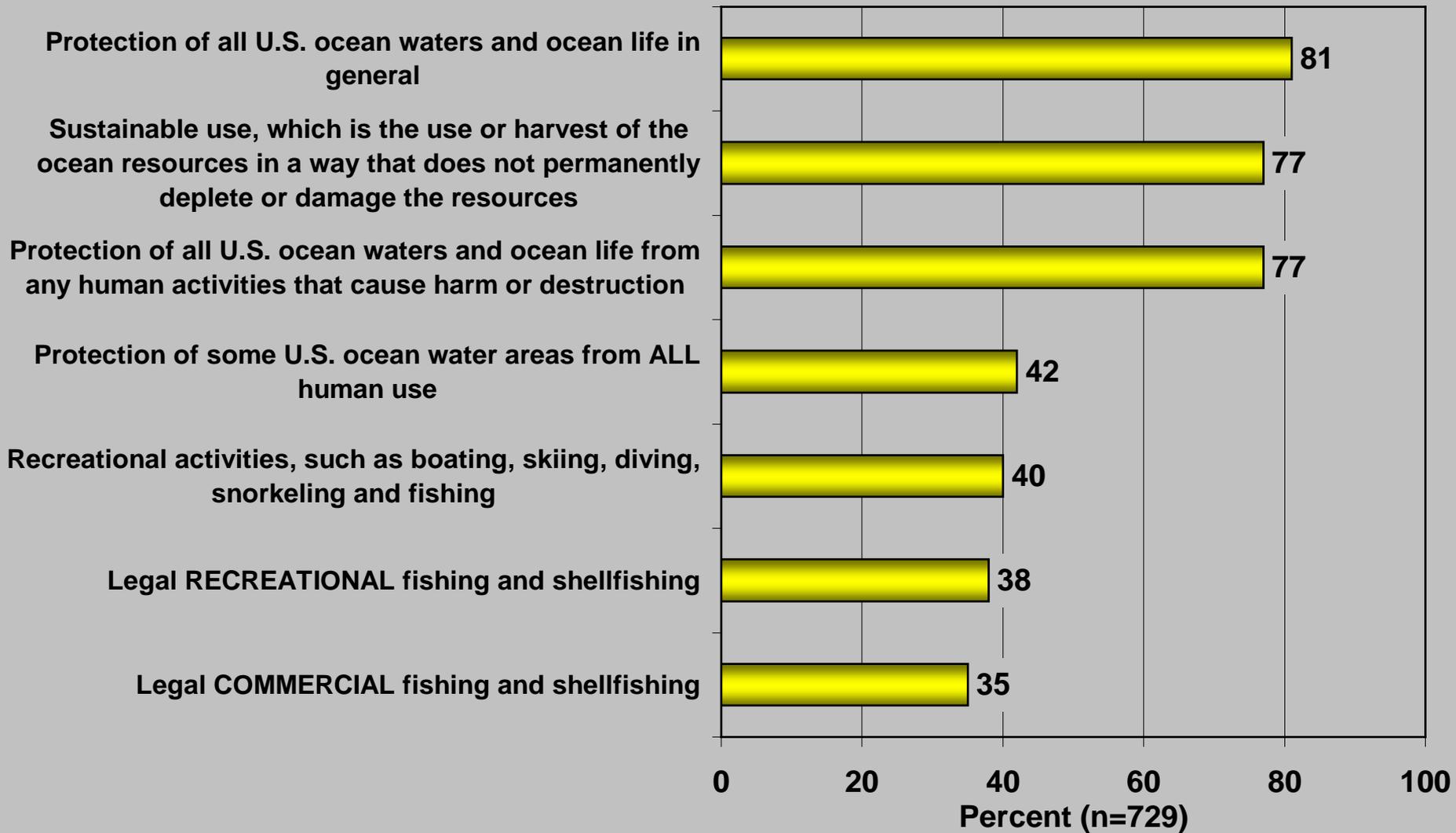
# Public Supports Protecting U.S. Ocean Waters and Ocean Life

- U.S. residents overwhelmingly support protecting U.S. ocean waters and ocean life: 95% support doing so, and only 3% indicate that they oppose.
- A vast majority of U.S. residents agree that managing U.S. ocean waters to ensure protection and sustainability is more important than to provide recreational opportunities.

USGS/Tania Larson



**Q32-38. Percent who indicated that it is very important to them to know that U.S. ocean waters are managed to allow for each of the following:  
(National Survey)**

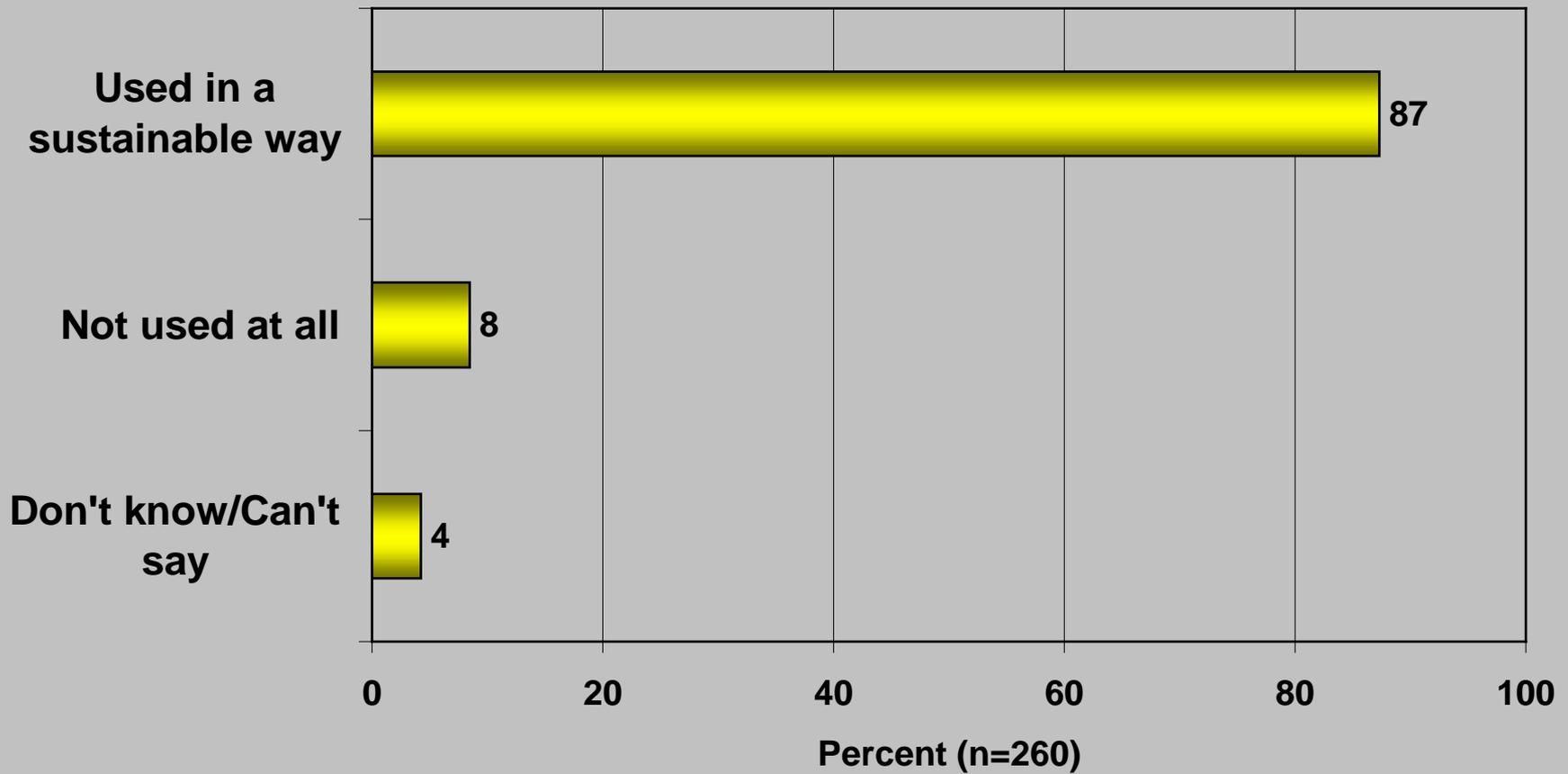


# What does protection mean...

## ...to California residents?

- Californians are moderate in their opinions: they overwhelmingly (87%) perceive “protect” to mean that the resources can be used in a sustainable way rather than not used at all (8%). This is an important consideration when examining statements and statistics about whether Californians want to “protect” the ocean.

**Q62. When you hear the word, "protect," as in "We should protect the ocean," do you think it means that ocean resources should be used in a sustainable way, or do you think it means that ocean resources should not be used at all?**

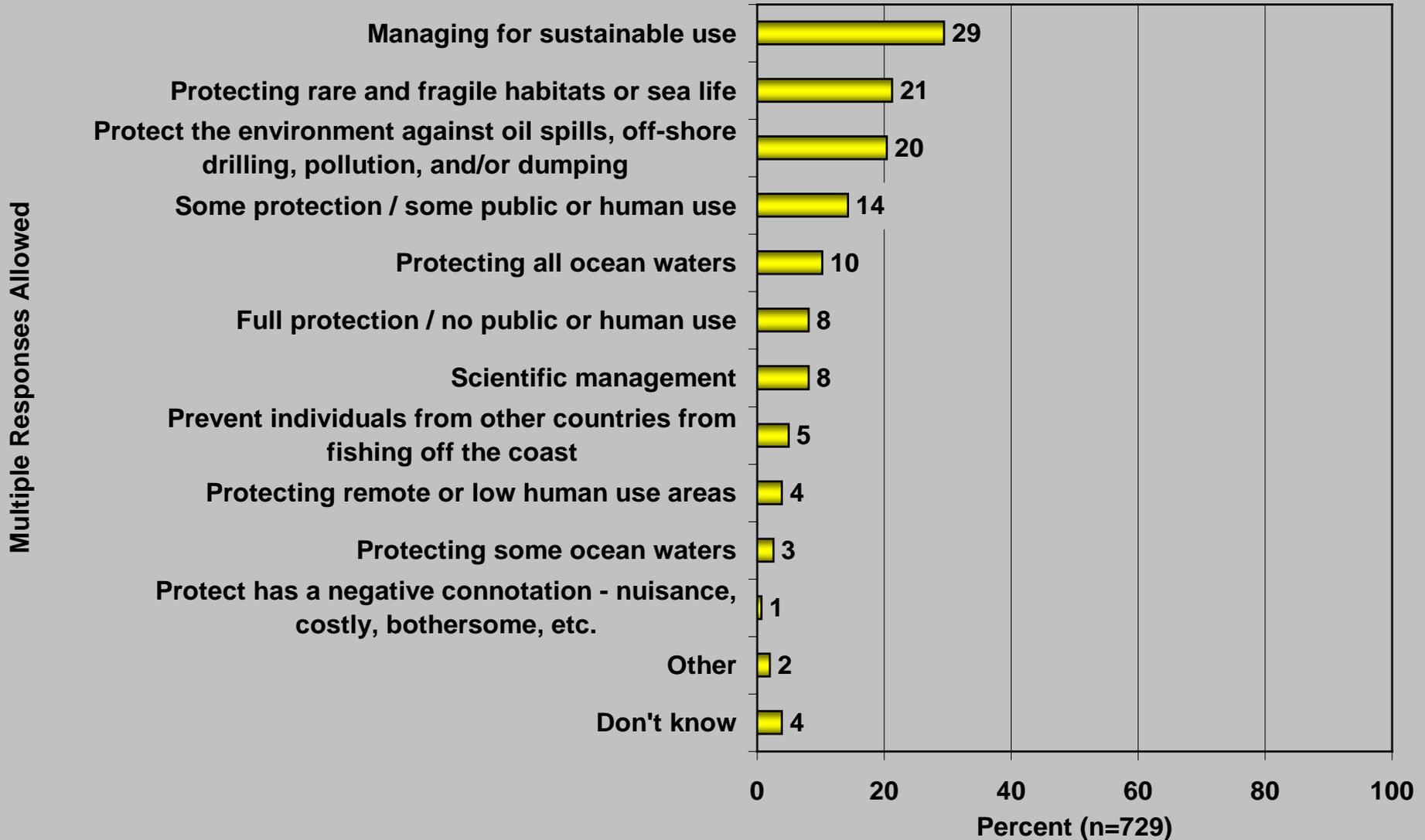


# What does protection mean...

## ...to U.S. residents?

- U.S. residents were asked to say what “protect” means to them in the phrase, “protect ocean waters and ocean life.” This was an open-ended question in which no answer set was read, allowing respondents to give any response that came to mind. The most common responses regarding the meaning of “protect” pertain to managing for sustainable use (29%), protecting rare and fragile habitats or sea life (21%), and protecting the environment against oil spills, pollution, dumping, etc. (20%). Only 8% gave an answer that pertained to excluding any human use.

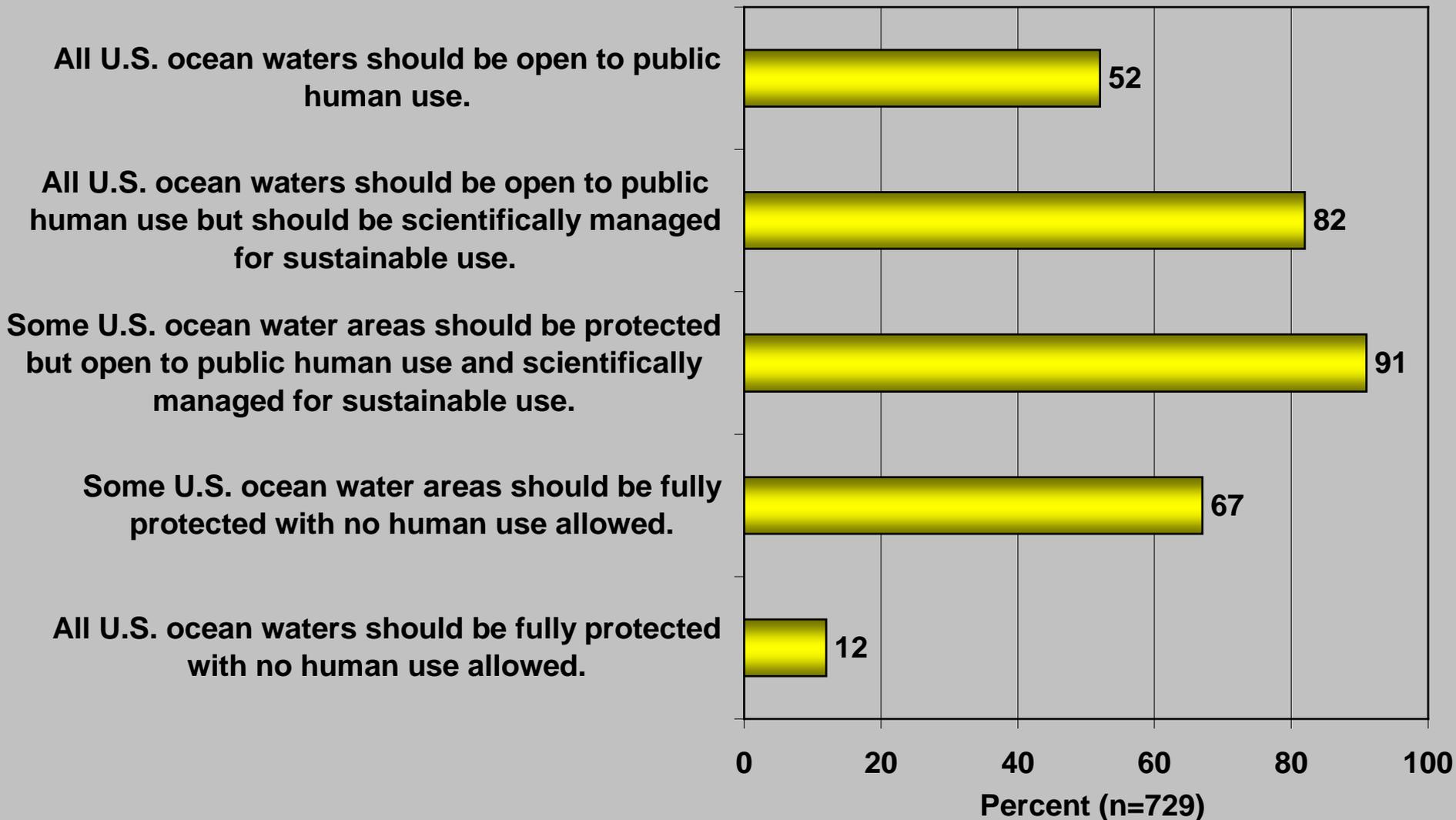
**Q22. When I say "protect" U.S. ocean waters and ocean life, what does the term "protect" mean to you?  
(National Survey)**



# Public Support of Protecting Ocean Waters Is Tempered by Moderation

- Support of protecting ocean waters is tempered by moderation, and the public is reluctant to close areas to human use. When U.S. residents were read five statements that are in a scale from virtually no restrictions to complete restrictions on using the ocean, agreement was highest for statements in the middle of the scale.
- Similar to the national results, in a question about use or protection of California's coastal fisheries, Californians favored moderate answers: California residents are almost evenly split between utilization with just a few limitations (38%) and mostly protection, with just a little utilization (41%).

**Q41-45. Percent who strongly or moderately agree with the following statements about U.S. ocean waters:  
(National Survey)**



# IMPORTANCE OF SUSTAINABLE DOMESTIC SEAFOOD HARVEST

Photo courtesy of Alexander MacDougall



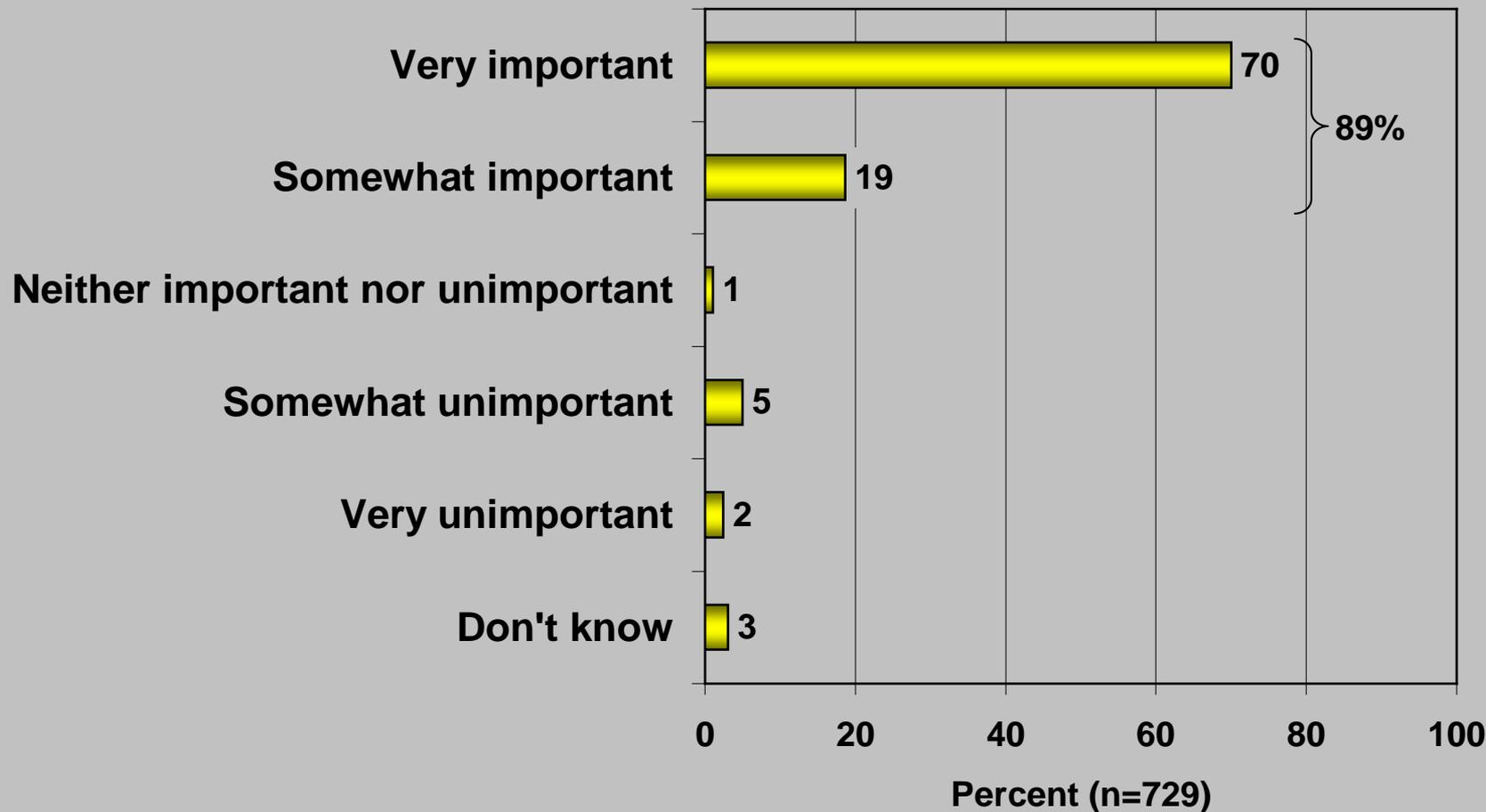
**ACSF**

The Alliance of Communities for Sustainable Fisheries

# Public Weighs in on the Importance of Domestic Seafood

- After informing respondents that approximately 85% of seafood consumed in the U.S. is imported, U.S. residents were asked how important it is to them that the U.S. maintain its ability to supply some seafood to U.S. residents rather than to depend entirely on imported seafood. U.S. residents rate this quite high: 89% say it is important to them, with most of them saying it is *very* important (70%).

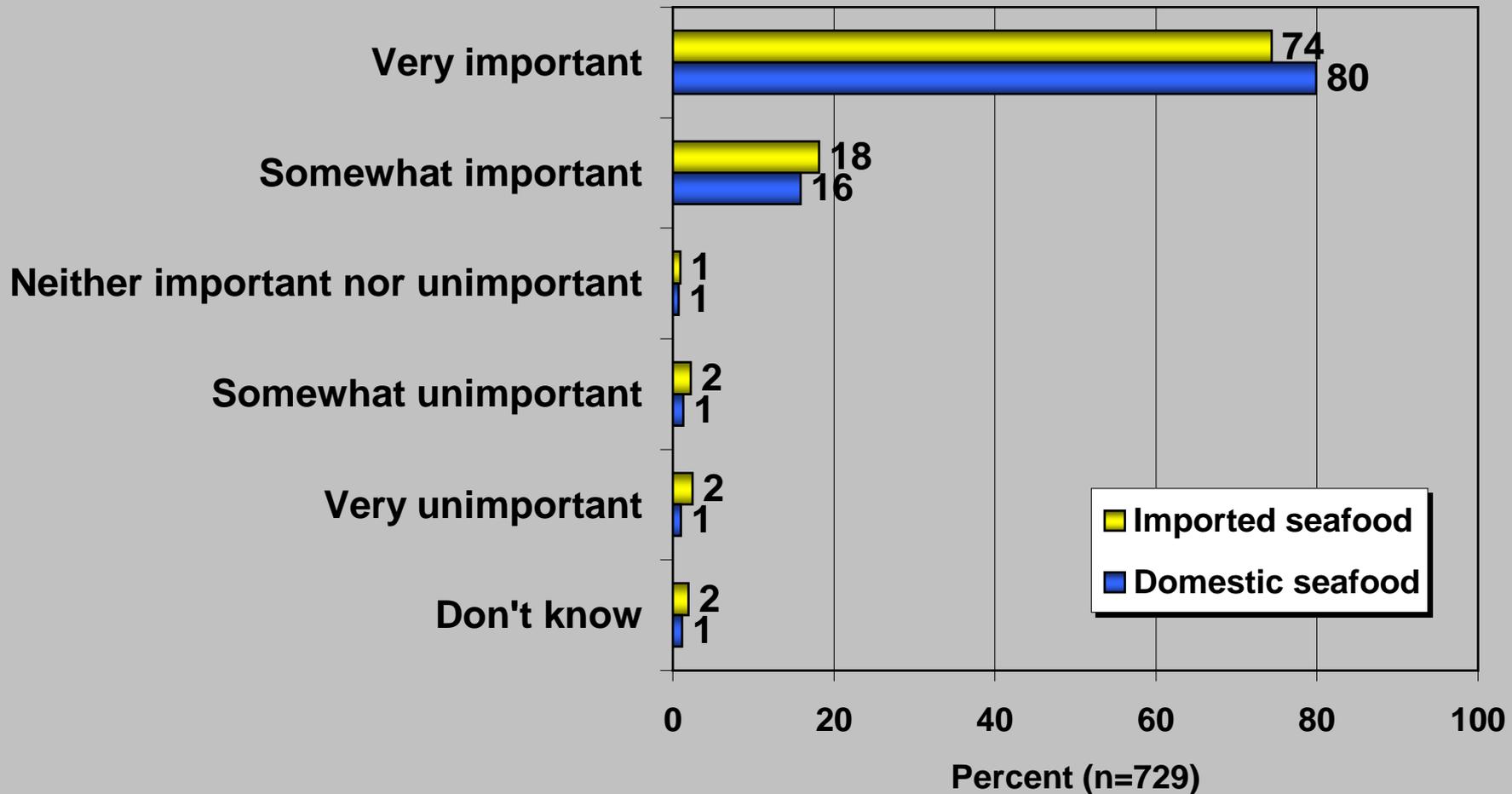
**Q57. Currently, about 85% of seafood consumed in the U.S. is imported from commercial fishing industries in other countries. How important is it to you that the U.S. maintains its ability to supply some seafood to U.S. residents rather than depend entirely on imported seafood?  
(National Survey)**



# Public Values Sustainable Seafood Harvest

- The national survey asked respondents to indicate how important it is to them that imported seafood be harvested in a sustainable manner, and importance is quite high: 92% say it is important, most of them saying it is *very* important (74%). Likewise, the survey asked this same question about *domestic or U.S.-harvested* seafood, and importance is again quite high: 96% say it is important, with 80% saying it is *very* important.
  - A comparison finds that domestic seafood being harvested in a sustainable manner is slightly more important than imported seafood being harvested in a sustainable manner.

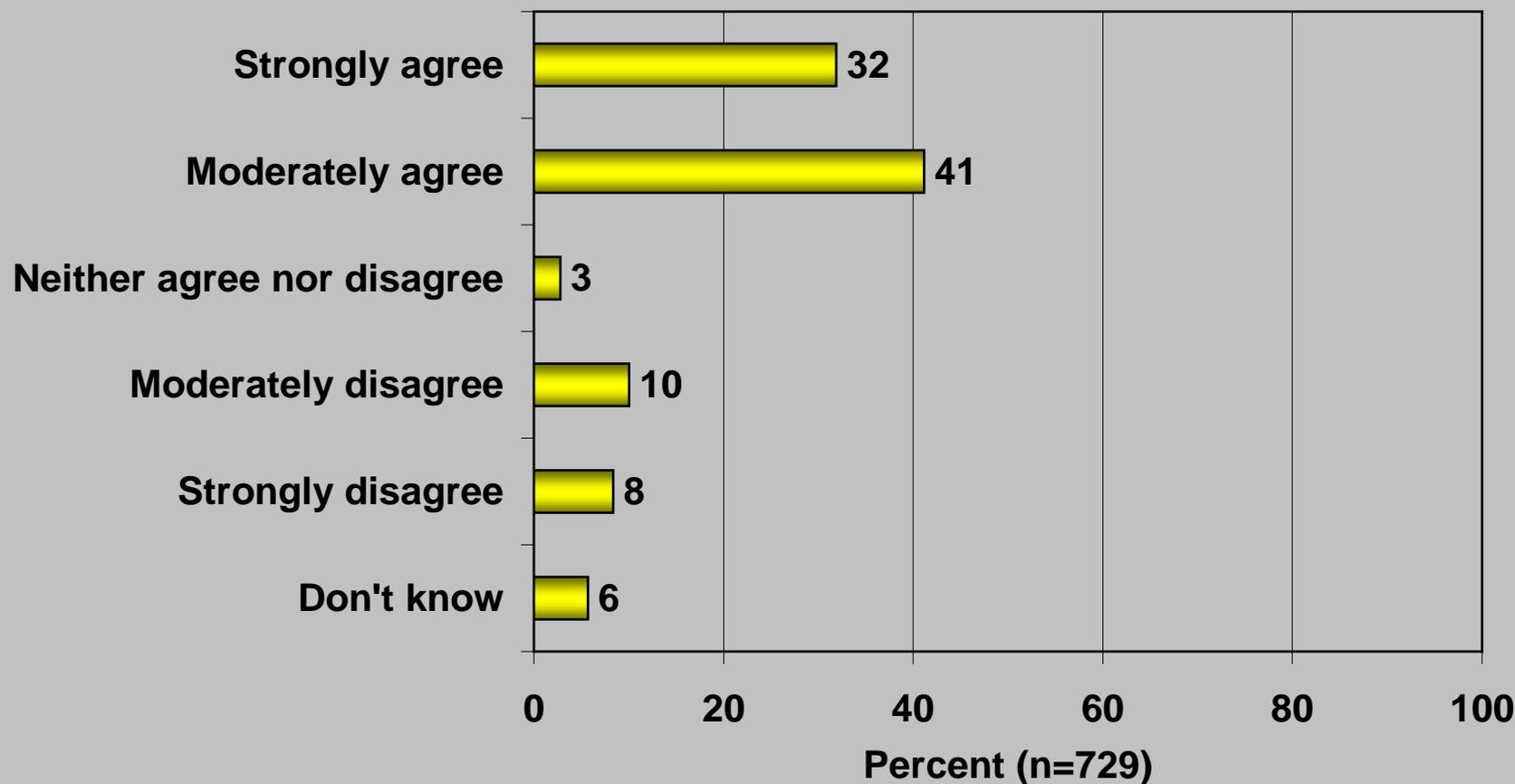
**Q58/59. How important is it to you to know that imported/domestic seafood is harvested in a sustainable manner?  
(National Survey)**



# Public Agrees Changes in Biodiversity Acceptable to Ensure Continued Food Supply

- The national survey asked respondents if they agree or disagree that some change to the natural biodiversity in U.S. ocean waters is acceptable to guarantee a continued food supply through fishing and shellfishing: agreement (71%) far exceeds disagreement (20%).
  - The same question was asked again, but was preceded by this explanation: “On land, our society generally accepts change to the natural biodiversity of an environment to guarantee a continued supply of food. For example, we change the natural biodiversity of land by replacing natural growth of wild grasses with food crops on farmed land.” When the question includes this introduction, 73% of respondents agree and 18% disagree (note that agreement is just slightly higher with the introduction).

**Q63. On land, our society generally accepts change to the natural biodiversity of an environment to guarantee a continued supply of food. Knowing this, do you agree or disagree that some change to the natural biodiversity in U.S. ocean waters is acceptable to guarantee a continued food supply through fishing and shellfishing?  
(National Survey)**



# OPINIONS ON FISHING AND THE MANAGEMENT OF COASTAL RESOURCES



Photo courtesy of Alexander MacDougall

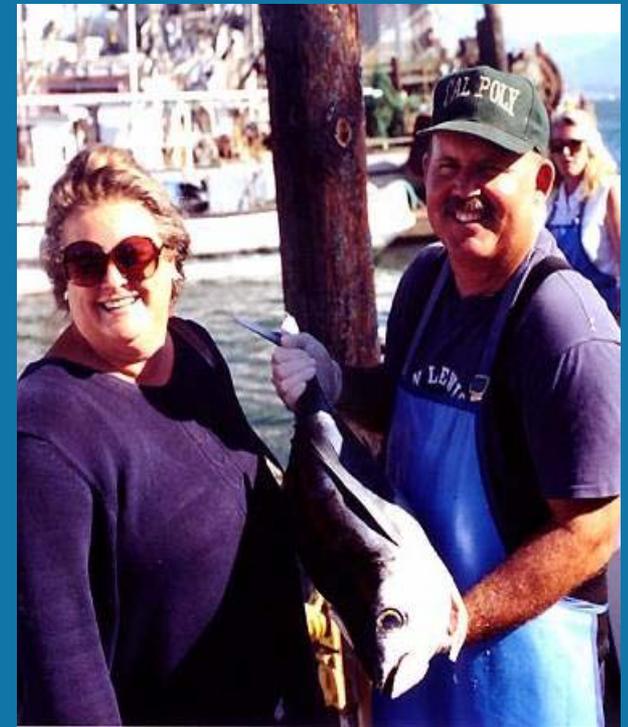
**ACSF**

The Alliance of Communities for Sustainable Fisheries

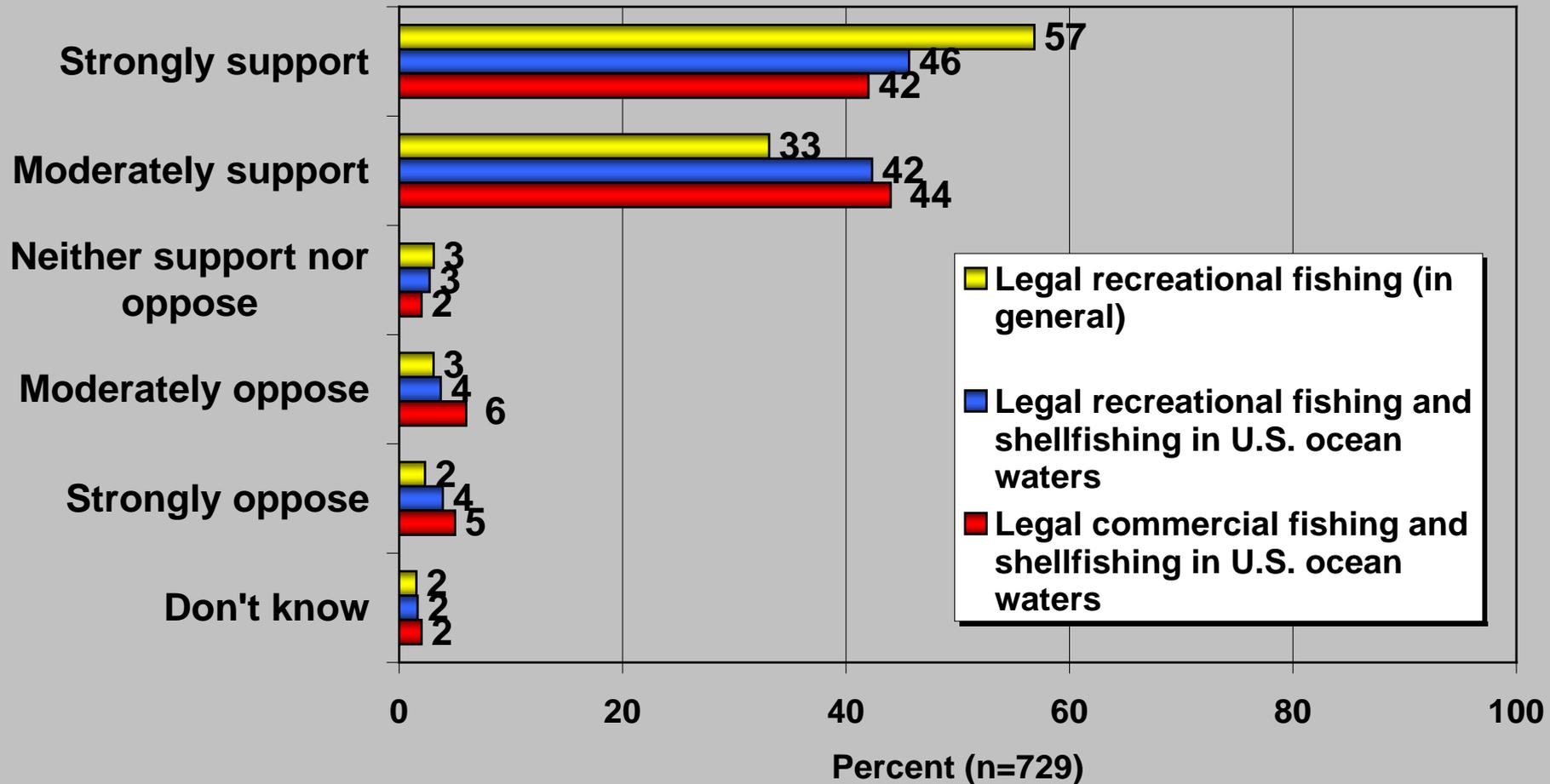
# Public Supports Legal Fishing

➤ U.S. residents generally support legal fishing and shellfishing:

- 90% support legal recreational fishing in general
- 88% support legal recreational fishing and shellfishing in U.S. ocean waters
- 86% support legal *commercial* fishing and shellfishing in U.S. ocean waters.



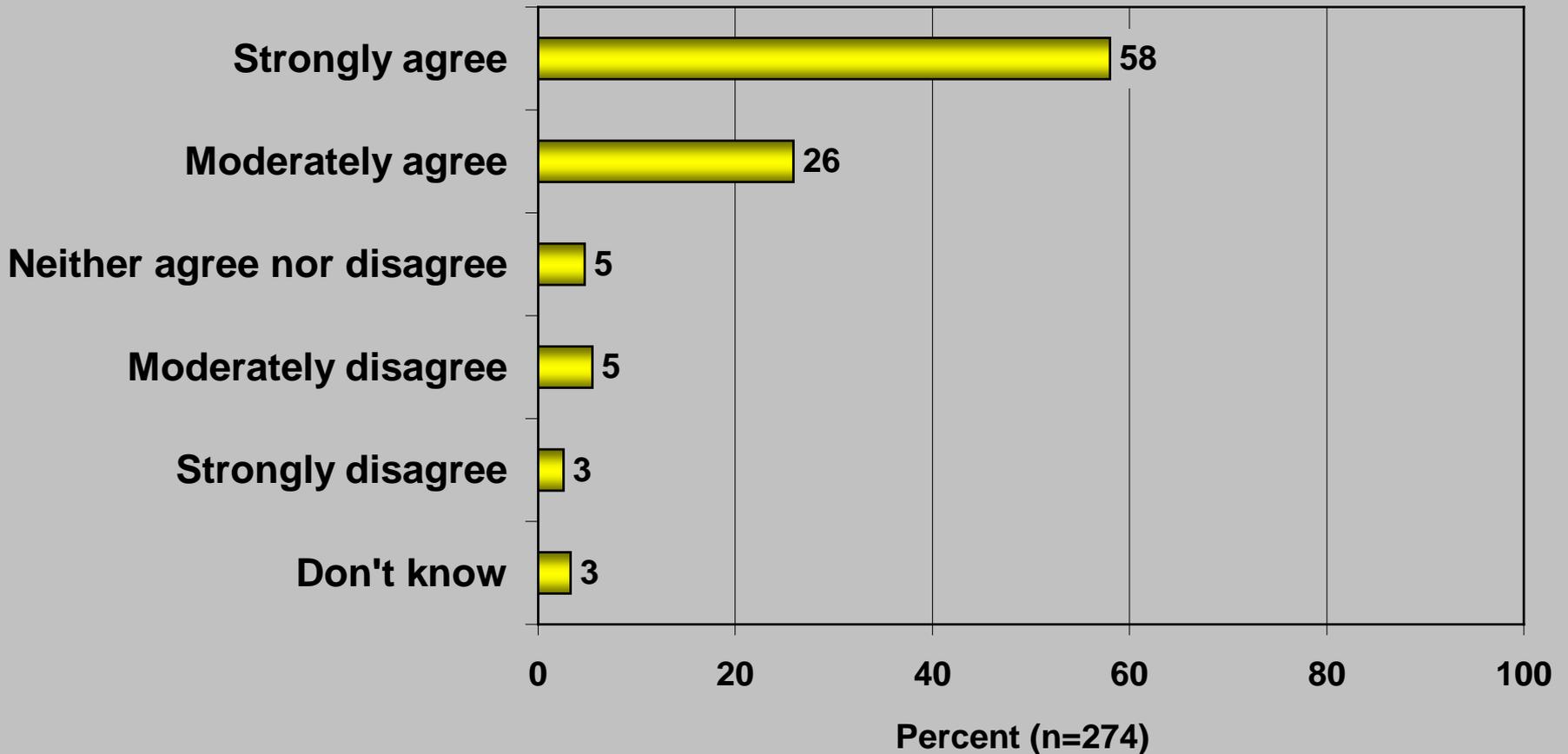
# Percent of U.S. residents who support or oppose legal recreational fishing in general, legal recreational fishing and shellfishing in U.S. ocean waters, and legal commercial fishing and shellfishing in U.S. ocean waters.



# Public Supports Legal Fishing

- Support for recreational fishing in California is further evinced by state residents' responses to several questions about charter boats and tourism. An overwhelming majority of Californians (84%) agree that the State of California and local governments should work to keep charter boat opportunities available to the public, given that charter boat businesses provide opportunities to people who otherwise would not be able to boat because they cannot afford a boat of their own.

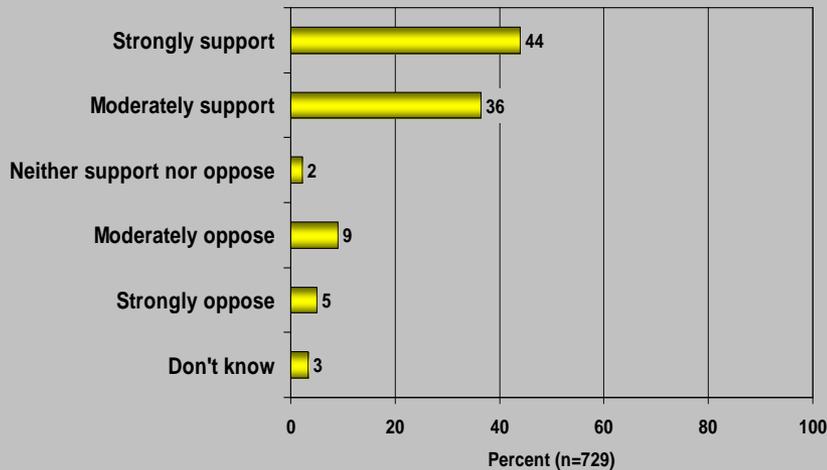
**Q64. Many coastal communities have charter boat businesses on their waterfront, which take people out on day trips. Typically, these charter boats enable people to go out on the water who otherwise cannot afford a boat of their own. Do you agree or disagree that the state of California and local governments should work to keep this type of opportunity available for the public?**



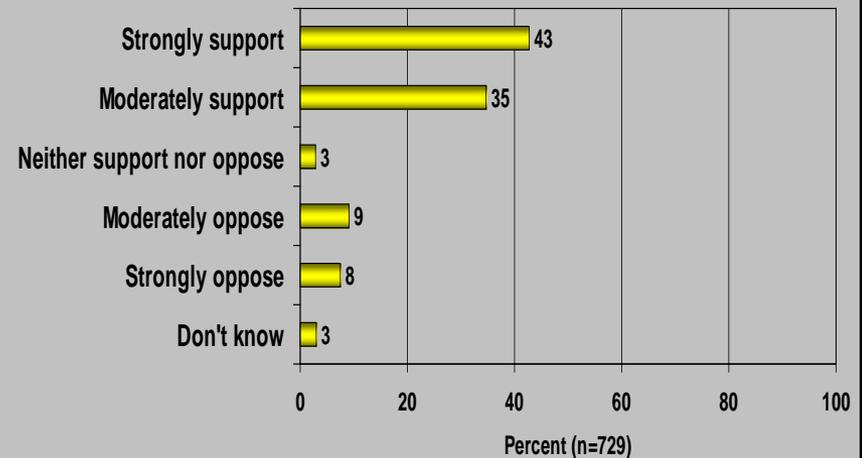
# Public Support of Recreational and Commercial Fishing

- Large majorities of U.S. residents support legal recreational fishing in National Forests (80%), National Parks (78%), and Wilderness Areas (72%).
- Support is at 59% for *recreational* fishing and shellfishing in ocean waters that would be designated in a manner similar to Wilderness Areas; opposition is at 32%.
- There is more public support (47%) than opposition (44%) for *commercial* fishing and shellfishing in ocean waters that would be designated in a manner similar to Wilderness Areas.
- These results are consistent with the public's desire to be able to use the natural environment, while not wanting destructive or unsustainable activities.

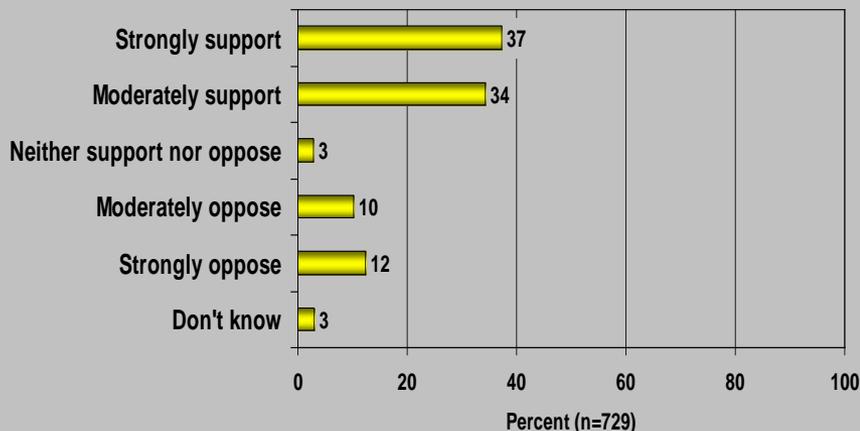
Q14. Currently, legal recreational fishing is allowed in U.S. National Forests. Do you support or oppose allowing legal recreational fishing in U.S. National Forests?  
(National Survey)



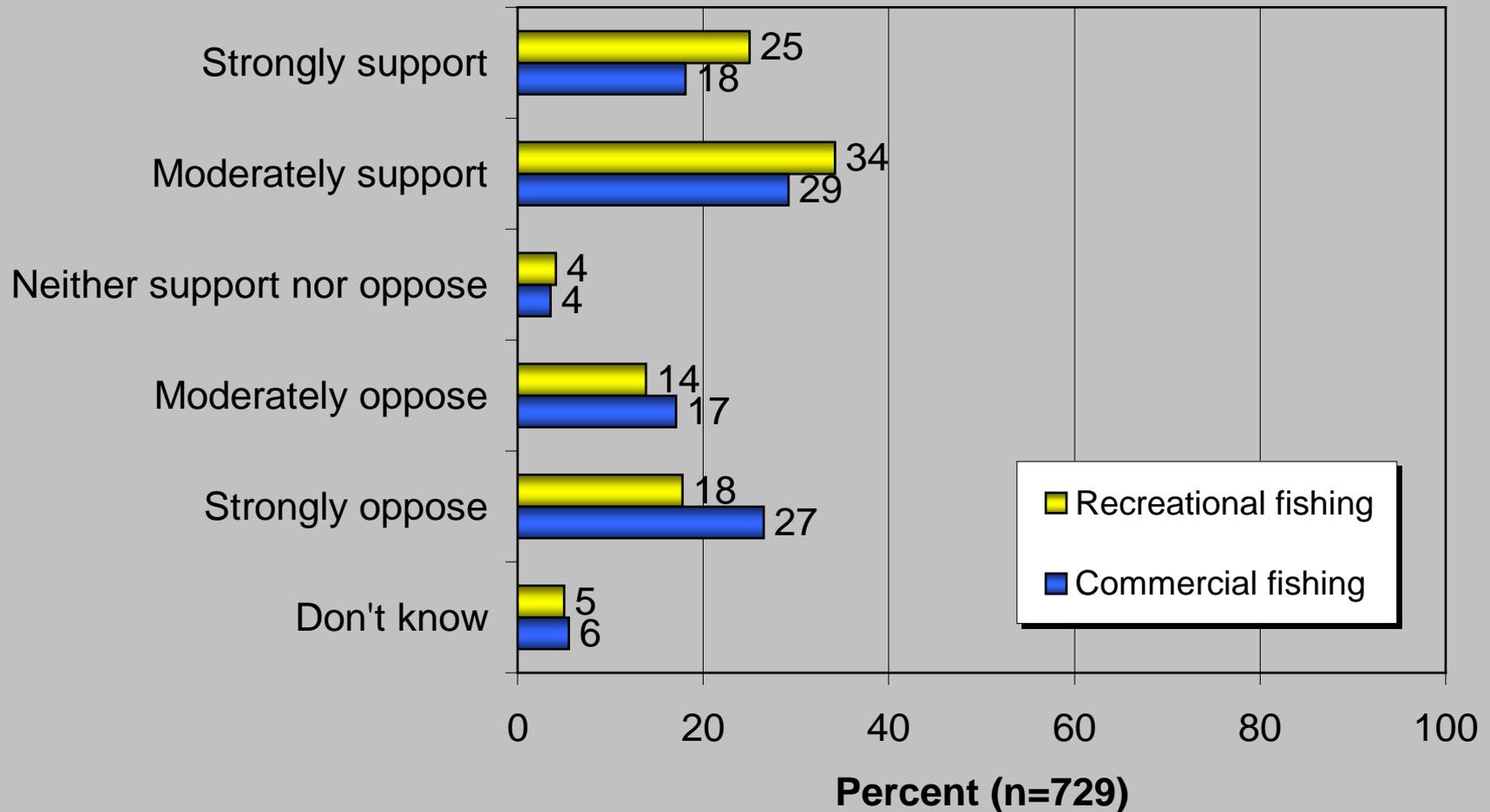
Q15. Currently, legal recreational fishing is allowed in U.S. National Parks. Do you support or oppose allowing legal recreational fishing in U.S. National Parks?  
(National Survey)



Q17. Do you support or oppose legal recreational fishing in U.S. Wilderness Areas?  
(National Survey)



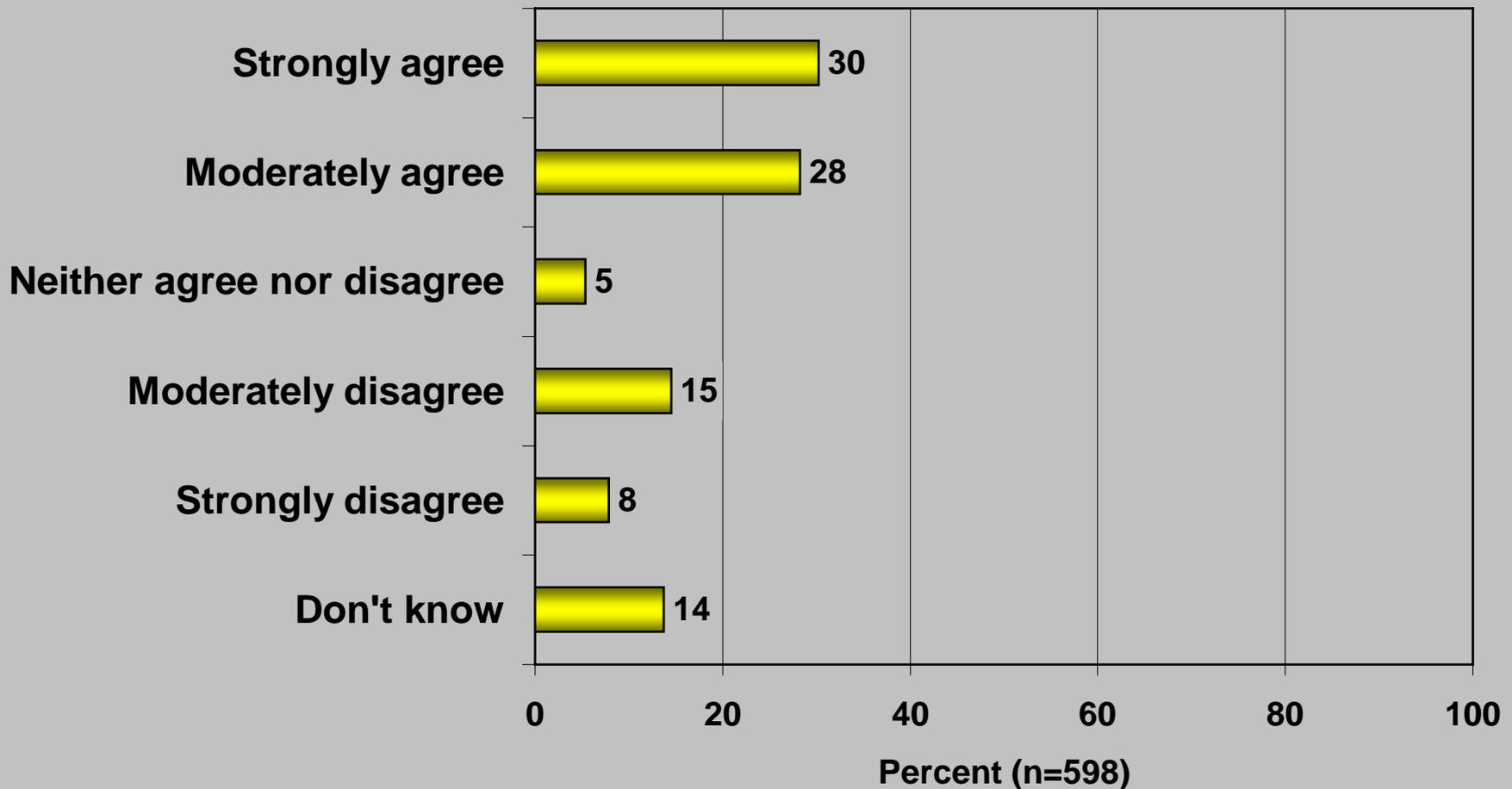
**Q28/29. If areas of U.S. ocean waters were designated in a manner similar to U.S. Wilderness Areas and human activities were restricted in the designated ocean areas, including a ban on specific human activities such as oil drilling, would you support or oppose legal recreational/commercial fishing and shellfishing in the designated ocean areas? (National Survey)**



# California Residents Express Concerns About Corporate Commercial Fishing

- The surveys examined perceptions of the effects of commercial fishing on the ocean ecosystem. While most Californians *disagree* that fishing itself harms the ocean, a majority of them agree that large corporate commercial fishing companies are harming the ocean's fisheries.
  - Californians do not perceive that fishing itself harms the ocean: in answer to a basic question, two-thirds of Californians (66%) *disagree* that fishing harms the ocean, and only 25% agree.
  - However, when asked about large corporate commercial fishing companies, the perception is more negative: 58% agree that large corporate commercial fishing companies are harming the ocean's fisheries, and 23% disagree.

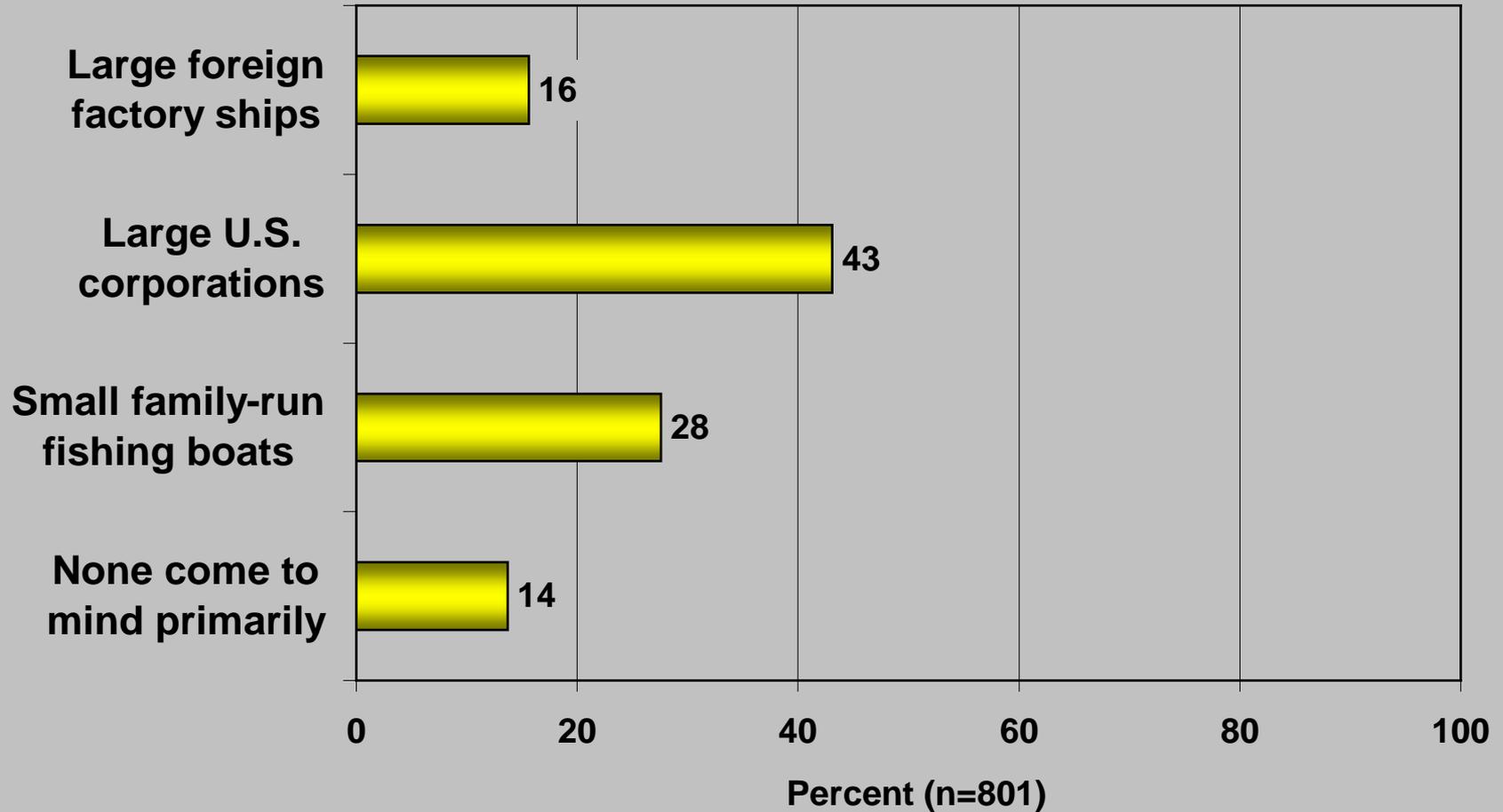
**Q68. Do you agree or disagree that large corporate commercial fishing companies in California are harming the ocean's fisheries?**



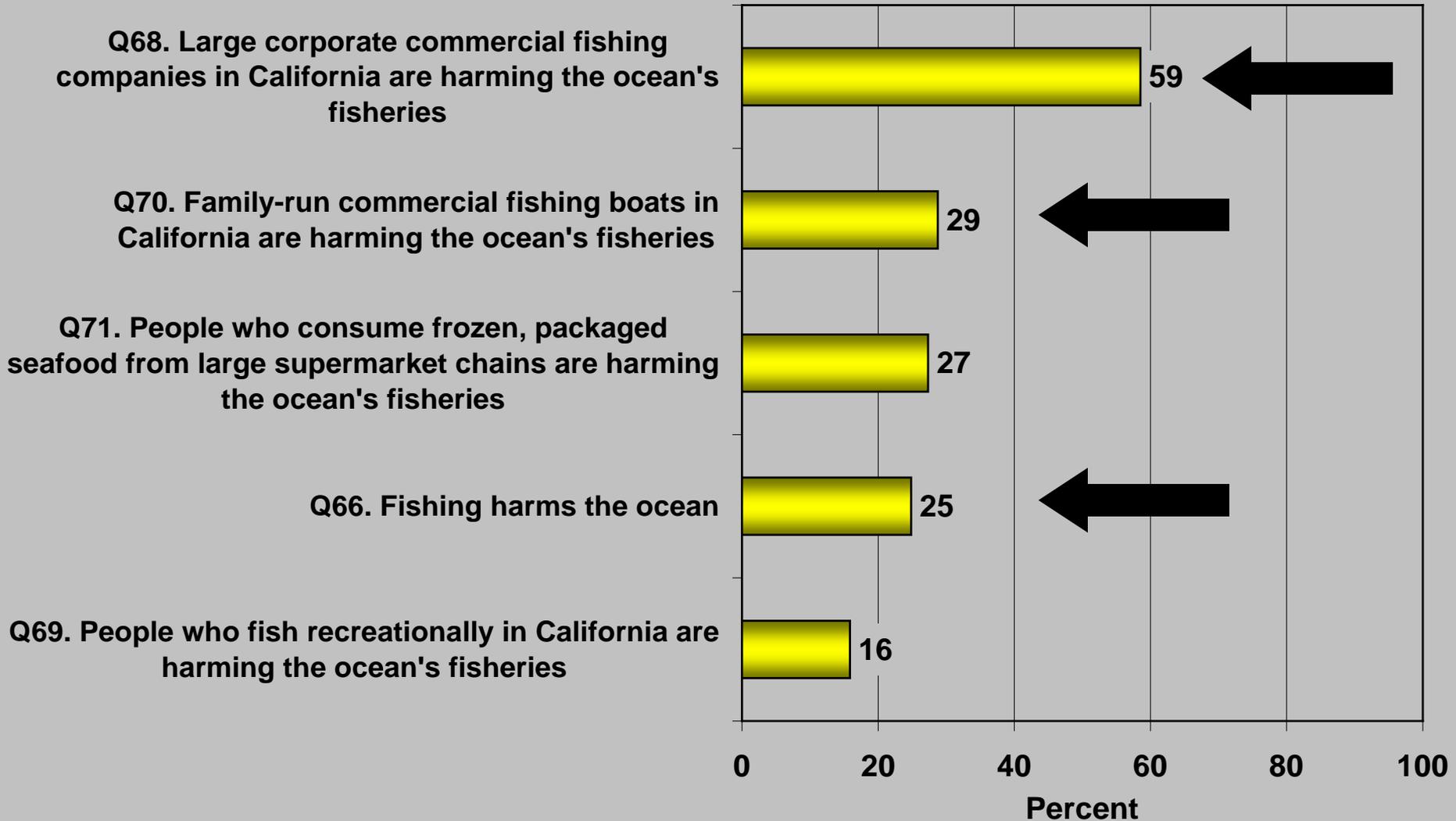
# A Closer Look at Commercial Fishing

- There is an important nuance regarding California's commercial fishing industry. Many Californians, when asked what they think of when the term “commercial fishing” is applied to California, think primarily of large foreign factory ships or large U.S. corporations; a small minority think primarily of small family-run fishing boats.
  - Californians also, in general, perceive large corporate commercial fishing companies much more negatively than small family-run commercial fishing boats vis-à-vis harm to the ocean's fisheries.
  - Family-run commercial fishing boats are not perceived as being as great a threat: 29% agree that family-run commercial fishing boats in California are harming the ocean's fisheries.

**Q75. When you think of the term, "commercial fishing," as it applies to California, do you think primarily of large foreign factory ships, large U.S. corporations, or small family-run fishing boats?**



# Q66, 68-71. Percent who strongly or moderately agree with the following.



# ATTITUDES TOWARD THE TOURISM INDUSTRY IN CALIFORNIA

Photo courtesy of Alexander MacDougall



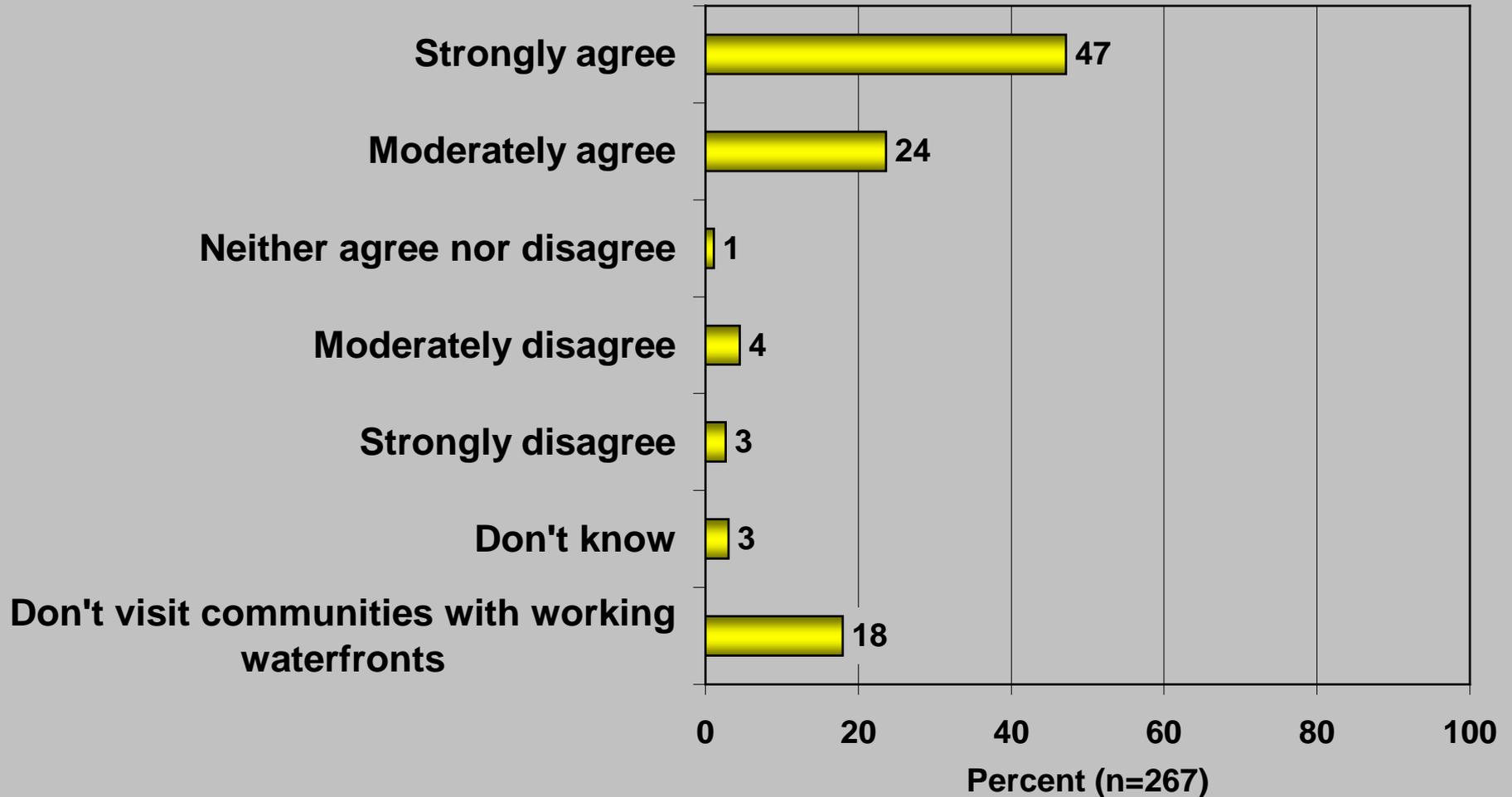
**ACSF**

The Alliance of Communities for Sustainable Fisheries

# Public Concurs that Fishing Heritage and Working Waterfronts Are Important to Tourism in Coastal Communities

- Waterfronts are important for tourism in coastal towns, as a large majority of Californians (71%) agree that they seek out and enjoy going to working waterfronts in communities that have them; only 7% disagree.
- Overwhelming majorities of visitors to three coastal communities visited the waterfronts: 80% of Crescent City visitors, 93% of Monterey visitors, and 97% of Morro Bay visitors.

**Q63. "Working waterfront" refers to places where ocean-dependent businesses are located. Do you agree or disagree that when visiting a coastal California community that has a working waterfront, you seek out and enjoy going to the waterfront?**



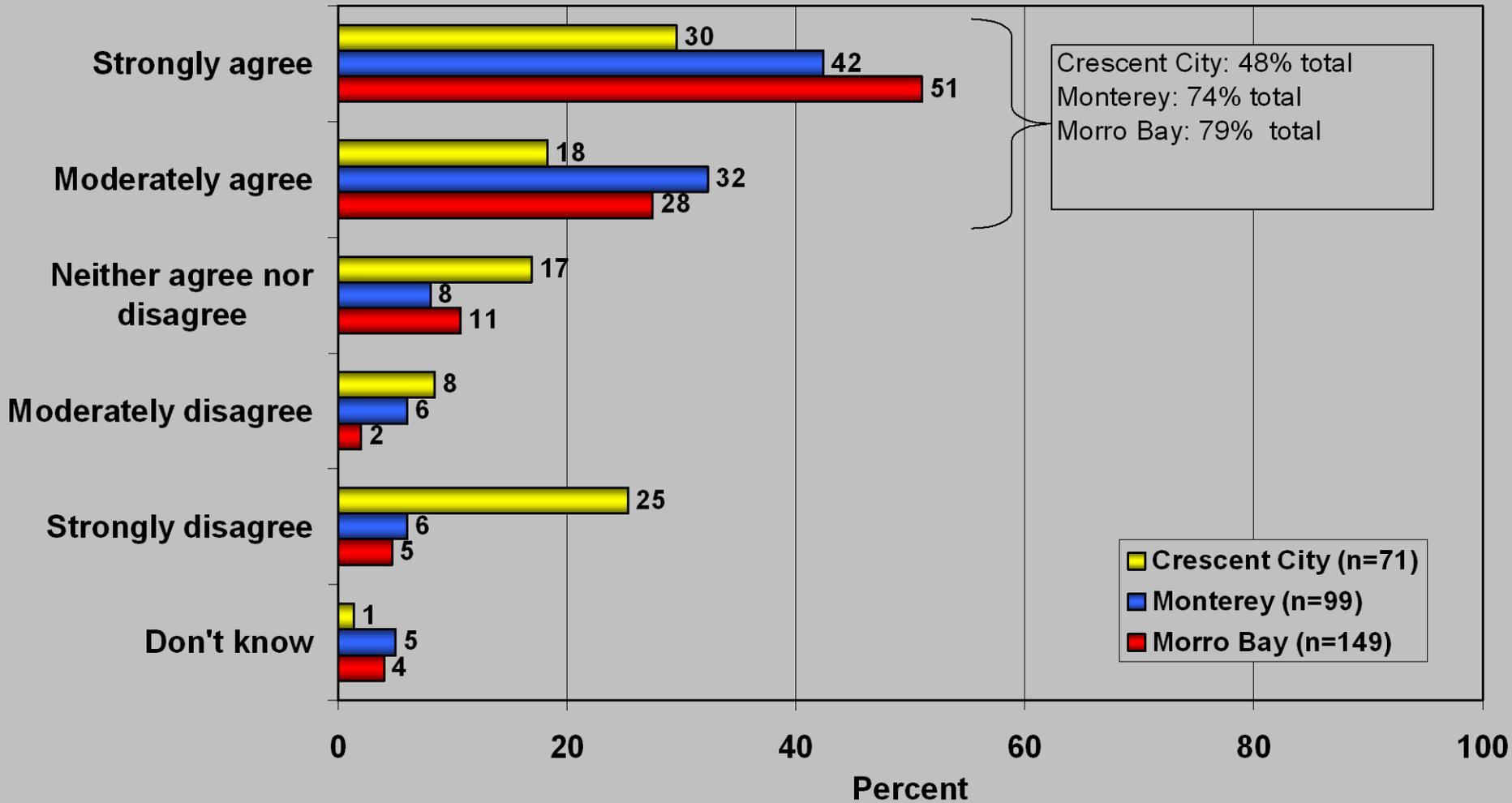
# Public Agrees that Seafood Is an Important Attraction

- Majorities of visitors seek out restaurants in Crescent City, Monterey, or Morro Bay (as opposed to any location in general) specifically for seafood: 48% of Crescent City visitors, 74% of Monterey visitors, and 79% of Morro Bay visitors.



Photo courtesy of Alexander MacDougall

**Q50. Sometimes I seek out restaurants specifically for seafood in Monterey / Morro Bay / Crescent City. (Do you agree or disagree with this statement?)**



# SURVEY OF MONTEREY BAY RESIDENTS' OPINIONS ON THE MONTEREY BAY SANCTUARY

Monterey Bay National Marine Sanctuary  
<http://montereybay.noaa.gov/visitor/slideshow/slideshow.html>



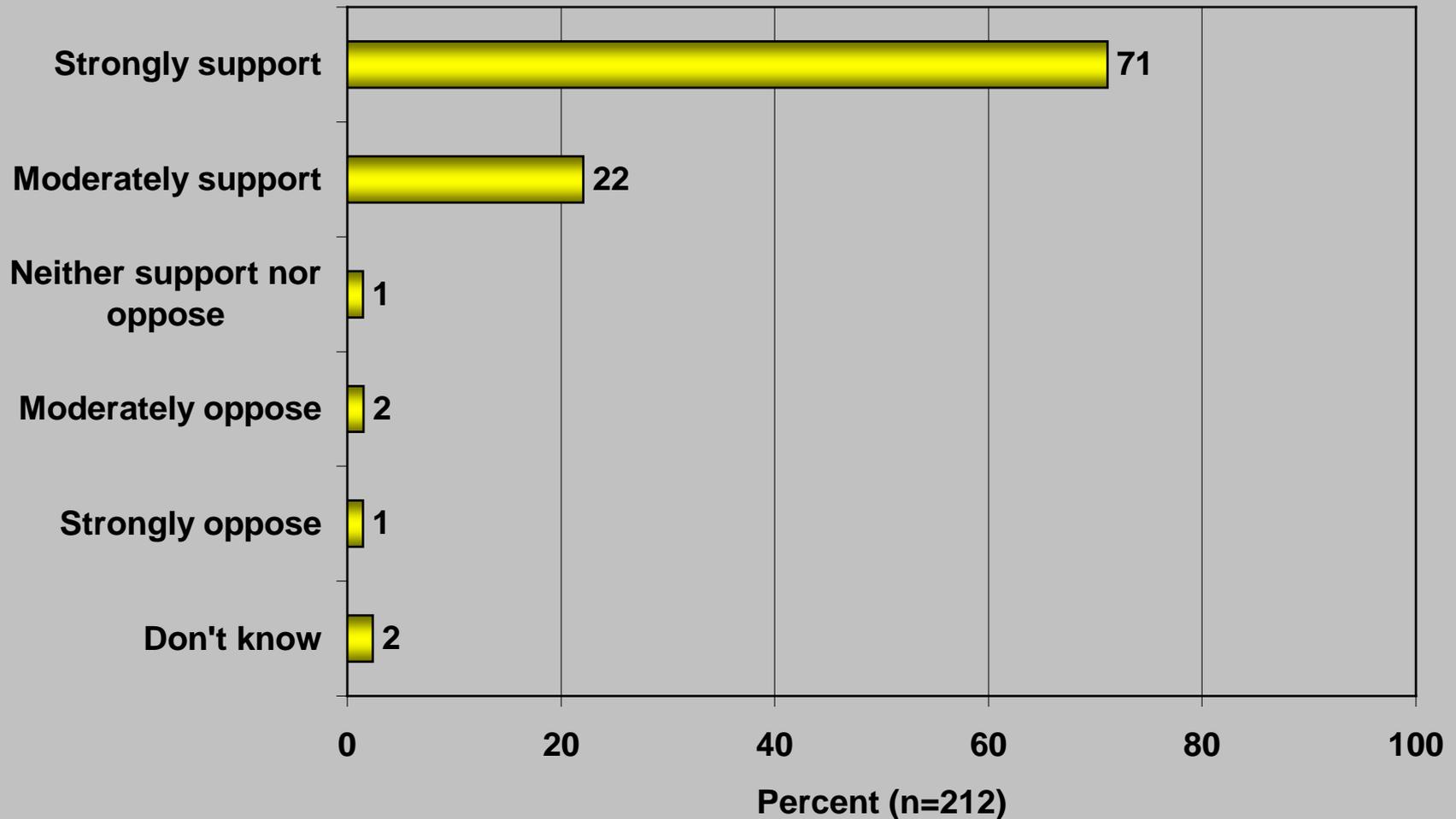
**ACSF**

The Alliance of Communities for Sustainable Fisheries

# Residents' Opinions on the Management of the Monterey Bay Sanctuary

- This survey involved a telephone survey of residents in a four-county area focused on Monterey Bay—San Mateo, Santa Cruz, Monterey, and San Luis Obispo Counties.
- Overall, Monterey Bay residents support the designation of certain areas of U.S. ocean waters as sanctuaries.
- The majority (52%) of Monterey Bay residents support the “sustainable use” of ocean resources.
- A large majority (90%) of Monterey Bay residents believe it is important that sanctuary managers accommodate the needs of local communities and the people who use the ocean.

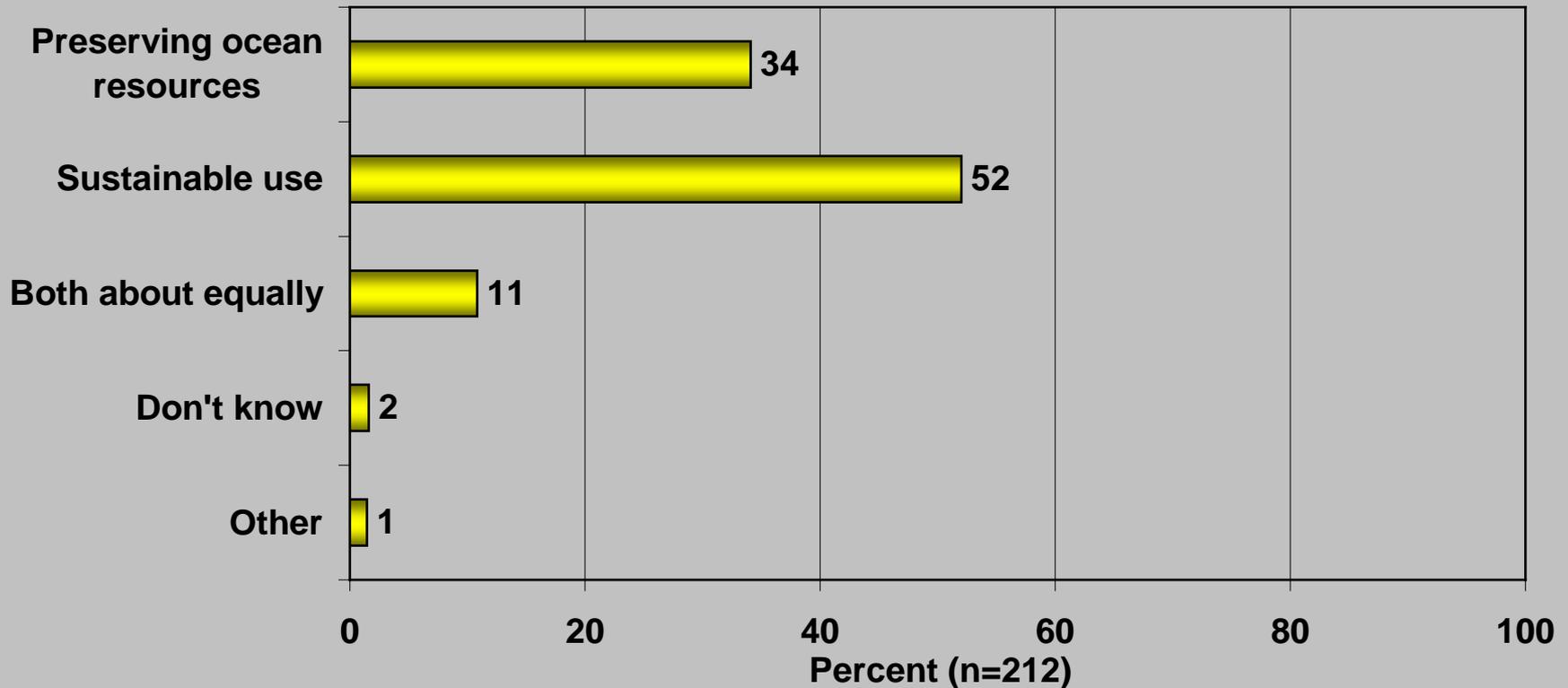
**Q9. In general, do you support or oppose the designation of certain areas of U.S. ocean waters as sanctuaries for special management to conserve the marine habitats and cultural features?  
(Monterey Bay Area Survey)**



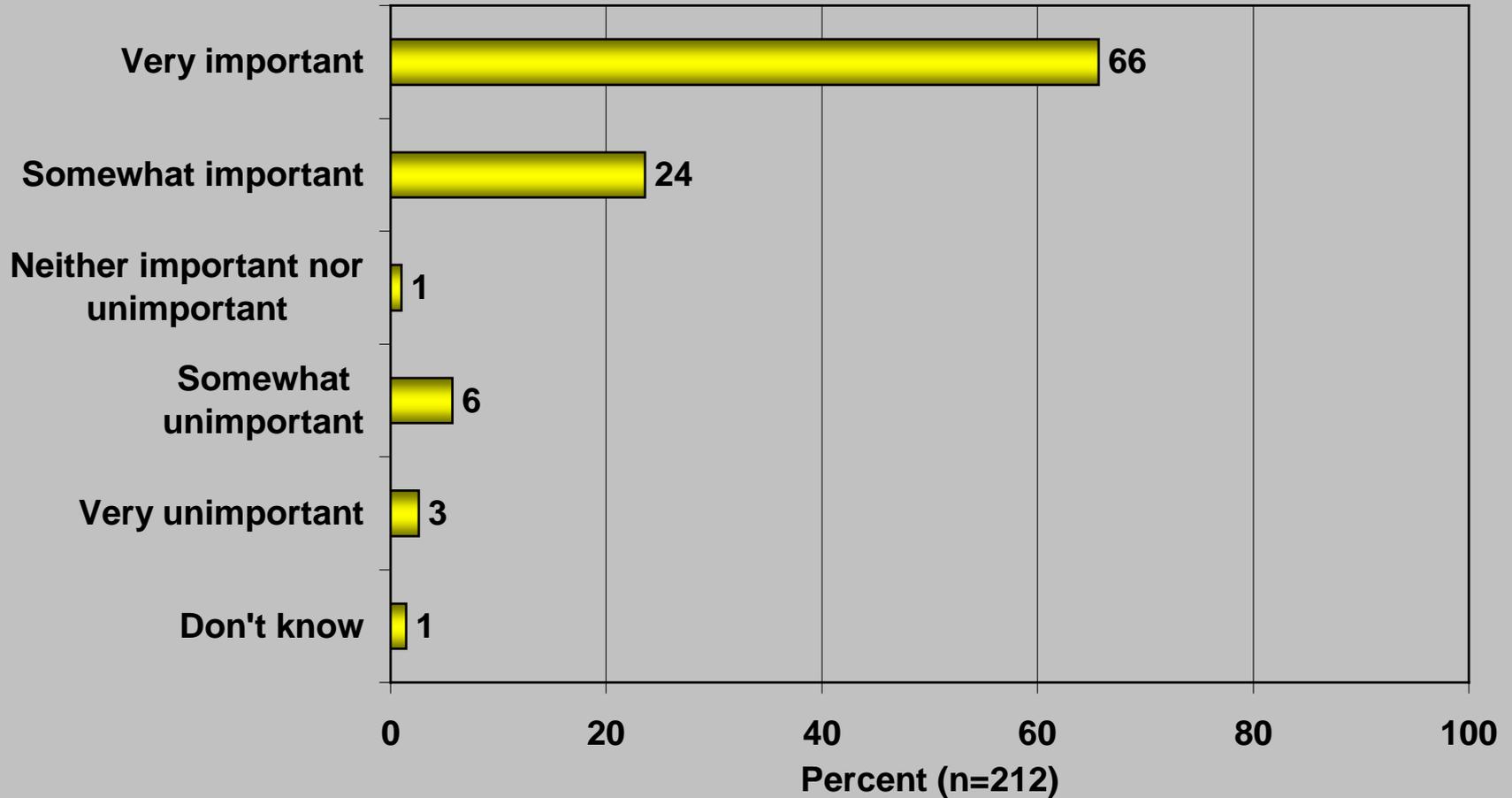
**Q10. Federal officials have several options for managing the sanctuary. One option is to manage the sanctuary primarily to preserve the ocean resources, which means not letting humans use or extract the ocean resources. Another option is "sustainable use," which means managing the use or harvest of the ocean resources in a way that does not permanently deplete or damage the resources.**

**Do you think sanctuaries should be managed primarily for preserving ocean resources or primarily for sustainable use of ocean resources?**

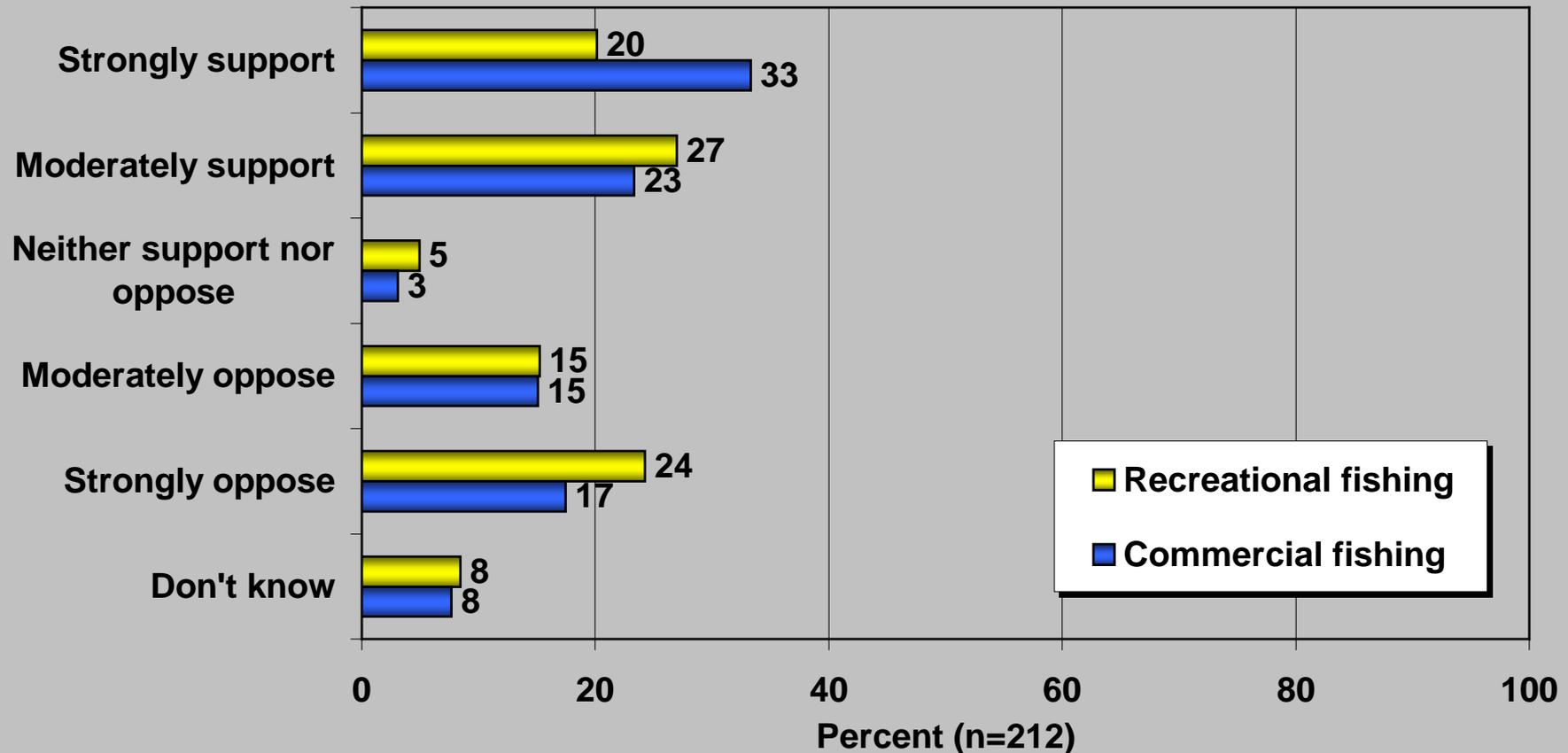
**(Monterey Bay Area Survey)**



**Q14. How important or unimportant is it to you to know that the sanctuary managers try to accommodate the needs of local communities and the people who use the ocean when making management decisions for the sanctuaries?  
(Monterey Bay Area Survey)**

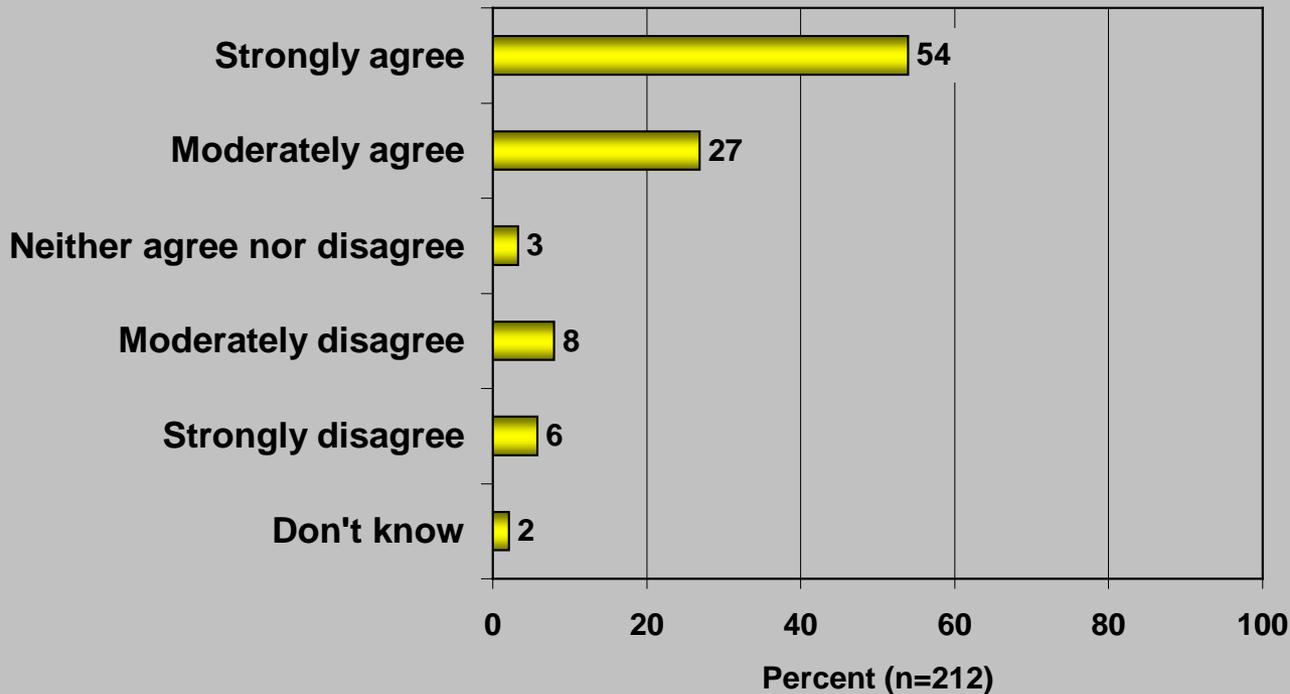


**Q32/33. Prior to the designation of the Monterey Bay Sanctuary in 1992, local recreational and commercial fishermen entered into an agreement with NOAA that the Sanctuary would NOT make additional regulations for recreational and commercial fishing and shellfishing. Recently, the Office of National Marine Sanctuaries and the local superintendent have indicated that they may make, or ask other agencies to make, additional fishing regulations for the Monterey Bay Sanctuary. Knowing this, would you support or oppose additional regulations for recreational/commercial fishing and shellfishing in the Monterey Bay?  
(Monterey Bay Area Survey)**

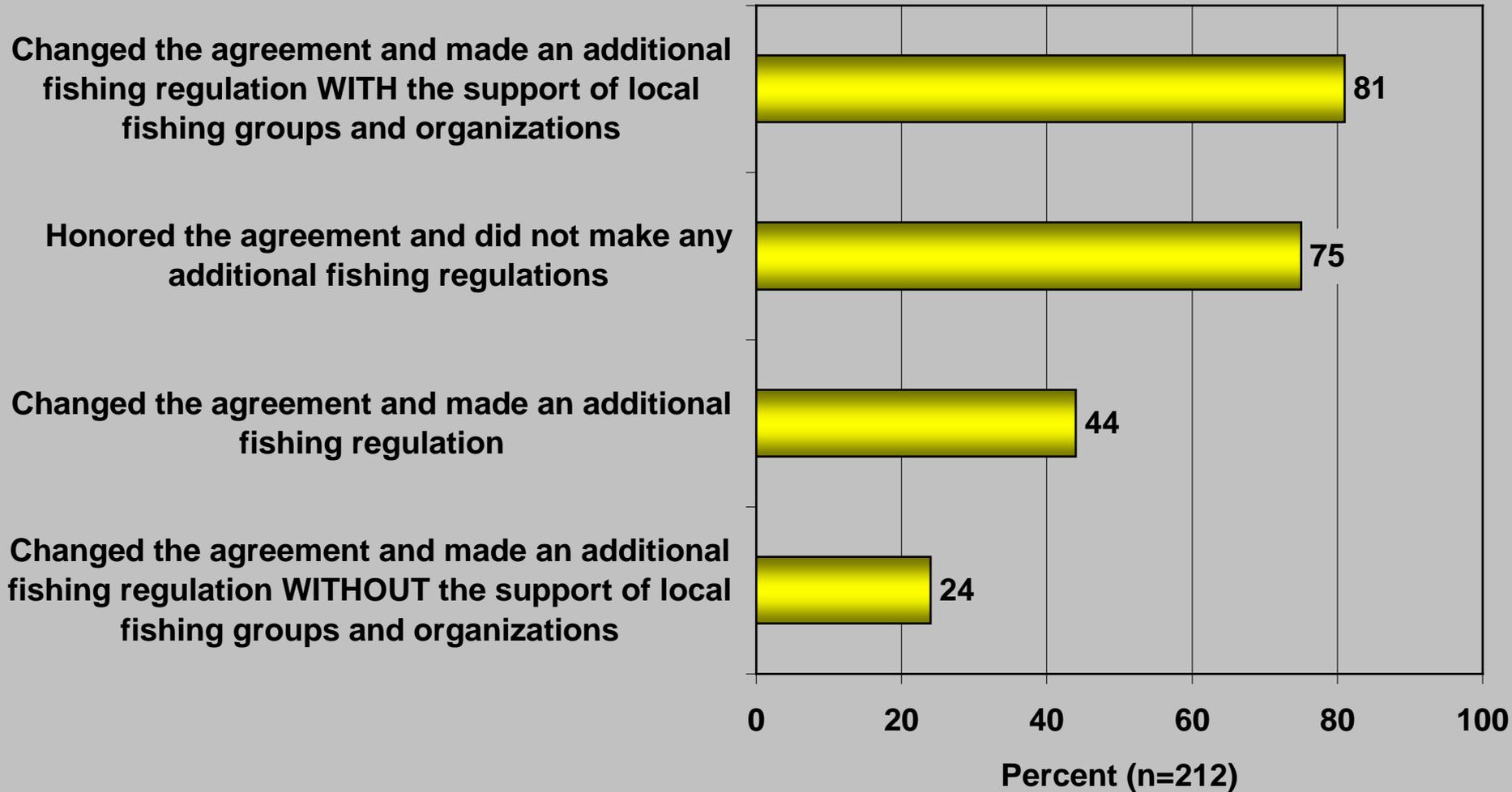


# Monterey Residents' Opinions on Fishing Regulations in the Monterey Bay Sanctuary

**Q40. Do you agree or disagree that the Sanctuary managers should obtain the support of local fishing groups and organizations if they want to change the agreement and make an additional fishing regulation?  
(Monterey Bay Area Survey)**



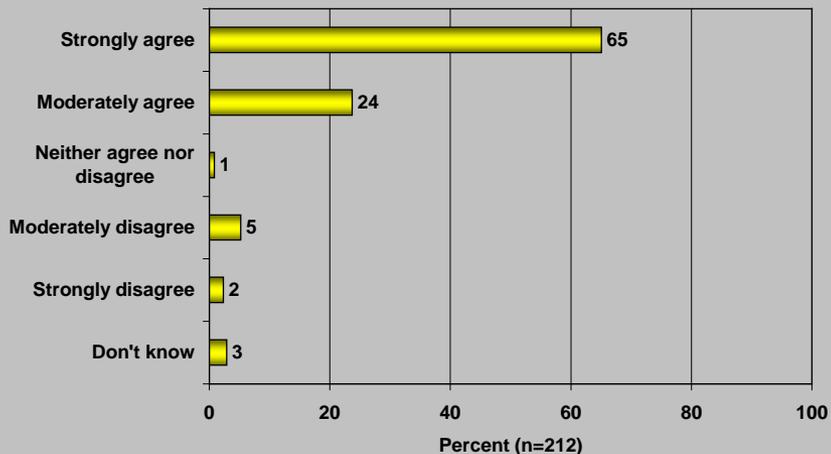
**Q36-39. Percent who would have more or about the same amount of trust in the Sanctuary managers if they did the following:  
(Monterey Bay Area Survey)**



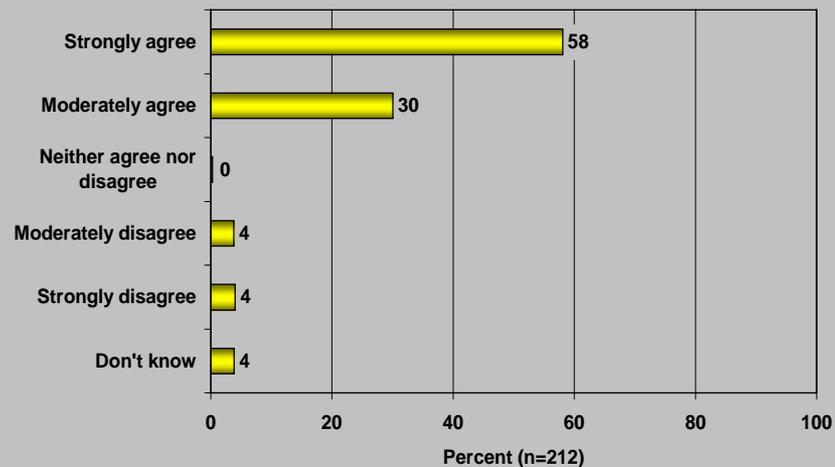
# Monterey Residents' Opinions on the Monterey Bay Sanctuary Advisory Council

- A large majority of Monterey Bay residents (89%) agree that the Monterey Bay Sanctuary superintendent should make sure that each Advisory Council member can be held accountable by their constituency for representing his or her constituency or group.
- Similarly, 88% of Monterey Bay residents agree that the superintendent should request that each County Board of Supervisors select a representative of the general public for each county.
- Most Monterey Bay residents (91%) agree that the Advisory Council should be free to communicate with members of Congress, the media, the general public, or any other group to address issues regarding the Sanctuary.

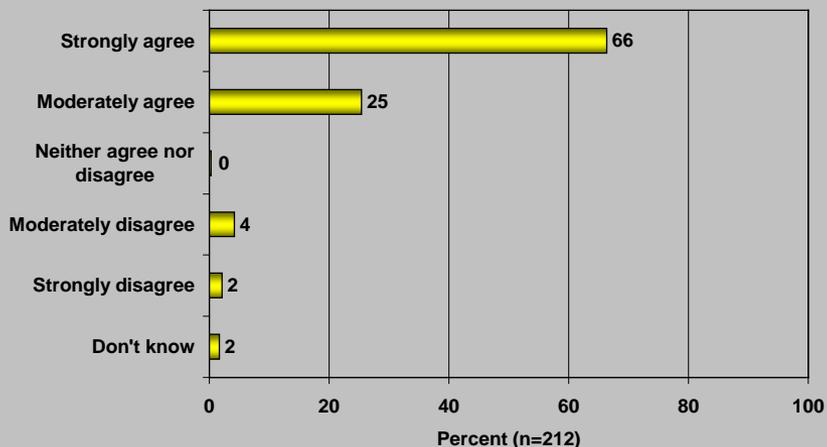
**Q23. Do you agree or disagree that the Monterey Bay Sanctuary superintendent should make sure that each Advisory Council member can be held accountable by their constituency for representing his or her constituency or group?**  
(Monterey Bay Area Survey)



**Q25. Do you agree or disagree that the Monterey Bay Sanctuary superintendent should request that each County Board of Supervisors, as elected officials, select a representative of the general public for each county?**  
(Monterey Bay Area Survey)



**Q26. Do you agree or disagree that the Monterey Bay Sanctuary Advisory Council should be free to communicate with members of Congress, the media, the general public, or any other group to address issues regarding the Sanctuary?**  
(Monterey Bay Area Survey)



# CONCLUSIONS

Sue Ann / Morro Bay Chamber of Commerce and Visitor Center  
<http://morrobay.org/cm/Home.html>



**ACSF**

The Alliance of Communities for Sustainable Fisheries

# In General, the Public and California's Business and Civic Leaders...

- Support protecting ocean waters, but this support is tempered by moderation.
- Strongly support scientific management of ocean waters for sustainable use.
- Are reluctant to fully protect and close off ocean waters with no human use allowed.

# In General, the Public and California's Business and Civic Leaders...

- Agree that it is important that the U.S. maintain its ability to supply some seafood to U.S. residents rather than to depend entirely on imported seafood.
- Value sustainable seafood harvest.
- Support legal recreational and commercial fishing and shellfishing.
- Agree that fishing heritage and working waterfronts are important to tourism in coastal communities.

# ACSF Mission

The Alliance of Communities for Sustainable Fisheries advocates for the heritage and economic value of fishing to California Coastal Communities. To preserve and enhance that value, the Alliance offers a broadly representative educational and promotional voice for waterfront communities to work constructively with interested agencies, individuals, and other marine protection organizations in order to ascertain and guarantee that: (1) the best and most current oceanographic, socio-economic, and fisheries science is accurately compiled; (2) this science is readily available to the public for use in crafting and promoting public policy; (3) the linkage between healthy sustainable fisheries, marine conservation, and coastal communities is firmly established in the public mind.

# About Responsive Management

Responsive Management is an internationally recognized public opinion and attitude survey research firm specializing in natural resource and outdoor recreation issues.

Its mission is to help natural resource and outdoor recreation agencies and organizations better understand and work with their constituents, customers, and the public.

Responsive Management conducts:

- Telephone, mail, and Web-based surveys
- Focus groups
- Personal interviews
- Park/outdoor recreation intercepts
- Needs assessments
- Literature reviews
- Data collection for researchers and universities

GROUND FISH ADVISORY SUBPANEL REPORT ON  
MARINE RESOURCES PUBLIC OPINION POLLS

The Groundfish Advisory Subpanel (GAP) reviewed the issues of the public opinion polls submitted by the Alliance of Communities for Sustainable Fisheries.

It was noted that these polls were of considerable interest to members of the fishing community. The GAP believes that the information contained within these polls should be important to the Council as an indication of public opinion toward fishery management including habitat.

Two of these polls, the national and Monterey regional polls, have received public critique from the Ocean Conservancy. In the interest of furthering this review process, the GAP strongly recommends that these two polls be submitted to the Scientific and Statistical Committee for a review. This would allow for a more thorough analysis of the methodology and an assessment of relevance and therefore a clearer understanding of the validity of this undertaking.

PFMC  
09/13/09

55 C Municipal Wharf  
Santa Cruz, CA 95060



831.425.1363 Telephone  
831.425.5604 Facsimile  
www.oceanconservancy.org

August 25, 2009

Dr. Donald Mclsaac  
Executive Director  
Pacific Fishery Management Council  
7700 NE Ambassador Place, Suite 101  
Portland, Oregon 97220

**RE: September 13, 2009 Council Meeting  
Item C.1: Marine Resources Public Opinion Polls**

Dear Dr. Mclsaac:

I am writing on behalf of Ocean Conservancy with regards to two public opinion polls commissioned by the Alliance of Communities for Sustainable Fisheries (ACSF) and conducted by Responsive Management earlier this year. For several years Ocean Conservancy has represented the conservation community on the Monterey Bay National Marine Sanctuary Advisory Council and our staff has served alongside fishing representatives and other stakeholders on both the Sanctuary's Marine Protected Area Work Group and the State of California's Marine Life Protection Act regional stakeholder groups. We are therefore very familiar with marine protected areas (MPAs) and the issues addressed in the ACSF commissioned public opinion polls. I have had the opportunity to review both polls in detail and offer the following comments.

In summary, the polls provide some useful information about public views on ocean management generally. **The basic take home message of both polls is that public support for ocean protection, for marine protected areas, for sustainable use of ocean resources, and for improved protection of the Monterey Bay National Marine Sanctuary is extraordinarily high.** Unfortunately many of the questions posed in both polls are either biased in their formulation, presenting a "false choice" to the survey respondents or cover issues that require more information than can be conveyed in the short span available during a telephone survey. Public responses to very similar questions vary significantly in percentage points further demonstrating the unreliability of relying unduly on specific responses to individual questions. While these flaws undermine the usefulness of the polls, the public's strong support for improved ocean protection is evident in the poll results overall.

## Nationwide Survey of Public Opinion on the Management of Ocean Resources

The biggest flaw with the national poll is that many of its questions are premised on a false policy choice – the choice between managing the ocean to allow at least some kinds of human use in some areas and allowing “no human use” at all.<sup>1</sup> Given that there is no policy effort directed at disallowing all human uses of the ocean, this formulation seriously undermines the usefulness of the whole series of questions that follow.

In spite of this flaw, the national poll shows overwhelming public support (94%) for ocean protection<sup>2</sup>. Nearly two-thirds of those surveyed agree with the statement: “Some U.S. ocean water areas should be fully protected with no human use allowed.”<sup>3</sup> Seventy percent of survey respondents that agree that some U.S. ocean water areas should be fully protected with no human use allowed continued to support closed areas “even if sustainable use is possible.”<sup>4</sup> Fully 55% of respondents agreed with the statement that “some U.S. ocean water areas should be fully protected from all human use, including sustainable harvest of fish and seafood, even if it reduces the ability of the U.S. to supply seafood to U.S. residents.”<sup>5</sup>

## Monterey Bay Area Residents' Opinions on the Management of the Monterey Bay National Marine Sanctuary

Like the national poll, the Monterey Bay area poll suffers from a fundamental bias. Question 10 of the poll sets up a false dichotomy by asking respondents to choose between managing sanctuary resources primarily to “‘preserve’ the ocean resources, which means not letting humans use or extract the ocean resources” and “‘sustainable use’, which means managing the use or harvest of the ocean resources in a way that does not permanently deplete or damage the resources.”<sup>6</sup> There is not now, and has never been, any suggestion in any policy venue that the sanctuary would be managed to disallow all human use. Unfortunately, the extreme bias reflected in this question taints the results of all of the questions that follow.

In spite of its flaws, the fundamental conclusion of the Monterey Bay Area poll is that the public overwhelmingly supports improved protection of the Monterey Bay National Marine Sanctuary. Fully 93% of poll respondents support designation of sanctuaries<sup>7</sup>, nearly two third (64%) believe that sanctuary managers should have the power to make rules to

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<sup>1</sup> Responsive Management, 2009. Nationwide Survey of Public Opinion on the Management of Ocean Resources. Questions 32-38; 41-45; 47-48.

<sup>2</sup> *Id.*, Question 19.

<sup>3</sup> *Id.*, Questions 41-45.

<sup>4</sup> *Id.*, Questions 47.

<sup>5</sup> *Id.*, Question 60.

<sup>6</sup> Residents' Opinions on the Management of the Monterey Bay National Marine Sanctuary. Question 10.

<sup>7</sup> *Id.*, Question 9.

prohibit human use of the designated sanctuaries<sup>8</sup>, and fully 68% say it is somewhat or very important to “create additional MPAs where fishing is restricted or banned for the primary purpose of ensuring that some areas of the ocean are in a more natural condition.”<sup>9</sup>

### Conclusion

I urge the members of the Pacific Fisheries Management Council to read the ACSF polls in their entirety. Given the polls' many flaws, I would urge caution in reliance on the results of individual poll questions in any policy setting. That said, the basic results of the ACSF polls demonstrating strong public support for additional ocean and Sanctuary protection are consistent with both past public opinion polls and the extensive public input received by the Sanctuary during the public scoping and environmental review process for the recently completed Sanctuary Joint Management Plan Review process. During that process, the Sanctuary received more than 10,000 public comments in favor of marine protected areas.

Moving forward I encourage the Pacific Fisheries Management Council to work closely with the Monterey Bay National Marine Sanctuary on efforts to improve protection of the living marine resources that are under the shared jurisdiction of both entities.

Please do not hesitate to contact me at 831-425-1363 with any questions.

Sincerely,



Pacific Ecosystem Protection Program Director

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<sup>8</sup> *Id.*, Question 15.

<sup>9</sup> *Id.*, Question 46.

# Responsive Management™



130 Franklin Street  
Harrisonburg, Virginia 22801

September 10, 2009

Dr. Donald McIsaac  
Executive Director  
Pacific Fishery Management Council  
7700 NE Ambassador Place, Suite 101  
Portland, Oregon 97220-1384

**RE: September 13, 2009 Council Meeting  
Public Opinion Polls Conducted by Responsive Management**

Dear Dr. McIsaac:

This letter concerns a letter submitted to the Board on or about August 25, 2009, by Ms. Gaffney of the Ocean Conservancy regarding public opinion polling conducted by Responsive Management under contract to the Alliance of Communities for Sustainable Fisheries. We were provided a copy of the letter, and we would like an opportunity to respond to the points made in that letter.

We submit this letter simply to comment on our polling; being objective researchers, we do not wish for the submission of this letter to be construed as taking sides on this debate. Indeed, we make no stand on the issues before the Council.

The following shows the comments in the Ocean Conservancy letter in *italic* with our response following.

*The biggest flaw with the national poll is that many of its questions are premised on a false policy choice....*

We set up a scale from one extreme to the other extreme to see where most people would fall on the continuum, and they fell out where they did. In no place in the survey did we say that either end of the continuum is where the current policy effort is being directed, so it did not undermine where people placed themselves along the continuum. The scale used in this analysis is shown on the following page, along with the lead-in to the questions. The scale included five questions,

from one extreme to the other. The introduction made no implication that one approach was currently being pursued over another. Furthermore, the questioning was worded to include both “agree” and “disagree” so as to not bias the respondent’s answers.

The survey questions were as follows:

Next, I am going to ask you about several different approaches to the management of U.S. ocean waters and resources, and I’d like to know if you agree or disagree with each one.

Do you agree or disagree that...

...all U.S. ocean waters should be open to public human use?

...all U.S. ocean waters should be open to public human use but should be scientifically managed for sustainable use?

(IF ASKED: "Scientifically managed" means managing resources based on scientific study and understanding of the resources.) (IF ASKED: "Sustainable use" means the use or harvest of the ocean resources in a way that does not permanently deplete or damage the resources.)

...some U.S. ocean water areas should be protected but open to public human use and scientifically managed for sustainable use?

(IF ASKED: "Scientifically managed" means managing resources based on scientific study and understanding of the resources.) (IF ASKED: "Sustainable use" means the use or harvest of the ocean resources in a way that does not permanently deplete or damage the resources.)

...some U.S. ocean water areas should be fully protected with no human use allowed?

...all U.S. ocean waters should be fully protected with no human use allowed?

For each question, respondents were given the following answer set:

- Strongly agree
- Moderately agree
- Neither agree nor disagree
- Moderately disagree
- Strongly disagree

The results of the five questions were then analyzed relative to one another. In this analysis, the most agreement was for the question in the middle of the scale: “some U.S. ocean water areas should be protected but open to public human use and scientifically managed for sustainable use” (91% agreed with this approach). This was followed closely by “all U.S. ocean waters should be open to public human use but should be scientifically managed for sustainable use” (82% agreed with this). The lowest agreement was for both the questions at the extremes.

*In spite of this flaw, the national poll shows...support (94%) for ocean protection.*

This comes from another line of questioning in which we asked, “In general, do you support or oppose efforts to protect U.S. ocean waters and ocean life?” In this very broad question, we found much support (78% strongly supporting and 17% moderately supporting) for protecting oceans waters and ocean life. However, this result must be examined with the follow-up question in mind: “When I say “protect” U.S. ocean waters and ocean life, what does the term

“protect” mean to you?” Only 8% gave an answer (the question was open-ended without an answer set being read to respondents) that related to full protection with no human use allowed. Most commonly, responses related to sustainable use (29%).

*Fully 55% of respondents agreed with the statement that “some U.S. ocean waters should be fully protected from all human use....*

Again, this points toward a middle ground, as the statement indicates that “some” waters should be protected.

*Question 10...sets up a false dichotomy....*

Again, we simply set up a premise for the survey; we did not indicate that either of the options is being favored over the other at this point. Rather, we simply stated two options that could be considered (as we assumed that no options were excluded at this stage) and asked people which of those two they prefer.

*...93%...support designation of sanctuaries.*

Yes, in a quite broad question, most people support some protection through the designation of sanctuaries.

*...64% believe that sanctuary managers should have the power to make rules...*

While this is true, it relates to “power” to make rules (i.e., people do not want a “puppet” at the top but want a manager who can manage), but this should be taken in context of the rest of the survey where people indicated more directly policy that they wanted to see enacted. This finding is not the same as wanting managers to necessarily *make* those rules. One would not want to simply examine this result without looking at questions that related more directly to the actual rules people wanted promulgated.

*...68% say it is...important to create additional MPAs where fishing is restricted or banned...*

Again, this is true. However, the results regarding people’s wishes to have more areas under protection should not be divorced from questions that directly pertain to how they want that protection to be enacted.

*Given the polls many flaws...*

We do not see flaws. We set up premises, and certainly other premises could have been set up, but we would not describe these as flaws. Furthermore, all the results have been made available, so we, as researchers, are not seeking to hide nor obfuscate results. They are what they are.

In summary, we do not doubt that many people favor protection. But the surveys obtained quite extensive data on what exactly people mean by “protection,” and those results should not be divorced from the rest of the results. In fact, as researchers, we would urge both sides not to simply cherry pick a few results of our polls without considering those results in context of all the surveys that have been conducted.

Sincerely,

Martin Jones  
Senior Research Associate  
Responsive Management

## MONTEREY BAY NATIONAL MARINE SANCTUARY MARINE PROTECTED AREA PROCESS

The Monterey Bay National Marine Sanctuary (MBNMS, Sanctuary) has initiated a process to consider criteria, rationale, and scientific justification that would define the need for marine protected areas (MPAs) in Federal waters of the Sanctuary for additional resource protection and has developed three principal management objectives as follows: “1) Preservation of unique and rare areas in their natural state for the benefit of future generations; 2) Preservation of areas where natural ecosystem components are maintained and/or restored; and 3) Designation of research areas to differentiate between natural variation versus human impacts to ecological processes and components.”

At the June 2008 Council meeting Superintendent Michel presented additional rationale and scientific justification for considering MPAs, a draft decision process and timeline for Sanctuary consideration of MPAs, and concepts for a process to move ahead with MPAs in the MBNMS. In a July 29, 2009 response letter, Council Executive Director Don McIsaac provided Council feedback on the determination of need for additional MPAs, independent scientific review, the analytical process, and the process timeline (Agenda Item C.2.a, Attachment 1).

In a letter dated August 26, 2009 (Agenda Item C.2.b, Attachment 1), Superintendent Michel provides a summary update on the Sanctuary’s process for MPA consideration. Based, in part, on the ecosystem-based aspects of the Sanctuary’s three principal management objectives and input from stakeholders, the Sanctuary is proposing a more comprehensive ecosystem-based management approach to its MPA process.

At this meeting, the Council is scheduled to receive a presentation from Superintendent Michel and provide input on the next steps and future coordination.

### **Council Action:**

#### **1. Provide Input on the MBNMS MPA Process.**

### **Reference Materials:**

1. Agenda Item C.2.a, Attachment 1: July 29, 2008 letter from Executive Director McIsaac providing Council input to the Sanctuary on the process of considering MPAs.
2. Agenda Item C.2.b, Attachment 1: August 26, 2009 letter from Superintendent Paul Michel to the Council, re: An update on the Sanctuary’s plans for considering MPAs.
3. Agenda Item C.2.d, Public Comment.

### **Agenda Order:**

- a. Agenda Item Overview
- b. Monterey Bay National Marine Sanctuary (MBNMS) Report
- c. Reports and Comments of Management Entities and Advisory Bodies
- d. Public Comment
- e. **Council Action:** Provide input to the MBNMS

Mike Burner  
Paul Michel

PFMC  
08/31/09



## Pacific Fishery Management Council

7700 NE Ambassador Place, Suite 101, Portland, OR 97220-1384  
Phone 503-820-2280 | Toll free 866-806-7204 | Fax 503-820-2299 | [www.pcouncil.org](http://www.pcouncil.org)  
Donald K. Hansen, Chairman | Donald O. McIsaac, Executive Director

July 29, 2008

Mr. Paul Michel, Superintendent  
Monterey Bay National Marine Sanctuary  
299 Foam Street  
Monterey, California 93940

Dear Mr. Michel:

The Pacific Fishery Management Council (Council) appreciates the opportunity to review and comment on the Monterey Bay National Marine Sanctuary's (MBNMS or Sanctuary) process for moving forward with consideration of additional marine protected areas (MPAs) in Federal waters of the Sanctuary. The Pacific Council tasked me with providing this response, which is based on the results of the April and June 2008 Council meetings. I, and the Council would like to thank you and your staff for your participation in these two Council meetings. Your testimony and discussions with the Council and its advisory bodies were especially valuable during these early coordination efforts.

It is unfortunate that the Council and the Sanctuary were unable to begin a dialogue on the need criteria for additional protective measures as envisioned and prior to the Sanctuary's February determination on the matter. Your February 15, 2008 letter to the Sanctuary Advisory Council (SAC), in which you stated that the "MBNMS has concluded there is a need for MPAs in Federal waters of the Sanctuary" raised several concerns from the Council and the public because this determination preceded both the Council's opportunity to comment on the issue as per your July 26, 2007 communiqué, the supporting analysis of possible need criteria and a thorough analysis of any specific MPAs alternatives. However, the Council was encouraged by your verbal testimony at the April Council meeting during which you characterized the Sanctuary determination as a general decision to consider MPAs a management tool, and with regard to specific MPA proposals, to evaluate existing and proposed management measures and MPAs within the Sanctuary in coordination the Council to ascertain if any modifications are necessary to meet the Sanctuary's goals and objectives.

The Council is supportive of a collaborative review of the need for additional MPAs within the Sanctuary and will assign a Council staff member as a liaison with the Sanctuary to ensure the best use of Council's transparent public process and extensive scientific and fishery expertise in the future evaluation of MPAs within the Sanctuary. The Council anticipates potential benefits to fishery management through increased collaboration because the Sanctuary, under the authority of the National Marine Sanctuaries Act (NMSA), can comment on laws and regulate non-fishing activities that are separate from the Council process but have benefits to fishery resources under Council jurisdiction.

The Council maintains its position that the Magnuson-Stevens Fishery Conservation and Management Act and the Council process represent the appropriate authority and forum for developing fishing regulations within and outside of National Marine Sanctuaries and is supportive of collaboration efforts early in the decision process for MPAs. However, it should be noted that Council support for a collaborative evaluation of MPAs does not imply Council support for the creation of additional MPAs. Any determination on the need for additional MPAs should only be made following a comprehensive analysis of a sufficiently wide range of alternatives.

#### **DETERMINATION OF THE NEED FOR ADDITIONAL MPAS AND EVALUATION CRITERIA**

Your April 15, 2008 letter to the SAC and Sanctuary staff testimony at the June Council meeting conveyed the Sanctuary's management objectives for MPAs as follows:

- 1) *There is a need for areas where the natural ecosystem components are maintained and/or restored;*
- 2) *there is a need for research areas to differentiate between natural variation versus human impacts to ecological processes and components; and*
- 3) *there is a need to preserve some unique and rare areas in their natural state for the benefit of future generations."*

These management objectives provide broad overarching principles under which initial proposals could be identified, but they lack specificity and a scientific basis for determining whether additional MPAs are necessary, or if necessary, the location and spatial extent of MPAs needed to meet the stated objectives. If taken literally, every geographic segment of the MBNMS would meet the criteria and the entire MBNSM could become an MPA.

The Council again was encouraged by Sanctuary staff testimony at the June Council meeting that the development of specific evaluation criteria for determining the purpose, location, size, and regulatory protections for proposed MPAs are still needed and would be developed cooperatively between the Council, the Sanctuary, and their respective advisory groups before MPA sites are proposed. This is a critical step in that, absent the adoption of *a priori* criteria for individual MPA sites, any and all proposals would pass the general "management tool" criteria threshold.

As an initial step in the development of MPA evaluation criteria, I encourage you to review a white paper completed by the Council's Scientific and Statistical Committee (SSC) entitled "*Marine Reserves: Objectives, Rationales, Fishery Management Implications and Regulatory Requirements.*" There are several commonalities between the Sanctuary's management objectives for considering MPAs and the rationales and objectives put forward in the SSC's white paper. Additionally, the white paper provides a framework for the development and analysis of management alternatives, including *status quo*. This document was completed in 2004 and is readily available on the Council's web page. The Council, its staff, and its SSC are willing to assist in the development and review of the evaluation process and the resulting analysis of alternatives. While not all evaluation criteria are likely to be amenable to rigorous scientific evaluation, those brought before the SSC for review should be.

To further assist in the development of evaluation criteria for existing and proposed MPAs, the State of California has offered to provide the criteria developed in part by the California Department of Fish and Game (CDFG) under an ongoing initiative to establish a network of state

MPAs under the California Marine Life Protection Act Initiative. Council and CDFG staff are currently coordinating to consolidate the regional California criteria for potential application to Federal MPA considerations.

#### **ADVISORY GROUPS AND INDEPENDENT SCIENTIFIC REVIEW**

The Council understands that the Sanctuary is currently deliberating the membership and roles of the advisory groups that are intended to provide recommendations and sound scientific advice to the Sanctuary on MPA matters. As the Sanctuary begins the process of forming these working groups and advisory bodies, the Council offers the following recommendations.

The Council relies on its SSC for an independent review of the science in support of Council recommendations and the Council encourages the Sanctuary develop a similar process. Science and policy should be kept separate and MPA proposal development and review should be done by separate entities. To facilitate this distinction, the Council recommends it be clear that the role of members of the Sanctuary's MPA Working Group is as stakeholders or institutional representatives, and the role of members of the Sanctuary's science advisory panel is as independent scientists that do not advocate policy positions of stakeholder groups.

The Sanctuary's science advisory panel should be made up of experts from many disciplines including biology, ecology, oceanography, and population dynamics to ensure adequate and independent scientific review of MPA evaluation criteria and proposals. An important component to the evaluation of MPAs is the analysis of potential impacts to fisherman and fishing communities. It is critical that the science advisory panel also include experts from a variety of fields within the social sciences. To maintain consistency and in recognition of the inter-related nature of social and non-social analyses, a separate socioeconomics panel is not desirable.

The Council would like to make its SSC and SSC Ecosystem-Based Management Subcommittee available for scientific input to the process, but would like to clarify that should any SSC members also serve as individual members of the Sanctuary's science advisory group, they would do so as independent scientist, not as representatives of the SSC or the Council. Further, the Council recommends that scientific matters reviewed by the Sanctuary's science advisory panel that are of particular interest to the Council, such as those associated with fishery impacts, socioeconomics, fish stock status, or fish habitat, also be brought before the Council and its advisory bodies, particularly the SSC. The Council must sanction any SSC statements for such statements to represent a Council position.

#### **ANALYTICAL AND DOCUMENTATION PROCESS**

The Council and the State of California currently implement or are developing spatial fishery management and/or MPAs within and around the MBNMS including California state water MPAs, area closures to protect groundfish essential fish habitat, and Rockfish Conservation Areas designed to minimize impacts to overfished rockfish species. With the understanding that analyzing a range of alternatives is required, the Council strongly recommends that any proposed future actions be contrasted with protections afforded by current state and Federal regulations (the "no action" or status quo alternative) as a standard analytical protocol. The Council understands that the Davidson Seamount is not currently a part of the MBNMS. However, given its proximity to the Sanctuary and the possibility that the expansion of the Sanctuary may

include the seamount soon, the Council recommends that the existing fishery closures implemented at the Davidson Seamount to protect essential groundfish habitat be included in the analysis of the status quo alternative.

Regarding the range of action alternatives for MPAs in Federal waters of the Sanctuary, the Council recommends that the added value to Sanctuary management goals afforded by proposed additional protections should be evaluated using the specific evaluation criteria developed at the onset of the process. The Council and its SSC recommend that at least one of the action alternatives consider the consolidation of existing spatial management measures as a potential mechanism to meet Sanctuary objectives.

The Sanctuary has identified research opportunities as one of the objectives for Sanctuary MPAs. The Council recommends that monitoring plans be developed along with each of the alternative proposed actions. This would help the Council, the Sanctuary, and the public ascertain each alternative's ability to meet Sanctuary objectives. The analysis of MPA alternatives and their associated monitoring plans should address the potential loss of existing fishery-dependent and fishery-independent sampling and surveying opportunities. The loss of these data sources, particularly those with a long time series, can have a significant effect on indices used for stock assessments. Replacement of these surveying opportunities with alternative methods should be a high priority if MPAs are implemented.

Lastly, should any MPA site involve fishery regulation to achieve adopted criteria, it will be useful towards the end of the analytical process to identify which fishery regulations can be adopted under MSA authority and which can only be adopted under NMSA authority. Current NOAA policy is for fishery regulation in Sanctuary waters to be accomplished under MSA if possible. Adding this determination into the process will facilitate implementing the NOAA policy and comport with a major Council concern.

At both the April and June Council meetings, Sanctuary staff distributed a schematic flow diagram to illustrate the process and timeline for consideration of MPAs in the MBNMS. This illustration has been very useful in capturing key steps and elements. We have attached edits to the diagram that reflect our understanding of the commitment for inclusion of Council input, as well as other suggestions in this letter. Please advise as to your actual revisions of this diagram.

In closing, thank you for your continued commitment to a close working relationship with the Council process. The Council and the Council staff look forward to increased collaboration with the Sanctuary during the next steps in the process as evaluation criteria are developed, Sanctuary advisory groups are established, alternatives are developed, thorough analyses completed, and wise policy choices are made.

If you or your staff should have any questions, please contact me or Mr. Mike Burner, the lead Council Staff Officer on this matter.

Sincerely,



D. O. McIsaac, Ph.D.  
Executive Director

Enclosure

MDB:rdd

c:

Council Members  
Mr. Jim Balsiger  
Mr. Jack Dunnigan  
Mr. Sam Rauch  
Mr. Dan Basta  
Mr. William Douros  
Mr. Chris Mobley  
Mr. Paul Michel

Mr. Dan Howard  
Ms. Maria Brown  
Ms. Carol Bernthal  
Ms. Eileen Cooney  
Mr. Judson Feder  
Dr. John Coon  
Mr. Mike Burner





UNITED STATES DEPARTMENT OF  
National Oceanic and Atmospheric Administration  
NATIONAL OCEAN SERVICE

Monterey Bay National Marine Sanctuary

299 Foam Street  
Monterey, California 93940

Agenda Item C.2.b  
Attachment 1  
September 2009

August 26, 2009

Mr. David Ortmann, Chair  
Pacific Fishery Management Council  
7700 NE Ambassador Pl, Suite 101  
Portland, OR 97220-1384

Dear Chairman Ortmann:

This letter and subsequent presentation at the September 2009 Pacific Fishery Management Council (PFMC) meeting provides the PFMC with an update on the Monterey Bay National Marine Sanctuary's (MBNMS or Sanctuary) plans for considering marine protected areas (MPAs) in federal waters of the Sanctuary. Your July 2008 letter provided some encouraging feedback and suggestions on how to move forward. We have also received guidance and advice from our Sanctuary Advisory Council (SAC), NOAA Fisheries, the California Department of Fish and Game (CDFG), PFMC staff, and the National MPA Center on approaches for a collaborative and integrated MPA process. We have carefully considered all this advice and incorporated it into our draft MPA planning process.

The MBNMS believes a healthy sanctuary ecosystem supports sustainable uses, economies, and coastal communities. This belief embodies our core mandate to protect marine ecosystems, which is reflected in the three objectives we articulated for MPAs in the federal waters of the Sanctuary:

1. Protecting unique and rare areas for future generations;
2. Protecting areas where natural ecosystem components are maintained and/or restored; and
3. Establishing research areas to differentiate between natural variation versus human impacts to ecological processes and components.

As we move forward with a process for considering MPAs, we recognize the value of a collaborative process that attempts to integrate the management objectives of our key partners and moves us collectively towards a more comprehensive ecosystem-based management for the Sanctuary, which may also benefit the larger regional ecosystem.

Taking into consideration the input we have sought and received over the past year, I want to clarify how our MPA planning will be taking a more comprehensive ecosystem-based management approach. We will work to consider and incorporate a range of objectives identified by our agency partners and stakeholders that are potentially



compatible with the MBNMS MPA objectives. Examples of these management objectives, identified during individual consultations with interagency partners, and others include:

- Implementing and monitoring the state MPAs within MBNMS;
- Identifying economically viable and creative ways to reduce impacts of fishing on benthic habitat within MBNMS;
- Determining modifications to essential fish habitat (EFH) closures within MBNMS and/or along the Central Coast;
- Developing an Ecosystem Fishery Management Plan or Fishery Ecosystem Plan with PFMC;
- Establishing economically and ecologically viable community-based fisheries within MBNMS and/or along the Central Coast;
- Establishing Community Fishing Associations along the central coast to utilize community-based catch shares for groundfish; and
- Developing a sustainable fisheries certification program for fisheries conducted within MBNMS and/or along the Central Coast;

A variety of promising and opportune tools and approaches are emerging in support of an integrated ecosystem-management system for the Sanctuary. One such tool is NOAA's Integrated Ecosystem Assessment (IEA) of the California Current Large Marine Ecosystem (CCLME). MBNMS is currently participating on an interagency team with the Northwest and Southwest Fishery Science Centers and Regional Offices in the development of the IEA's FY10 work plan. Under the leadership and direction of the Science centers, we anticipate the IEA process to produce evaluations of a range of interagency management scenarios aimed at achieving a healthy Sanctuary ecosystem that are supportive of sustainable uses and communities. We also are looking to the IEA to help inform how the Sanctuary's MPA needs can be met within a larger collaborative process. It is our understanding that NOAA anticipates providing a briefing of the CCLME IEA process at the November 2009 PFMC meeting.

For the MBNMS MPA effort to be successful, we need the active participation, support and assistance from our agency partners at NOAA Fisheries, the MBNMS SAC, and stakeholders, including the PFMC and its Science and Statistical Committee. The expert advice and scientific input from these partners is critical to our process and we look forward to engaging each in our efforts.

Your July 2008 letter identified two analytical needs that the IEA is suited to address. An early step in the IEA process is the development and testing of indicators that reflect ecosystem attributes of interest. This step may also inform the development of specific evaluation criteria for the MPA objectives articulated by the MBNMS. Additionally, the IEA may prove useful in evaluating existing and proposed management measures within the Sanctuary to ascertain what modifications or additions are necessary to meet the Sanctuary's goals and objectives.

We acknowledge and thank the PFMC for its advice and technical expertise on this issue and past management actions on the west coast in consideration of the special nature of national marine sanctuaries. We look forward to building on the successes that we have already achieved through collaboration, hard work and constructive dialogue. If Council members or staff have any questions, please contact me or Mike Eng on my staff.

Sincerely,

A handwritten signature in black ink that reads "Paul Michel". The signature is written in a cursive style with a large, prominent "P" and "M".

Paul Michel  
Sanctuary Superintendent

# MBNMS MPA Planning Process Update

Paul Michel  
Superintendent

Pacific Fishery Management Council  
September 13, 2009  
Foster City, CA



# MBNMS core values

- Science-based
- Public input and stakeholder involvement
- Collaborative: interagency, stakeholders, scientists
- Transparent management

A healthy Sanctuary ecosystem supports sustainable uses, economies and coastal communities

# MBNMS MPA goals

- Protect unique and rare places within MBNMS in their natural state for future generations
- Protect areas within MBNMS where natural ecosystem components are maintained and/or restored
- Establish research areas within MBNMS that can be used to differentiate between natural variation versus human impacts to ecological processes and components

# Recap of key steps along the way

- **2001:** Marine Protected Areas (MPAs) and Joint Management Review Process
- **2002 - 2007:** MPA Working Group convened
- **Feb-2008:** MBNMS announces decision “that there is a need for MPAs in the federal waters of the Sanctuary.”
- **April-2008:** MBNMS provides rationale for decision
  - Ecosystem-based management (EBM) approach
  - Precautionary approach

# MBNMS's MPA Action Plan

## Key Strategies

- 1) Develop partnerships with interagency partners to identify common goals within the geographic area of MBNMS
- 2) Ensure that the development of any additional MPAs are coordinated with other types of management measures
- 3) Develop interagency coordination mechanisms
- 4) Consider a range of options that allow for varying types of extractive and non-extractive uses within MPAs

# PFMC Advice

- **July-2008:** PFMC provides feedback on MBNMS proposed process for moving forward with MPA planning process:
  - Mutual benefits from collaboration
  - Need to develop evaluation criteria and evaluate current management regime
  - Consider consolidation of spatial management measures

# Other Partner Agency Advice

- Sanctuary Advisory Council & MPA subcommittee
- NMFS NWR
- NMFS SWR
- NMFS Science Centers
- PFMC staff
- CDFG
- NOAA's National MPA Center
- The Nature Conservancy

# Complementary management programs

- MLPA MPAs
- Address fishing impacts to benthic habitat
- EFH - 5 year review
- PFMC's plans for an EFMP
- Economically and ecologically viable community-based fisheries.
- Community Fishing Association
- Sustainable fisheries certification program
- National System of MPAs

# Integrated Ecosystem-Based Management

Comprehensive approach that considers multiple management objectives with partner agencies

# Integrated Ecosystem Assessment (IEA)

- A process to inform and achieve ecosystem goals
- A process to evaluate various management actions
- NOAA's 2009-2014 Strategic Plan for ecosystem approaches to management
- Identified by NOAA scientists as a critical tool for EBM

# West Coast IEA

- May be suited to address two analytical needs identified by PFMC for MPA process
  - Development and testing of indicators that reflect ecosystem attributes of interest: may inform the development of specific evaluation criteria for MPA goals
  - Overall ecosystem assessment and evaluation: may prove useful in evaluating existing and proposed management measures within the Sanctuary to ascertain if any modifications or additions are necessary to meet the MPA objectives.

# MBNMS commitments

- MBNMS committed to working with SAC, NMFS and PFMC to ensure an effective and timely public process
- MBNMS committed to understanding the ecological and socioeconomic impacts on any proposed actions
- Any proposed action would be accompanied by full analysis, as required by NEPA and APA

GROUND FISH ADVISORY SUBPANEL REPORT ON  
MONTEREY BAY NATIONAL MARINE SANCTUARY MARINE PROTECTED AREA  
PROCESS

The Groundfish Advisory Subpanel (GAP) reviewed the documents involved with this agenda item. The GAP believes that there are many criteria that should be considered when considering permanent closures of any area to any fishing activity. The first and foremost is the fact that National Marine Fisheries Service (NMFS) through the Magnuson-Stevens Act (MSA) is the sole authority to regulate fishing activity within the area in question.

The GAP wishes to address the process that is being employed by the Sanctuary staff and advisory groups for this determination of a need. First of all an implied final decision that Marine Protected Areas (MPAs) are necessary is premature. Since fishing is the only activity being constrained or eliminated then it is a fishery management action. If a desire to alter current fishery management regulatory measures is desired then it must be done under the authority of the Council and NMFS.

The GAP believes that the following criteria must be followed in the priority order as listed:

1. The Council authority and involvement is crucial to this process. Fishing regulations are developed by the Council. It is mandated by the MSA. This Council is also where fishery expertise resides. If a truly collaborative, transparent and objective approach is desired, then the Council must be involved in every step of the process when fishing issues are involved.
2. Baseline socio-economic and ecosystem studies must be completed prior to any determinations. This must be done to determine if further economic constraints can be tolerated without losing any fishing economic value, and more importantly, capital infrastructure.
3. A statement of desired status of any select sanctuary site must be made. A scientific and social analysis must occur in order to justify this preferred outcome. An MPA is only a tool to achieve a change in status. Many other tools exist which may be able to provide an acceptable and or identical result. All options need to be considered. As an example, any development of an MPA must include: an analysis of effects on incidental non-targeted bycatch and catch per unit of effort on targeted species completed, a determination of the impacts resulting from area-specific effort shift conducted, and all relative socio-economic costs to harvesting listed.
4. To determine the need for MPA's, a thorough transparent public process needs to be implemented similar in scope to the Council process. Open public meetings involving impacted stakeholders are paramount in importance.

In summary, the GAP feels the Sanctuary could consider a vibrant, profitable, and sustainable fishery as a valuable sanctuary asset. This could be an asset that deserves protection. A fishery such as this would have a very high intrinsic value, as well as provide cultural value for future generations.

PFMC  
9/13/09

## HABITAT COMMITTEE REPORT ON MONTEREY BAY NATIONAL MARINE PROTECTED AREA PROCESS

The Habitat Committee (HC) heard a summary of the status of marine protected area (MPA) planning in the Monterey Bay National Marine Sanctuary (MBNMS or Sanctuary). In the Sanctuary's August 26 letter to the Council, Superintendent Michel reiterated that the Sanctuary is moving ahead with planning MPAs in the Federal waters of the Sanctuary, and emphasized their focus on addressing the Sanctuary's ecosystem management goals and working collaboratively with the Council, NOAA Fisheries, California Department of Fish and Game (CDFG), and stakeholders to integrate the Council's management objectives and ecosystem goals. The Sanctuary maintains that it does not intend to manage or regulate Council-managed fisheries. Any actions that would affect fishing would be discussed with National Marine Fisheries Service, the Council, and CDFG.

The Sanctuary is engaged with the Northwest and Southwest Fisheries Science Center in developing an Integrated Ecosystem Assessment (IEA) tool to address multiple management needs. The IEA evaluates the interaction of various environmental variables, including socioeconomics, with respect to MPAs and other management measures.

The HC makes the following observations and recommendations:

- An ecosystem assessment tool that adequately incorporates fishery science and socio-economic information is imperative.
- The HC encourages the Scientific and Statistical Committee (SSC) to be engaged in the development and testing of the IEA tool to help validate and verify the tool's usefulness for Council management. SSC involvement, combined with a public outreach effort explaining the IEA, will help increase Council stakeholder confidence in the MPA planning process.
- Stakeholders continue to express concern that the Sanctuary is extending their jurisdiction into fisheries management. The Sanctuary should continue active outreach efforts to stakeholders on their MPA planning process.

**Alliance of Communities for Sustainable Fisheries**  
256 Figueroa Street #1, Monterey, CA 93940  
(831) 373-5238  
[www.alliancefisheries.com](http://www.alliancefisheries.com)

August 26, 2009

David Ortmann, Chair  
Pacific Fishery Management Council  
7700 NE Ambassador Place, Suite 101  
Portland OR 97220-1384

Dear Chairman Ortmann:

When the Council takes action in September on agenda item C.2 (Monterey Bay National Marine Sanctuary (MBNMS) MPA Planning), the Alliance of Communities for Sustainable Fisheries asks that you consider including the following:

1. Recommend to the MBNMS that it reconsider its statement of an "Unmet Need" for additional or changed Marine Protected Areas within the Federal Waters of the Sanctuary, given more recent information that has been brought forward regarding the overall sound management of fisheries and overall health of the California Current large marine ecosystem (see Worm, Hilborn, et al; *Science*; 7/31/09).
2. Recommend that the MBNMS re-examine the need for marine protected areas in the context of an Integrated Ecosystem Assessment and encourage the Sanctuary to consider MPAs as one tool among many that may address any ecosystem needs that emerge from that assessment.
3. Refer the two Public Opinion Polls provided by our organization to the Scientific and Statistical Committee for a methodology review and assessment as to their relevance in this MPA discussion.
4. Request all agencies involved in the Integrated Ecosystem Assessment to give greater transparency to the assessment process through open public meetings.

### **Background**

The Alliance of Communities for Sustainable Fisheries (ACSF), is a regional organization representing fishing communities from Port San Luis to Half Moon Bay, California. This is also roughly the region of the Monterey Bay National Marine Sanctuary. One of our main projects has been to represent the collective commercial and recreational fishing interests in this region in such processes as the Monterey Bay National Marine Sanctuary's Management Plan Review and subsequent Marine Protected Area working group. A letter signed by fifteen recreational and commercial fishing organizations who fish in the waters of the Monterey Bay National Marine Sanctuary is attached for your review. This letter indicates very strong support for the ACSF's leadership role in working constructively with the MBNMS on the MPA effort.

There is a long relationship between the Sanctuary and the fishing community. When Sanctuary designation was first considered, an agreement was struck between NOAA and the regional fishing community. In exchange for the fishermen's support of the new Sanctuary, the Sanctuary would not create regulations that affect the fishermen. This agreement is well summarized in Congressman Sam Farr's letter to the Sanctuary dated January 31, 2002: "*In the process of building support for the designation of the Sanctuary, a clear commitment was made to the*

*fishing community that the Sanctuary would not impose any regulations directed at fishing activities or fishing vessels.”* Congressman Farr’s letter also states, and the ACSF agrees, that the Sanctuary does have a role in communicating and coordinating management measures with the Pacific Council, the National Marine Fisheries Service (NMFS), and the fishing community in a constructive manner. The fishing community feels that it has kept up its end of that bargain. Attached is a letter from the late Dave Danbom (a former PFMC member), which describes this agreement.

**No scientific analysis has occurred that would inform a “need MPAs” conclusion.**

The Sanctuary’s interest in, and effort to create additional Marine Protected Areas during the last eight years, has not lead to the sort of communication we envisioned. This process culminated in the Sanctuary issuing two letters, one on February 15, 2008 and the second on April 15, 2008, asserting that the Sanctuary has an “unmet need” for MPAs within the federal waters of the MBNMS. The Sanctuary also purported to have conducted “scientific analysis” on this question of unmet needs in making their determination. Despite ACSF’s direct participation in all aspects of Sanctuary MPA discussions, we were not aware of any scientific analysis that occurred. In fact, a major complaint that the ACSF members brought to the Sanctuary about its process was “When are we going to have some science?”

Inquiries to the Sanctuary for its scientific analysis failed to produce anything, resulting in a Freedom of Information Act request made by the ACSF to the Sanctuary Program for this analysis and other related information. This FOIA request was made in early October, 2008. Approximately ten months later the ACSF received the first batch of information on the Sanctuary’s MPA decision. It is still evident, at least from the information obtained thus far, that no scientific analysis occurred when the Sanctuary made its MPA determination. The Sanctuary has not produced evidence that the Sanctuary resources are in ill health, that the ecosystem is not functioning as it should, that over-fishing is continuing, how the many MPAs that already exist within the Sanctuary satisfy MBNMS “needs”, or that fishing activities are any threat to the healthy functioning of the resources. Nor has the Sanctuary answered the fundamental question, “How much protection is enough?” Because of this, the ACSF concludes the Sanctuary cannot possibly know that it has an unmet need for additional spatial protections in the Sanctuary.

The assertion that the Sanctuary has an “unmet need” for MPAs means that the Sanctuary has determined that there will be additional MPAs or MPAs with different rules and configurations, quite possibly more restrictive.

Since the Sanctuary has not demonstrated any scientific analysis to substantiate the “unmet need” claim, the ACSF feels strongly that the MBNMS needs to reconsider that statement. If they do not, then there is the possibility that the Sanctuary’s “unmet need” statement will be the premise, or building block, from which additional MPAs spring. Therefore, MPAs could be built on a weak, or non-existent, foundation.

Importantly, it also appears that this is not the understanding that the PFMC had about how this process would go, based on prior testimony from the Sanctuary. In PFMC Executive Director Don McIsaac’s letter to the MBNMS Superintendent Paul Michel, dated July 29, 2008, Dr. McIsaac states:

*However, the Council was encouraged by your verbal testimony at the April Council Meeting during which you characterized the Sanctuary determination as a general decision to consider MPAs as a management tool, and with regard to specific MPA proposals, to evaluate the existing and proposed management measures and MPAs within the Sanctuary in coordination with the Council to ascertain if any modifications are necessary to meet the Sanctuary’s*

*goals and objectives... The Council is supportive of a collaborative review of the need for additional MPAs within the Sanctuary... Any determination of the need for additional MPAs should only be made following a comprehensive analysis of a sufficiently wide range of alternatives” (underlining done by ACSF)*

It seems that the PFMC also believes that the “need” question should still be open.

### **Changing course to an Integrated Ecosystem Assessment.**

The MBNMS has announced its hope that it will participate in an Integrated Ecosystem Assessment process lead by NMFS. The ACSF is heartened by this turn of events, and hopes that this assessment will be a balanced, science-driven process that will determine whether additional protections are needed. Since we assume that this process will be driven by the data and analysis, we believe that the PFMC should support recommendations 1 and 2 provided above. The ACSF also requests that the staff level IEA meetings that relate to the MBNMS MPA issue be open to at least public observation (recommendation #4 above).

### **Refer public opinion polls to the Scientific and Statistical Committee**

Time has been provided by the PFMC to hear the summary results of several public opinion polls which have been commissioned by the ACSF and conducted by Responsive Management Inc., of Virginia. We believe the results of a recently released national public opinion poll on the management of ocean resources, and a second poll of Monterey Bay area residents opinion’s on the management of the MBNMS, are directly relevant to the MBNMS’s Marine Protected Area process. These polls are meant to inform the decision makers as to the public’s opinions and core values on certain key items. These polls have been provided to the Council, and the ACSF requests that they be referred to the Scientific and Statistical Committee for comment on both the validity of methodology, and their relevance to the MBNMS MPA issue. The polls can be viewed in entirety at [www.alliancefisheries.com](http://www.alliancefisheries.com)

### **In conclusion**

The ACSF is committed to constructively participating in the Integrated Ecosystem Assessment should this process come to realization. On behalf of the ACSF, and the approximately 900 fishing families that it represents, thank you for your consideration of these requests.

Sincerely,



Kathy Fosmark  
Co-Chair, ACSF



Frank Emerson  
Co-Chair, ACSF

Attachments

C: Representative Sam Farr  
Paul Michel, Superintendent, Monterey Bay National Marine Sanctuary

### **Supporting Associations & Organizations**

Ventura County Commercial Fishermen’s Association  
Port San Luis Commercial Fishermen’s Association  
Morro Bay Commercial Fishermen’s Association  
Monterey Commercial Fishermen’s Association  
Fishermen’s Association of Moss Landing  
Fishermen’s Marketing Association  
Santa Cruz Commercial Fishermen’s Marketing Association

Half Moon Bay Fishermen's Marketing Association  
Western Fishboat Owners Association  
West Coast Seafood Processors Association  
Federation of Independent Seafood Harvesters  
Golden Gate Fishermen's Association  
California Fisheries Coalition  
California Wetfish Producers Association  
Recreational Fishing Alliance  
Carmel River Steelhead Association  
Pacific Coast Federation of Fishermen's Association  
Port San Luis Harbor District  
City of Morro Bay Harbor  
City of Monterey Harbor  
Moss Landing Harbor District  
Santa Cruz Port District  
Pillar Pt. Harbor, San Mateo County Harbor District

**Alliance of Communities for Sustainable Fisheries**  
**256 Figueroa Street #1, Monterey, CA 93940**  
**(831) 373-5238**  
[www.alliancefisheries.com](http://www.alliancefisheries.com)

October 1, 2008

Paul Michel, Superintendent  
Monterey Bay National Marine Sanctuary  
299 Foam Street  
Monterey, CA 93940

Dear Superintendent Michel:

We, the undersigned are either the Presidents, Executive Directors, or regional representatives of our commercial or recreational fishing associations. Collectively, we represent all sectors of fishing activity within the federal waters of the Monterey Bay National Marine Sanctuary and nearly every organization. As we are the leaders of these organizations and associations, we believe that the Monterey Bay National Marine Sanctuary should look to us for designated representatives of the fishing community for the Monterey Sanctuary's marine protected area process. We do not believe that the MBNMS should appoint any recreational or commercial fishing representative to the future MPA Work Group who is not clearly supported by us.

Further, you should be aware that we organized in 2000, creating the regional organization, the Alliance of Communities for Sustainable Fisheries. In fact, the ACSF was organized specifically to provide a unified voice of the fishing community for the California Marine Life Protection Act implementation process, and for the Monterey Bay National Marine Sanctuary management plan review, which we knew was bound to include a marine protected area process. We will, in the near future, provide you with the types of fisheries, other expertises, and specific names of representatives who we feel must be included in the Monterey Bay Sanctuary's MPA process. We also believe that our recommendations for the composition of the science team to be used in the MPA process should be given considerable weight for us to feel that the best available science is being used to evaluate the need for, and/or locations and rules for, any future MPAs.

This letter is not being signed, but should you wish to confirm its support by any of us, please feel free to contact us with the information provided below.

Sincerely,

Tom Capen, President  
Port San Luis Commercial Fishermen's Association  
[TomCapen@yahoo.com](mailto:TomCapen@yahoo.com)

Mike Ricketts, President  
Monterey Commercial Fishermen's Association  
[seahawk85@comcast.net](mailto:seahawk85@comcast.net)

Jeremiah O'Brien, President  
Commercial Fishing Association of Morro Bay  
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Howard Egan, Monterey Bay Area Representative  
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Kathy Fosmark, President  
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Duncan McLean, President  
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Rod Moore, Executive Director  
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Dave Bitts, President  
Pacific Coast Federation of Fishermen's Associations  
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Vern Goehring, Manager  
California Fisheries Coalition  
[Vern@cal.net](mailto:Vern@cal.net)

#### Supporting Associations & Organizations

Pacific Coast Federation of Fishermen's Association  
Ventura County Commercial Fishermen's Association  
Port San Luis Commercial Fishermen's Association  
Morro Bay Commercial Fishermen's Association  
Monterey Commercial Fishermen's Association  
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Port San Luis Harbor District  
City of Morro Bay Harbor  
City of Monterey Harbor  
Moss Landing Harbor District  
Santa Cruz Port District  
Pillar Pt. Harbor, San Mateo County Harbor District

Frank Emerson, Director  
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Mike Stiller, President  
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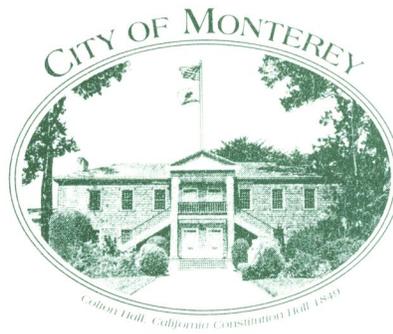
Wayne Heikkila, Executive Director  
Western Fishboat Owners Association  
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cc: Representative Sam Farr, Congressional District #17  
Don McIsaac, Executive Director PFMC

## **Statement of Dave Danbom on the potential for the Monterey Bay National Marine Sanctuary to regulate fishing**

Dave Danbom is a retired Monterey Bay fisherman who led local fishermen in their original negotiations with NOAA representatives during the establishment of the MBNMS. His statement summarizes the perceptions, attitudes, and beliefs about the potential for MPAs in the Sanctuary:

Concerns from the fishing industry about a Federal program that would call the Central Coast a “Sanctuary”, leading to possible new regulations of fishing by this agency, mobilized fishermen to work against and defeat Sanctuary designation in the mid 1980’s. Then a proposal for a Monterey Sanctuary surfaced again in the early 90’s. At this time, as a leader in local and state fisheries, and a member of the Pacific Fishery Management Council (holding the obligatory seat for the State of California) I was asked by our Congressional Representative to assist him in bringing the commercial and recreational fishermen together in support of the proposed Sanctuary. Early on, fishermen were clearly promised that the new Sanctuary would not regulate fishermen or fishing activities. If the Sanctuary had any concerns, they would work with us for a mutually acceptable solution. This promise was made both by elected officials, and also NOAA representatives. It was unequivocal: we wouldn’t have to worry about this new agency. We would get benefits, like the ban on oil development, a water quality program, and enhanced and collaborative research with us for better knowledge on fish populations. These are all things fishermen value. Fishermen had had a positive working relationship with Gulf of the Farallones National Marine Sanctuary Manager Ed Uber. With the promise in place, we anticipated that we would have that kind of relationship with the new Sanctuary. Now, the reality is frustrating and disappointing. Fishermen perceive the Sanctuary as working to find ways to break this promise, especially over the MPA issue. Fishermen were deeply angered to see the MBNMS go on record as wanting a State MPA network that was even more extreme than what the State wanted, and which had zero support from the fishing community. Because of my deep involvement in bringing the fishing industry, elected officials and NOAA together in reaching the agreement that led to the creation of the MBNMS, I feel personally responsible for any adverse consequences now facing the fishing industry. If this Sanctuary breaks its promise made to fishermen by changing the Designation Document to regulate fishing, I will go to my grave regretting my support of the new Sanctuary, and regret my role in getting other fishermen to go along. (Dave Danbom, personal communication, October 2007)



August 22, 2008

HARBOR/MARINA DIVISION

Paul Michel, Superintendent  
Monterey Bay National Marine Sanctuary  
299 Foam Street  
Monterey, CA 93940

Dear Paul:

A point of confusion still exists over what is meant by the statement, "*The Office of National Marine Sanctuaries has decided to move forward with a process to propose MPAs in the Sanctuary.*" My question, which I raised in part at the August 15<sup>th</sup> Sanctuary Advisory Council (SAC) meeting, is based on my hearing your interpretation of this statement at the Pacific Fishery Council meetings, the Sanctuary Advisory Council meetings, and the Monterey City Council meeting. Your statements, however, seem to differ from the February and April Sanctuary letters, and from what I heard from Sanctuary Staffperson Mike Eng at the August 15<sup>th</sup> SAC meeting. There is enough of a question that I am putting this in writing, and hope you'll provide a written response.

At the August 15<sup>th</sup> SAC Meeting, I asked if the need-for-additional-MPAs question was still an open question, i.e., the need for MPAs had not been established. You responded that it was a settled question, but then went on to explain that that statement did not mean that any additional, or even reconfigured, MPAs were required. This is generally consistent with what you have said to the Monterey City Council and to the Pacific Fishery Management Council. The understanding of the Pacific Council, based on your testimony, is reflected in the statement to you in its letter of July 29, 2008, wherein PFMC Executive Director Don McIsaac states:

*"However, the Council was encouraged by your verbal testimony at the April Council Meeting during which you characterized the Sanctuary determination as a general decision to consider MPAs as a management tool, and with regard to specific MPA proposals, to evaluate the existing and proposed management measures and MPAs within the Sanctuary in coordination with the Council to ascertain if any modifications are necessary to meet the Sanctuary's goals and objectives... The Council is supportive of a collaborative review of the need for additional MPAs within the Sanctuary... Any determination of the need for additional MPAs should only be made following a comprehensive analysis of a sufficiently wide range of alternatives"*  
(underlining is mine)

It seems that the PFMC believes that the "need" question is still open.

When I hear your statements, and then also review the concurrence of those statements by the Pacific Council, I am encouraged that the MPA review process might be a general review of MPAs as one of many management tools available to the Sanctuary to meet its goals, and that the MPA process will

consist of an evaluative process of measuring the effectiveness of all existing management measures, identifying needs, and choosing the right tool to address those needs. Alternatively, I suppose that the MBNMS could decide that even if there are some needs identified during this process, the Sanctuary might not need to act on those.

However, at the August 15, 2008 SAC meeting, Sanctuary Resource Protection Specialist Mike Eng made a clear statement that the Sanctuary Program had determined that “*there is an unmet need for MPAs within the Sanctuary.*” This statement, I believe, is consistent with both the February 15<sup>th</sup> and April 15<sup>th</sup> letters from you and the Office of National Marine Sanctuaries. When I read those two letters, my overwhelming impression is that the Sanctuary has determined that it needs additional MPAs or MPAs with different rules, beyond what are already in place under the authority of other state and federal agencies. Why else would your letter say that the Sanctuary “*has decided to propose MPAs in the Sanctuary*”? When discussing existing spatial management, your letter also states “*However, while the existing spatial management measures in state and federal waters of the Sanctuary provide valuable protections from fishing impacts in certain habitats. (sic) Those habitats further offshore are either not adequately represented in existing MPAs, or not fully protected by the gear based restrictions associated with EFH or the temporary RCAs.*” The MPA workgroup process, in this scenario wherein the MBNMS asserts that what exists is not adequate, would be one of starting from a conclusion that there will be more or different MPAs, and the Work Group would only provide input as to the locations of new or reconfigured MPAs, and input about the rules associated with MPAs.

For the stakeholders and the science team to understand their tasks, four questions need to be clearly resolved. Is the MBNMS/ONMS asserting that:

1. there is a need for areas where the natural ecosystem components are maintained and/or restored that is not met by the variety of current management measures that exist?
2. there is a need for research areas to differentiate between natural variation versus human impacts to ecological processes and components that is not met by the variety of current management measures that exist?
3. there is a need to preserve some unique and rare areas in their natural state for the benefit of future generations that is not met by the variety of current management measures that exist?
4. MPAs are the only tool being considered to meet these needs that are not met by the variety of current management measures that exist?

I think you can appreciate that these questions need to be fully resolved or the MPA workgroup and process will be confounded at every step.

Thank you in advance for addressing this critical question.

Sincerely,



Stephen B. Scheiblaue  
Harbormaster

C: City Manager  
Public Facilities Director  
Sanctuary Advisory Council  
Don McIsaac, PFMC



UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL OCEAN SERVICE

Monterey Bay National Marine Sanctuary  
299 Foam Street  
Monterey, California 93940

September 8, 2008

Stephen B. Scheiblaue  
Harbormaster - City of Monterey  
Monterey, CA 93940

Dear Steve:

Thank you for your letter of August 22, 2008, requesting clarification of the Monterey Bay National Marine Sanctuary (MBNMS) decision on the need for marine protected areas (MPAs) in federal waters. I welcome the opportunity to provide clarity on this issue.

As you know, in February 2008, the MBNMS and Office of National Marine Sanctuaries (ONMS) concluded that there is a need for MPAs in the federal waters of the sanctuary. The need decision proposes MPAs to address broad ecosystem objectives as per the sanctuary's mission of ecosystem-based management that is derived from the National Marine Sanctuaries Act (NMSA). In April 2008, further explanation of the decision was provided (aka the "decision rationale document"). The need decision was made after six years of analysis with input from the public, an MPA Working Group, the MBNMS Advisory Council, partner agencies, and NOAA management. This decision did not include proposals for location, size, or number of future MPAs. Such specific proposals will be developed after careful consultation with all interested parties and stakeholders.

I realize that for many, the "need" decision is interpreted as meaning the ONMS has made a final decision on a network of future MPAs. However, such an interpretation is premature until a planning process is completed and any proposal(s) analyzed under the National Environment and Policy Act (NEPA). Moreover, depending upon the outcome of the planning process, it is also premature to speculate the authority under which any future action would be implemented (Magnuson-Stevenson Act or NMSA). The need decision was made with the intent that a serious planning process would ensue and that MPAs in federal waters are likely. Any new MPAs may be augmentations of existing management measures, including existing closures, or wholly new areas. The purpose of the planning process is to develop such specifics.

I apologize if there has been any confusion about the intent of the decision. This is a complicated issue, and one that obviously attracts attention to every written and spoken word. I have tried to be clear about the path forward, as well as reflect the good advice I have received from the MBNMS Advisory Council, the Pacific Fishery Management Council (PFMC), NOAA Fisheries, and the public. In explaining the proposed process forward, I have stated that the MPA planning process will include an evaluation of



existing management measures to determine how well these are meeting the sanctuary objectives of preservation, restoration, and research per the decision rationale. Any future NEPA review of proposed MPAs in federal waters of the MBNMS will include evaluation of a "no action alternative." I have also stated that evaluation criteria still need to be developed for future MPAs so we can determine how well they would meet the need rationale. These statements alone or taken out of context could be misinterpreted as backing away from the need decision.

Your request for clarification was put into the context of whether or not current management measures suffice in meeting the needs of the MBNMS. While existing measures are important parts of the current resource protection regime within the sanctuary, they were not designed to address the MBNMS's mission of ecosystem protection and preservation in deeper water habitats. For example, fishery management measures, such as Essential Fish Habitat (EFH) and Rockfish Conservation Areas (RCAs) are focused on sustainable fishery objectives, such as rebuilding target species to fishable levels. The ONMS's resource protection mandate is broader than this, as has been pointed out in the April 2008 decision rationale document.

You also asked if MPAs are the only tool being considered to meet the MBNMS needs. The selection of MPAs as a management tool to protect specific sites within the sanctuary is consistent with other zoning strategies that have been used in the MBNMS for the past 16 years, such as restriction zones for motorized personal watercraft and dredge spoil discharge, and prohibition zones for motorized flight and white shark attraction. The MPA planning process will focus on MPAs as a management tool to meet the three goals outlined in our April 2008 decision rationale.

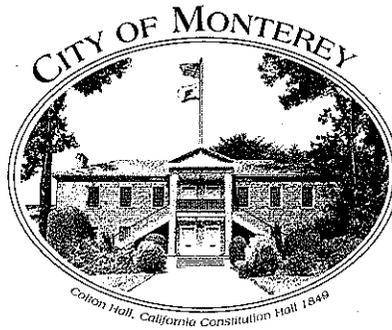
The MBNMS has been working with the MBNMS Advisory Council, PFMC, and NOAA Fisheries to gain input on how best to proceed with the MPA planning process. We are encouraged by the feedback we have received from these groups and we look forward to a renewed MPA working group and planning process in the near future. I appreciate your engagement on this issue, as you have a wealth of knowledge and experience with the MBNMS and the maritime community on the central coast. I hope you will join with me to make this the best effort possible, one that is based on the common belief that fishing is an integral part of the sanctuary's culture and the economic vitality of the region, and that a healthy ecosystem can provide for healthy fisheries.

Sincerely,



Paul Michel  
Superintendent

cc: City Manager, Monterey  
Public Facilities Director, Monterey  
MBNMS Sanctuary Advisory Council  
Don McIsaac, PFMC



September 1, 2009

Mayor:  
CHUCK DELLA SALA

David Ortmann, Chair  
Pacific Fishery Management Council  
7700 NE Ambassador Place, Suite 101  
Portland OR 97220-1384

Councilmembers:  
LIBBY DOWNEY  
JEFF HAFERMAN  
NANCY SELFRIDGE  
FRANK SOLLECITO

City Manager:  
FRED MEURER

RE: Monterey Bay National Marine Sanctuary MPA Process

Dear Chairman Ortmann:

On behalf of the Monterey City Council, I am writing to provide comments and recommendations to the Pacific Fishery Management Council about the Monterey Bay National Marine Sanctuary (MBNMS) process to meet its stated "need" for additional MPAs in the Federal waters of this Sanctuary.

The City of Monterey has previously provided to the PFMC a copy of our letter of March 27, 2008 (attached), to Sanctuary Superintendent Paul Michel, which outlines a number of significant concerns with the Sanctuary's announcement that it has an "unmet need" for MPAs (attached). In this letter the City provided the following advice to the Sanctuary:

- Respect the promise that was made to fisherman to gain their support for Sanctuary designation, that the Sanctuary would not create regulations that affect them.
- Do not change MBNMS designation document to give the Sanctuary the power to create fishing regulations.
- For any proposed regulation or zone that affects fishing, support from the fishing community is required
- The Sanctuary must have a fair and transparent process to determine the need for additional protection. Fisherman support for the process is also required
- The best available peer-reviewed science should be used in MPA decision making. The MBNMS should work with the Alliance of Communities for Sustainable Fisheries to reconcile the differences between the science products that they have brought forward to inform this issue, and the "need" conclusion of the MBNMS
- The Sanctuary should follow its own Federal regulations and consult with the National Marine Fisheries Service (NMFS), the PFMC, and Industry, before it makes decisions that affect fishermen.

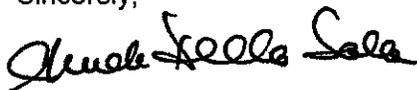
All of these recommendations to the National Marine Sanctuary remain valid recommendations from the City of Monterey. Since writing the March 27, 2008 letter, the Sanctuary has brought forth a "rational document" dated April 15, 2008, as well as having held a number of meetings to develop an MPA planning process. The City of Monterey also understands that very recently the Sanctuary has announced its intention to participate in an Integrated Ecosystem Assessment (IEA) process with a number of other Federal and State agencies. It is unclear at the present how this will relate the recommendations the City has made (above).

Because of the announcement of the potential for an IEA process, and because there remains considerable uncertainty as to what is occurring with regard to the Sanctuary's position on MPAs, the City of Monterey offers the following advice or comments regarding this process.

- In both the MBNMS February 15, 2008 and April 15, 2008 letters, the Sanctuary determined that it has an "unmet need" for MPAs within the Federal waters of the Sanctuary. As clarified by the Sanctuary, this plainly means that the Sanctuary wants to have additional MPAs, or make existing MPAs more restrictive, or otherwise modify existing MPA's. Considering that no scientific analysis has been brought forward to substantiate this claim, the City recommends that the Sanctuary modify its process to be one that begins with a scientific analysis as to whether existing levels of protection, including spatial protection, are sufficient to meet the requirements of the National Marine Sanctuaries Act. This new IEA process should be a process in which the development of data and scientific analysis informs the policy and management decisions; the Sanctuary should not begin this process with the assertion that it "needs MPAs".
- As evidenced in the April 15, 2008 MBNMS letter, a major reason that the Sanctuary is going forward with this MPA effort is to establish wilderness areas within the Sanctuary. A claim is made that this is somehow required by the language of the National Marine Sanctuaries Act. The pertinent language of the Sanctuaries Act is essentially the same since the designation of the Monterey Bay Sanctuary in 1992. Had this claim been made, that the Act requires wilderness areas, fishermen would never have supported it. Further, in 2001 correspondence with the City of Monterey, National Marine Sanctuary Director Dan Basta stated in reference to the MPA issue: "While it is my position that each management plan review will assess whether ecological reserves are appropriate, there is no policy that they must be established or that they must be a certain size". Because of these factors, the City of Monterey cannot support the MBNMS's assertion that the Sanctuaries Act requires it to create wilderness areas, unless such areas are agreed to by the fishing community.
- Also as evidenced by the April 15, 2008 MBNMS letter, the position is taken that sustainable fisheries are not good enough in National Marine Sanctuaries. The City asks that the PFMC provide a review and guidance as to the validity of that claim.

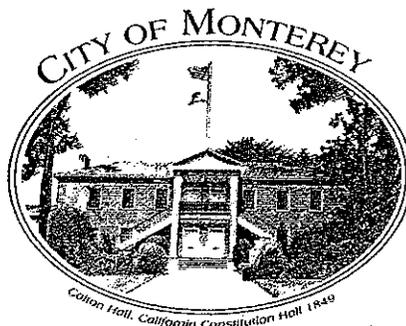
Please be assured that the City of Monterey will support a fair, science based process. It appears that the IEA may also create other management options which could have value to our fishermen, and to our community. If the new IEA process is fair, open, and transparent, is lead by science rather than by policy statements, and will seek and obtain the support of fishermen, then we support the new process.

Sincerely,



Chuck Della Sala  
Mayor

c: The Honorable Sam Farr, 100 W. Alisal St., Salinas, CA 93901  
Paul Michel, MBNMS, 299 Foam St., Monterey, CA 93940  
Don McIssac, PFMC, 7700 NE Ambassador Place, Suite 101, Portland, OR 97220-1384



March 27, 2008

Mayor:  
CHUCK DELLA SALA

Councilmembers:  
LIBBY DOWNEY  
JEFF HAFERMAN  
NANCY SELFRIDGE  
FRANK SOLLECTO

Paul Michel, Sanctuary Superintendent  
Monterey Bay National Marine Sanctuary  
299 Foam Street  
Monterey CA 93940

City Manager:  
FRED MEURER

Dear Paul:

On behalf of the Monterey City Council, I am writing in response to the Monterey Bay National Marine Sanctuary (MBNMS) Decision Letter of February 15, 2008 to the Marine Protected Area Workgroup and Sanctuary Advisory Council Members. This Decision Letter announces the decision that the MBNMS will create more Marine Protected Areas (MPAs).

The City of Monterey has gone on record many times to support the wise and sustainable use of our ocean resources and the conservation goals of the Sanctuary Program. Our citizens want assurances that the ocean will be healthy for future generations to enjoy. If there are problems, we want all federal, state, and local agencies to review their management options and to coordinate a response to deal with the problem. MPAs are one of many management options available for marine resource issues. The City of Monterey will be an active partner with the MBNMS in supporting science-based solutions in which the needs of key stakeholders are addressed.

It is not within our expertise to offer an opinion as to the need of the ecosystem for additional protections, including additional MPAs, within this Sanctuary Region. However, the letter of February 15<sup>th</sup> contains issues of procedure, policy, and best available science, all previously advised by the City of Monterey in the form of a number of different policy statements or recommendations made to the MBNMS.

The February 15<sup>th</sup> letter contains two major points. The first point asserts that the Sanctuary has determined that there is a need for additional MPAs within the Sanctuary, and offers three justifications in support of that determination. The second major point outlines the legal authority that might be used to create additional MPAs.

Regarding the legal authority to create additional MPAs, several Monterey City Councils, over the past seven years, have gone on record on the question of the Sanctuary's authority, or lack of, to create regulations that affect fishing. During the early 1990's, the City of Monterey was very active in supporting the creation of the Monterey Bay National Marine Sanctuary. A crucial part of the willingness of the City to support the new Sanctuary was the commitment which we heard from both our federal and state elected leaders, and NOAA officials, that the new Sanctuary would not be a threat to fishermen and that they need not worry about the Sanctuary creating regulations that affect them or potentially put them out of business. I believe that this promise is well remembered still by many civic and business leaders in the Sanctuary Region, and is not limited to the City of Monterey.

Beginning in March 2001, after the Management Plan Review process was announced by the Sanctuary Program, the City Council created a series of policy statements on this issue. At their March 20, 2001 meeting, the City Council of Monterey adopted resolution #01-58, which supports the goals of the Alliance of Communities for Sustainable Fisheries. A copy of this resolution is attached, and I quote two brief sections:

“Whereas, the Alliance expects the Monterey Bay National Marine Sanctuary to keep the clear promise that was made to the fishing community during the designation period for the Monterey Bay Sanctuary, that the Sanctuary would not become involved in fishery issues and,

Whereas, the Alliance believes fishery management should continue to be the responsibility of the California Department of Fish and Game and the Pacific Fishery Management Council,”

The City Council supported this resolution unanimously.

At the Monterey City Council's November 20, 2001 meeting, recommendations were made to the MBNMS regarding the Management Plan Review process and potential issues. A copy of these recommendations is attached. Among them is:

“Understand and respect the original consensus building that created the Sanctuary.”

In his letter to the Monterey Sanctuary of January 31, 2002, Congressman Sam Farr states this consensus effort quite clearly when he says,

“In the process of building support for the designation of the Sanctuary, a clear commitment was made to the fishing community that the Sanctuary would not impose any regulations directed at fishing activities or fishing vessels. This agreement is based on the understanding that fisheries within the Sanctuary are already being regulated and that there is neither the necessity nor the resources for the National Marine Sanctuary Program to take on this responsibility.”

Congressman Farr's position was reiterated to the MBNMS in his letter to you of December 13, 2007 (attached), as the MBNMS considered the MPA issue.

Certainly, the understanding made with the fishing community that the Sanctuary would not regulate fishing is one of the most critical pieces of the consensus building effort.

Also at the November 20, 2001 meeting, the City Council adopted recommendations to the MBNMS specifically about the fishing issue. The adopted policy statement is as follows:

“To clarify that the Department of Fish and Game and the National Marine Fisheries Service (including the Pacific Fishery Management Council) are the agencies responsible for fishing regulations as per the original intent when the

Sanctuary was designated. Any zones or regulations proposed by the Sanctuary which affect fishing would occur only if they are the result of a cooperative effort with the fishing and/or aquaculture communities and they have the support of those communities."

Regarding the need for the MBNMS to gain the support of the fishing community before it proposes fishing regulations or zones, this was certainly a part of the understanding that the fishing community had with NOAA as the Sanctuary was being proposed. Additionally, the best available science on successful MPA processes is unanimous in concluding that stakeholder/community support for MPAs is needed.

At the City Council's October 4, 2005 meeting, the Council again reviewed their 2001 set of recommendations (attached). The City Council heard the perspective of the Monterey Sanctuary Staff and also received an update on the relevancy of these recommendations from Monterey City Staff. The Monterey City Council took no action on this update, thereby consciously leaving in place existing City Council policy.

When the Draft Management Plan was released, the City of Monterey formally commented on this Plan by sending a copy of the attached letter of January 2, 2007. As you can see, the City Council has confirmed each time its recommendation that the Monterey Sanctuary keep this important promise made to the fishing community. It is evident when we read the Sanctuary's February 15<sup>th</sup> Decision Letter, that the Sanctuary Program is preparing us for the possibility that the Sanctuary Document will be changed and the Sanctuary may create regulations affecting fishing via creating MPAs, including complete no-fishing zones, or that the Sanctuary will bring an MPA proposal to the Pacific Fishery Management Council which is not supported by fishermen. On this point the Monterey City Council is concerned that it is likely that if the Sanctuary does break this promise, there will be a reaction of deep concern toward the Sanctuary from civic and business leaders, and fishermen, throughout this region. This reaction and dismay may make it harder for the MBNMS to work with communities and stakeholders in a spirit of mutual trust.

It also must be pointed out that Monterey Sanctuary Regulations (15CFR, Chapter IX, Subchapter A and B, and Part 944) calls for a consultation to occur between the PFMC and the National Marine Fisheries Service, as well as the fishing industry, to determine an appropriate course of action if problems arise that might be caused by fishing activities. However, no consultation on issues of substance occurred with the three listed entities before the Sanctuary issued its Decision Letter.

The City of Monterey also has a longstanding policy of supporting the use of the "best available science" to inform or resolve resource management issues. With regard to the Sanctuary's Decision Letter, the first assertion made for the need for additional MPAs is that there are ecological concerns with any level of fishing activity, at least in certain areas. It is not within the expertise of the City Council to know whether or not this is a valid assertion. However, we do point out that the local organization, the Alliance of Communities for Sustainable Fisheries, has brought forth a detailed scientific analysis that deals with the question of the need for additional MPAs in this region. Staff at the MBNMS and the National Marine Sanctuary Program had this scientific analysis for some time prior to the creation of the Decision Letter, yet the

analysis and its conclusions are nowhere mentioned in the Decision Letter. We hope and expect that the Monterey Sanctuary will engage in a scientific discussion of the merits of this analysis through the Science and Statistical Committee of the Pacific Fishery Management Council (PFMC). As you know, the PFMC (as are all fishery councils in the United States) is now charged by the latest reauthorization of the Magnuson-Stevens Act, to utilize the best available science in their decision making, and to listen to the advice of their Science and Statistical Committees. It's clear with this recent reauthorization of the Magnuson-Stevens Act that Congress wants thorough science and not merely personal or even agency opinion to dictate the use and conservation of our marine resources.

The City of Monterey has also gone on record twice (in the context of the State's MPA process) asking for a thorough socio-economic analysis to be developed early-on in any MPA process. The MBNMS MPA Decision Letter does briefly mention that the Sanctuary will seek to "adequately understand the ... socio-economic impacts of any proposed action". While the City of Monterey understands that a complete socio-economic analysis cannot be done until the specific MPA locations are identified, the City wishes that key baseline socio-economic information would have been developed before the Sanctuary made the decision that additional MPAs are needed. Such information would have been relevant to the level of fishing activity that currently exists and relevant to a MBNMS decision on "need".

The Monterey City Council is also well aware that our robust tourism economy, which is the dominant economic engine of our community, is reliant to a large degree on the visiting public's desire to eat fresh local seafood and to experience the culture and heritage of our historic fishing community. A recent study conducted by Responsive Management Inc., has shown a very high correlation between fishing heritage and our tourism economy as recorded by local tourism professionals and civic leaders. One of the "Vision Statements" recently adopted by the City Council speaks directly to this point:

"Appropriately preserve, promote, and maintain our historic, cultural, and environmental assets"

On this very point the City of Monterey was proud to receive from First Lady Laura Bush a 2005 "Preserve America Award" for our efforts to preserve our historic and cultural assets, our fishing heritage being among those.

The City of Monterey has also gone on record several times to express concern and to suggest constructive changes in the MBNMS public decision-making process. Most notable have been concerns about the structure and function of the Sanctuary Advisory Council. These concerns are expressed in the Monterey City comments made to the MBNMS during the Management Plan Review process. Because of the ability of the MBNMS to control the selection of most members of the SAC, the public is left to wonder if SAC advice truly represents the public, including on this MPA issue. I also point out that the Sanctuary Program timeline states that by January 8, 2008, a consultation had occurred with the Pacific Fishery Management Council and NOAA Fisheries. However, no such consultation on issues of substance occurred. These events may serve to make some of the public question the National Marine Sanctuary

decision-making process.

I want to comment on the assertion in the Decision Letter that the National Marine Sanctuary Act mandates mean that the MBNMS has a "need" to create wilderness areas in the ocean. First, let me note that this assertion is the antithesis of the promise made to fishermen, that the Sanctuary would not create regulations. Had this assertion been made during the run up to the sanctuary designation, I do not believe that a sanctuary would exist today. Secondly, this interpretation may be legally challenged. Third, may I point out that in an April 5, 2001 letter to the City of Monterey (copy attached), National Marine Sanctuary Program Director Dan Basta states, "While it is my position that each Management Plan Review will assess whether ecological reserves are appropriate, there is no policy that they must be established or that they must be a certain size." From this quote, I do not perceive that Director Basta is asserting the same mandate that the Sanctuary must create wilderness areas.

It appears that a strong difference of opinion exists between fishermen and the MBNMS regarding the fundamental question of the need for additional MPAs. This question, in our opinion, does need to be resolved before the Sanctuary goes ahead with an MPA design process. It has been previously pointed out that Monterey City Council adopted policy recommends to the Sanctuary that no fishing regulation or zone be adopted unless it has the support of the fishing community. This is not merely a City of Monterey policy and it does not confer "veto" power to fishermen. The Decision Letter presented by the Sanctuary refers to the 2003 National Research Council report on the use of Marine Reserves. However, the Decision Letter fails to mention key conclusions of the NRC report:

"Local people must be deeply involved from the earliest possible stage in any MPA effort for it to be successful, and socio-economic considerations usually determine the success or failure of MPAs".

and

"Actions taken in the context of incomplete information require agreement among stakeholders, managers, and scientific researchers that regulatory actions are necessary and beneficial despite information gaps and conflicting perceptions of resource status."

On behalf of the Monterey City Council I strongly urge the MBNMS to reconcile the science which has been brought forth by the fishermen (including their own anecdotal knowledge) with what appears to be a top-down decision from the National Marine Sanctuary Program that additional MPAs are needed. Without such reconciliation it appears that there will not be support for an MPA network from the key stakeholders, as recognized even by the National Research Council. I further urge the MBNMS to not change the Designation Document for this Sanctuary or attempt to create its own MBNMS fishing regulations.

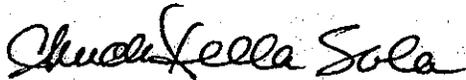
The City of Monterey always wants to be a working partner with the MBNMS for programs that support the wise and sustainable use of the ocean. It is our observation that the Sanctuary Program needs to take actions to assure the public that there is a strong, science-based rationale for determining that there is a need for additional MPAs in the federal waters of the MBNMS. The City will work with and support a

process to assure that the best available science, including socio-economics, is used to evaluate the need for additional protections, understanding that MPAs are one tool of many for preserving ocean health. As a constructive recommendation to the MBNMS, the City suggests that the Sanctuary seek to resolve this MPA issue by working with the Pacific Fishery Management Council in their new process to develop an "Ecosystem Fishery Management Plan". This would be a great opportunity to work with the PFMC, which is the Agency with the authority to create MPAs, to resolve the ""need" issue and/or even identify areas that should be made into MPAs if that is what the best science determines.

We well know that sometimes the advice of a community like Monterey to the Sanctuary Program may not be in agreement with actions proposed by the senior management of the National Marine Sanctuary Program. However, please know that City of Monterey advice is well-considered and aimed at assuring long-term community support for the Sanctuary.

Thank you for considering these observations and comments. The City of Monterey has been a key partner with the MBNMS on many issues and we look forward to working through the issues and concerns expressed above.

Sincerely,



Chuck Della Sala, Mayor  
City of Monterey

#### Attachments

- C: Vice Admiral Conrad Lautenbacher, USN (ret.), Undersecretary for Oceans and Atmosphere,  
Department of Commerce, 1401 Constitution Ave. N.W., Washington, D.C. 20230  
Anthony Botelho, President, AMBAG, P O Box 809, Marina, CA 93933  
Representative Sam Farr, 1221 Longworth House Office Bldg, Washington, DC 20515  
The Honorable Leon Panetta, 100 Campus Center, Bldg 86E, Seaside, CA 93955  
Don Hansen, Chair, Pacific Fishery Management Council, 7700 NE Ambassador Pl., Suite 101, Portland, OR 97220-1384

## NATIONAL SYSTEM OF MARINE PROTECTED AREAS

The National Marine Protected Area (MPA) Center is currently seeking formal nominations for sites for potential inclusion into the National System of Marine Protected Areas (National System). Creating the National System is a directive of Presidential Executive Order 13158 signed on May 26, 2000 and is guided by a public process within the *Framework for the National System of Marine Protected Areas of the United States of America* (Framework) (Agenda Item C.3.b, Attachment 1). The National System is designed to create overarching goals and priority conservation objectives, improve regional and ecosystem-based coordination between existing MPAs managed by state, tribal, and Federal entities, and to establish a science-based process for identifying gaps in the national system. To assist the Council and the public, the National MPA Center has provided a series of fact sheets on the benefits of the National System (Agenda Item C.3.b Attachment 2), joining the National System (Agenda Item C.3.b Attachment 3), and the nomination process (C.3.b, Attachment 4).

The National System is being developed through an ongoing public nomination process. The first nomination period was focused on state MPAs and Federal MPAs within the programs of the National Marine Sanctuaries, the National Parks, and the National Wildlife Refuges. The first nomination period occurred in early-2009 and resulted in the adoption of 225 charter sites including 63 state MPAs in California and 19 in Washington. The current second round of nominations is focused on input from the eight Regional Fishery Management Councils.

On March 9, 2009, the National Marine Fisheries Service (NMFS) issued a Policy Directive (Agenda Item C.3.b, Attachment 5) to provide guidance and clarification on the Council nomination process. The Policy Directive, calls for the MPA Center and NMFS Regional Offices to send each Council a letter (Agenda Item C.3.b, Attachment 6) that includes a list of potential sites that meet the criteria specified in the Framework. The Council process is expected to occur over two Council meetings. At the first meeting (September 2009) the Pacific Council is scheduled to consider the proposed list and develop initial recommendations on nominations. The public is provided a comment period before the Council makes final recommendations to NMFS and the MPA Center at its next meeting (November 2009).

Based in part on discussions at recent meetings of the Council Coordination Committee, the Council may be particularly interested in jurisdictional questions surrounding the process by which MPA sites within the National System are modified or removed from the list, as well as, the science-based process the National MPA Center will use to identify conservation gaps in the National System.

Regarding the modification or removal of sites in the National System, language in the Framework (pages 29-30) indicates that MPAs may be removed from the list without any additional jurisdictional authority involvement. However, the NMFS Policy Directive seems to describe a process for removing sites from the National System that follows a similar iterative process as the nomination process whereby the Council requests removal through a two-meeting process followed by consultation between NMFS, the MPA Center, and the public before the MPA Center removes the site from the National System. The Council is on record advocating no

new jurisdictional authority beyond the Magnuson-Stevens Fishery Conservation and Management Act for MPA determination in west coast Federal waters (Agenda Item C.3.b, Attachment 7). Appropriate MPA Center and NMFS staff are scheduled to attend the Council meeting to clarify any changes in jurisdictional process.

The Council's science-based decision process implies interest in the MPA Center science used to identify conservation gaps and resulting recommended improvements to any MPAs on the west coast. In an April 30, 2009 letter from Dr. Mark Hixon, Chair of the MPA Federal Advisory Committee (FAC) provides FAC recommendations on assessing ecological resilience and conservation gaps within the National System (Agenda Item C.3.b, Attachment 8). The Council and its Scientific and Statistical Committee would likely welcome the opportunity to further review these recommendations and any other science or proposed analyses behind these important determinations.

### **Council Action:**

**Provide Guidance to Council staff on Development of a Public Review Draft of MPA sites to be Submitted for the National System of MPAs.**

### **Reference Materials:**

1. Agenda Item C.3.b, Attachment 1; *Framework for the National System of Marine Protected Areas of the United States of America (Executive Summary only*, the full document is available in electronic format on the Briefing Book CD and at <http://www.mpa.gov>).
2. Agenda Item C.3.b, Attachment 2, *Benefits of a National System of Marine Protected Areas*.
3. Agenda Item C.3.b, Attachment 3; *Joining the National System of MPAs, FAQs*.
4. Agenda Item C.3.b, Attachment 4; *Implementing the National System, Nomination Process*.
5. Agenda Item C.3.b, Attachment 5; NMFS Policy Directive 01-114, *Regional Fishery Management Council Consultation in MPA Nomination Process*.
6. Agenda Item C.3.b, Attachment 6; August 14, 2009 letter and list of potential MPA sites from Mr. Barry Thom to the Council.
7. Agenda Item C.3.b, Attachment 7, February 13, 2007 letter from Dr. Donald McIsaac to Mr. Joseph Uravitch re: Council comments on the Draft Framework.
8. Agenda Item C.3.b, Attachment 8; April 30, 2009 letter from Dr. Mark Hixon, providing FAC recommendations on assessing ecological resilience and conservation gaps.
9. Agenda Item C.3.d, Public Comment.

### **Agenda Order:**

- a. Agenda Item Overview
  - b. Marine Protected Areas (MPA) Center Report
  - c. Reports and Comments of Management Entities and Advisory Bodies
  - d. Public Comment
  - e. **Council Action:** Provide input to the National MPA Center on the Nomination Process for the National System of MPAs.
- Mike Burner  
Charlie Wahle/Lauren Wenzel

PFMC  
08/27/09

# FRAMEWORK FOR THE NATIONAL SYSTEM OF MARINE PROTECTED AREAS OF THE UNITED STATES OF AMERICA



NOVEMBER 2008





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**November 2008**

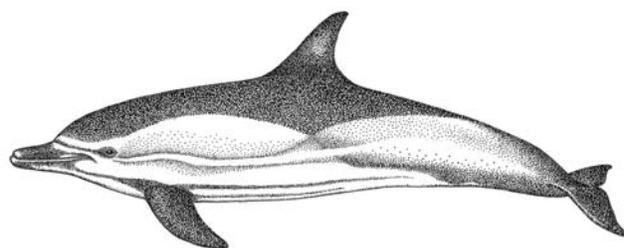
For more information please contact:

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**[www.mpa.gov](http://www.mpa.gov)**

Cover photos courtesy of the National Oceanic and Atmospheric Administration.



FRAMEWORK FOR THE NATIONAL SYSTEM OF  
**MARINE PROTECTED AREAS**  
OF THE UNITED STATES OF AMERICA



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FRAMEWORK FOR THE NATIONAL SYSTEM OF MARINE PROTECTED AREAS OF THE UNITED STATES OF AMERICA



# EXECUTIVE SUMMARY

Increasing impacts on the world's oceans from coastal and offshore development, overfishing, a changing climate, natural events, and other sources are straining the health of marine ecosystems and the Great Lakes. Impacts to these intricately balanced environments include declining fish populations, degradation of coral reefs and other vital habitats, threats to rare or endangered species, and loss of artifacts and resources that represent the diverse cultural heritage of the United States. The effects of these losses are significant and jeopardize the social and economic fabric of the nation.

In the United States and around the world, marine protected areas (MPAs) are increasingly recognized as an important and promising management tool for mitigating or buffering some of these impacts. When used effectively and as a part of a broader ecosystem-based approach to management, MPAs can help to restore and maintain healthy marine and Great Lakes environments by contributing to the overall protection of critical marine habitats and resources. In this way, effective MPAs also can offer social and economic opportunities for current and future generations, such



as tourism, biotechnology, fishing, education, and scientific research.

MPAs are designated and managed at all levels of government by a variety of agencies including parks, fisheries, wildlife, natural resource and historic resource departments, among others. U.S. MPAs have been established by well over 100 legal authorities, with some federal and state agencies managing more than one MPA program, each with its own legal purpose. There are approximately 1,700 existing MPAs in the United States that have been established by federal, state, territorial, and local governments to protect and conserve the nation's rich natural and cultural marine heritage and sustainable production resources. These MPAs have been designated to achieve a myriad of conservation objectives, ranging from conservation of biodiversity hotspots, to preservation of sunken historic vessels, to protection of spawning aggregations important to commercial and recreational fisheries. Similarly, the level of protection provided by these MPAs ranges from fully protected or no-take marine reserves to sites allowing multiple uses, including fishing, recreational, and industrial uses.

Recognizing the significant role that U.S. MPAs play in conserving marine heritage and sustainable use, and the lack of a national institution for comprehensive MPA planning, coordination, and support, Presidential Executive Order 13158 of May 26, 2000 (Order), found in Appendix D of this document, calls for the development of a National System of Marine Protected Areas (national system). The Order clearly calls for a national and not a federal system, and requires collaboration not only with other federal agencies, but also with coastal states and territories, tribes, Regional Fishery Management Councils, and other entities, as appropriate, including the MPA Federal Advisory Committee. The Order further specifies that the national system be scientifically based, comprehensive, and represent the nation's diverse marine ecosystems and natural and cultural resources.

To provide a blueprint for building the National System of MPAs,<sup>1</sup> the Order calls for the development of a framework for a National System of MPAs and directs the establishment of a National MPA Center (MPA Center) within the National Oceanic and Atmospheric Administration (NOAA) to lead the system's development and implementation. This final *Framework for the National System of MPAs of the United States of America* (Framework) is the result of a multi-year development effort. The first draft Framework received over 11,000 comment submissions (composed of comments from 100 individual commenters and a petition from nearly 11,000 people) during its September 2006 to February 2007 public comment period. A second draft addressing these comments was published for public comment from March-May 2008, and received 34 public comment submissions. The MPA Federal Advisory Committee also provided two sets of recommendations on the Framework that have contributed significantly to its final form.

The Framework recognizes that U.S. MPA programs can achieve more efficient, effective conservation of the nation's important natural and cultural resources by working together rather than separately, and that many solutions require collaboration across programs with their own individual mandates, levels of government, and even international boundaries. It proposes a national system that is, initially, an assemblage of existing MPA sites, systems, and networks established and managed by federal, state, territorial, commonwealth, tribal, or local governments, acknowledging and building upon the contributions of these foundation programs. In addition, the Framework outlines collaborative, transparent processes for MPA programs at all levels of government to work together at regional, national, and international levels and with public participation to achieve common conservation objectives through comprehensive MPA planning; identification of enhanced or new MPAs that may be needed; and support for improved MPA science, stewardship, and effectiveness.

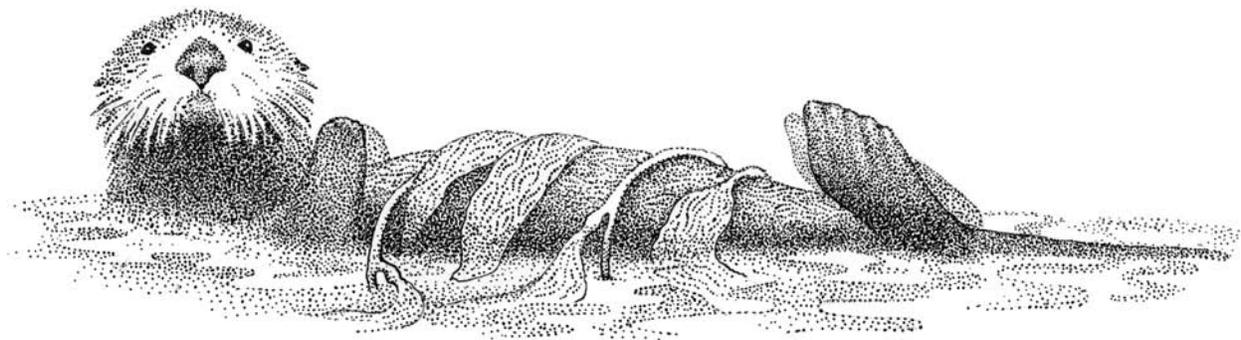
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<sup>1</sup> The purpose of this document is to provide a framework for developing and implementing a National System of MPAs; it is not a blueprint for the establishment of individual MPAs.

## THE FRAMEWORK OUTLINES THE FOLLOWING KEY COMPONENTS OF THE NATIONAL SYSTEM:

- A set of overarching national system goals and priority conservation objectives.
- MPA eligibility criteria and other key definitions.
- A nomination process for existing MPAs to be included in the national system that provides opportunities for public input.
- A science-based, public process for identifying conservation gaps in the national system.
- A process for improving regional and ecosystem-based coordination of MPAs by:
  - creating new or strengthening existing regional forums for MPA coordination;
  - identifying and catalyzing action to address shared priorities for improving MPA science, stewardship, and effectiveness; and
  - developing collaborative, ecosystem-based MPA planning to identify and recommend MPAs for inclusion in the new national system.
- Mechanisms for national and international coordination.
- Implementation guidance regarding federal agency responsibilities to avoid harm to resources protected by the National System of MPAs.
- Mechanisms for monitoring, evaluating, and reporting on national system progress and priorities.

Through collaborative efforts among U.S. MPA programs and stakeholders, the national system can achieve the Order's goal of enhancing the comprehensive conservation of the nation's natural and cultural marine heritage and the ecologically and economically sustainable use of the marine environment for present and future generations.

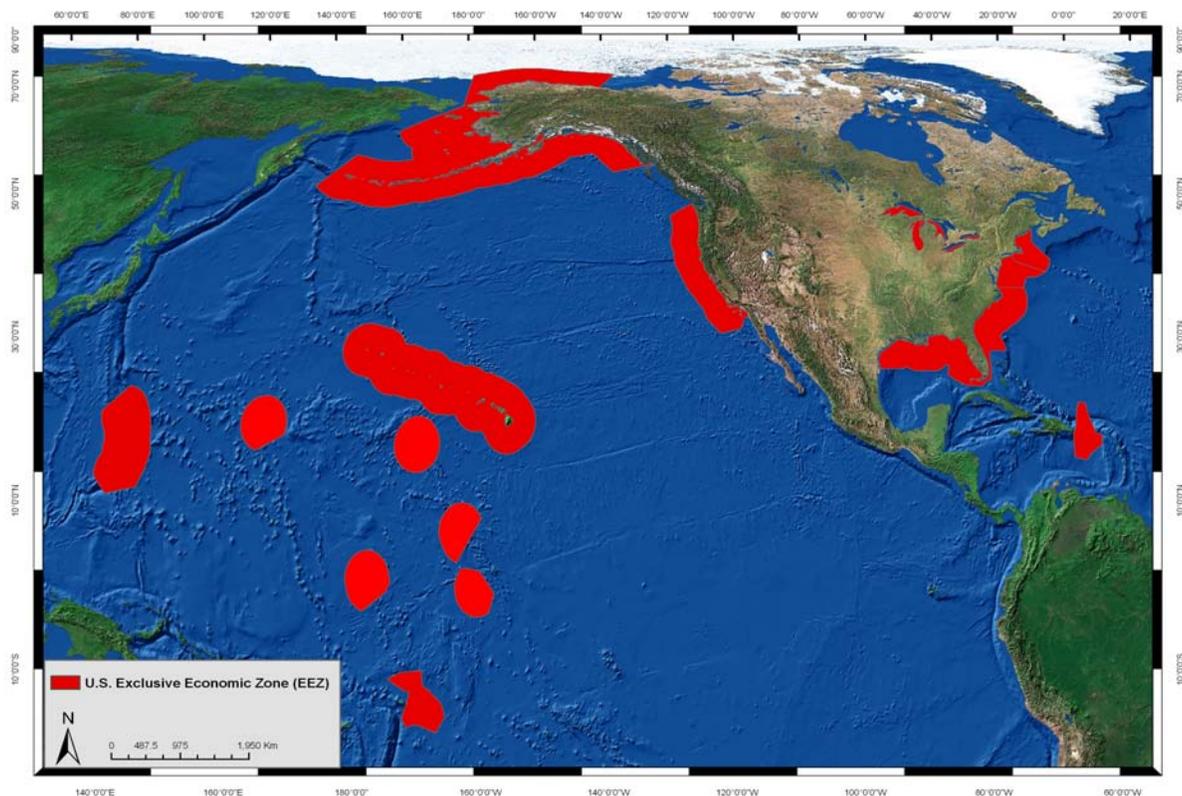




**Marine Protected Area** – *Any area of the marine environment that has been reserved by federal, state, territorial, tribal, or local laws or regulations to provide lasting protection for part or all of the natural and cultural resources therein. (Executive Order 13158)*

**National System of MPAs** – *The group of MPA sites, networks, and systems established and managed by federal, state, tribal, and/or local governments that collectively enhance conservation of the nation's natural and cultural marine heritage, and represent its diverse ecosystems and resources. National system MPAs work together at the regional and national levels to achieve common objectives for conserving the nation's important natural and cultural resources.*

**Figure 1: U.S. Exclusive Economic Zone**



## II. INTRODUCTION

### A. BACKGROUND

With the world's largest Exclusive Economic Zone (Figure 1), the coastal, marine, and Great Lakes waters of the **United States**<sup>2</sup> support an incredible diversity and wealth of life. These waters also play host to untold special places that represent our rich cultural heritage and connections to the sea. In the same way, myriad human uses, livelihoods, and other activities take place in the marine and coastal environment, benefitting from and relying upon the sustained health of our nation's vast natural and cultural heritage.

As human populations grow and use of marine resources increases, so do the pressures and stresses exerted on these intricately balanced ecosystems. Ensuring the long-term health of these ecosystems and the sustained benefits on which humans depend requires comprehensive management approaches. In the United States and many other countries around the

<sup>2</sup> Important terms are in bold the first time they are used and defined in the Glossary found in Section VI of this document.



**“Based on evidence from existing marine area closures in both temperate and tropical regions, marine reserves and protected areas will be effective tools for addressing conservation needs as part of integrated coastal and marine area management.”**

**“MPAs, areas designated for special protection to enhance the management of marine resources, show promise as components of an ecosystem-based approach for conserving the ocean’s living assets.”**

**“Integration of management across the array of federal and state agencies will be needed to develop a national system of MPAs that effectively and efficiently conserves marine resources and provides equitable representation for the diversity of groups with interests in the sea.”**

*Committee on the Evaluation, Design, and Monitoring of Marine Reserves and Protected Areas in the United States, Ocean Studies Board, Commission on Geosciences, Environment, and Resources, National Research Council, /Marine Protected Areas: Tools for Sustaining Ocean Ecosystems./ Washington, D.C.: National Academy Press, 2001.*

world, marine protected areas (MPAs) are increasingly recognized and used as important tools for the conservation and sustainable use of marine resources and as an important component of a comprehensive management approach.

Recognizing the expanding role and importance of MPAs in the United States, Presidential Executive Order 13158 of May 26, 2000 (Order) directs the Department of Commerce (DOC) and the Department of the Interior (DOI), in consultation with other federal agencies,<sup>3</sup> to develop a **National System of Marine Protected Areas** (national system).

The Order specifies that this is to be a *national* and not a *federal* system and requires consultation with all **states** (this includes U.S. states, territories, and commonwealths as defined in the Glossary,

Section VI) that contain portions of the marine and Great Lakes environment; **tribes**; Regional Fishery Management Councils (FMCs); and other entities, as appropriate, including the Marine Protected Areas Federal Advisory Committee (MPA FAC) established by the Department of Commerce under the Order. The Order further specifies that the national system be scientifically based and comprehensive, and that it represent the diverse marine **ecosystems** of the United States and the nation’s **natural** and **cultural resources**.

To provide a roadmap for building the national system, the Order calls for the development of a framework for a National System of MPAs and establishes the National MPA Center (MPA Center) within DOC’s National Oceanic and Atmospheric Administration (NOAA) to develop the system and coordinate its subsequent implementation. This *Framework for the*

<sup>3</sup> The Department of Defense, the Department of State, the United States Agency for International Development, the Department of Transportation, the Environmental Protection Agency, the Department of Homeland Security, the National Science Foundation, and other pertinent federal agencies.

*National System of Marine Protected Areas of the United States of America* (Framework) outlines collaborative processes for building this assemblage of existing MPA sites, networks, and systems established and managed by federal, state, tribal, or **local governments** and for collectively working together at the **regional** and national levels to achieve common objectives for conserving the nation's important natural and cultural resources.

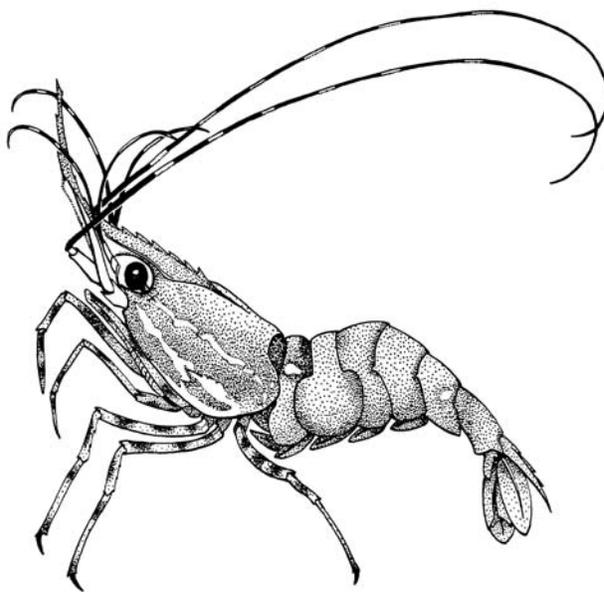
For the purposes of the national system, the term “**marine protected area**” (MPA) is defined by the Order as, “Any **area** of the **marine environment** that has been **reserved** by Federal, State, territorial, tribal, or **local** laws or regulations to provide **lasting protection** for part or all of the natural and cultural resources therein.” The term MPA, as defined and further clarified and used in this document, is not synonymous with or limited to “no-take reserves” or “marine reserves.” The term MPA used here denotes an array of levels of protection and conservation purposes, from areas that allow multiple-use activities to areas that restrict take and/or access. To meet the nation's goals for conserving **natural heritage** and **cultural heritage** and achieving **sustainable production** of resources found in the coastal and marine environments, the national system must include an approach to balancing types and levels of MPA protections that is science-based and **stakeholder** informed. The national system is intended to be inclusive of MPAs across the spectrum of levels of protection, from multiple-use to no-take, recognizing that existing MPAs across this spectrum offer different values to the national system that can help meet its goals and objectives.

While MPAs are an important tool for marine conservation, other types of management approaches are employed to address marine conservation

objectives while allowing other appropriate uses and activities in the marine environment to take place in an economically and environmentally sustainable manner. Like other tools, MPAs should be carefully designed and implemented to meet specific conservation goals. Efforts to develop the national system must be both coordinated and integrated within the larger, evolving ecosystem-based approach to managing marine resources.

Neither the national system nor the Order establish any new legal authorities to designate, manage, or change MPAs, nor do they alter any existing federal, state, local, or tribal MPA laws or programs. Each MPA or program that participates in the national system will continue to be independently managed by its respective entity or entities, as will any new sites that eventually may be established by those authorities. The national system is intended to support, not interfere with, agencies' independent exercises of their own existing authorities. The national system is therefore envisioned as a “system of sites and systems” that will be developed to achieve conservation and management objectives that could not be accomplished by individual MPAs or MPA programs working independently.

Furthermore, the *requirements* outlined in the Order, which provide the legal authority for establishing the national system, apply only to the actions of federal agencies. The Order does not direct the actions of states or tribes, or alter any existing state, local, or tribal authorities or treaties regarding the establishment or management of MPAs or marine resources under their jurisdiction. Finally, nothing in this document is to be construed as altering existing authorities regarding the establishment of federal



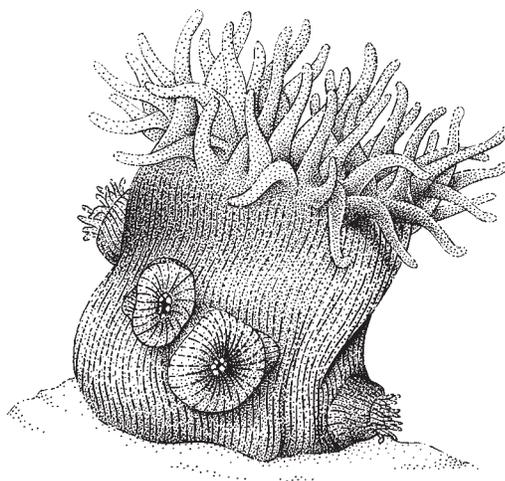


MPAs in areas of the marine environment subject to the jurisdiction and control of states, tribes, or local governments.

While the Order's requirements apply only to federal agencies, the full and ongoing participation of state, tribal, and local governments is critical to an effective national system. MPAs are designated and managed at all levels of government by a variety of agencies including parks, fisheries, wildlife, and natural resource and historic resource departments, among others. U.S. MPAs have been established by over 100 legal authorities, with some federal and state agencies managing more than one MPA program, each with its own legal purpose. Given the importance of the marine resources they manage and their wealth of experience in doing so, building and implementing the national system in partnership with state, tribal, and local governments is a major emphasis of the Framework. A full description of the range of existing U.S. MPA programs, federal MPA initiatives and tribal and international efforts can be found in Appendix B of this document. In light of this breadth of existing U.S. MPA responsibilities, the Order recognizes the need and calls for a national, rather than federal, system of MPAs with a geographic scope that spans the U.S. waters of the Pacific Ocean, including the Bering Sea; Atlantic Ocean, including the Gulf of Mexico and Caribbean Sea; Arctic Ocean; and the Great Lakes.

By establishing an effective structure for working together, the national system will help to increase the efficient protection of important marine resources; contribute to the nation's overall social and economic health; support government agency cooperation and integration; and improve the public's access to

scientific information and decision making about the nation's marine resources. It affords all system members the protections of Section 5 of the Executive Order, which requires federal agencies to avoid harm to the natural and cultural resources protected by MPAs within the national system, to the extent permitted by law and to the maximum extent practicable. The collaborative efforts of the national system are also intended to benefit the participating federal, state, tribal, and local government partners through the identification of shared priorities for improving MPA effectiveness and the development of partnerships to provide assistance in meeting those needs. Finally, the national system provides a foundation for cooperation with other countries to conserve resources of common concern.



## B. DEVELOPING THE FRAMEWORK

In developing this Framework, the MPA Center engaged the nation in a multi-year dialogue to ensure that the national system represents the nation's interests in the conservation and sustainable use of its natural and cultural marine resources.

The MPA Center

continues to work with and solicit input from federal, state, tribal, and local government partners, FMCs, stakeholder groups, and the general public about their perspectives on the national system.

Recommendations and comments from the MPA FAC, states, tribes, federal agencies, FMC representatives, and non-governmental stakeholders have provided the foundation of viewpoints and information on which this document is constructed. Moreover, many of the core concepts presented in this document stem directly from the recommendation documents and reports submitted by the MPA FAC and states.

The MPA Center led a broad and inclusive public scoping process to develop the initial draft Framework starting in 2005, and conducted general discussions about the purpose of the national system as early as 2001. Specific recommendations during the scoping process were sought and received from the MPA FAC, composed of 30 individual members of the public representing the range of the nation's MPA stakeholders and geographic areas; an MPA State Advisory Group convened by the Coastal States Organization and the MPA Center; and the Federal Interagency MPA Working Group, which provides ongoing, coordinated advice from federal agencies on the implementation of the Order. A full description of the MPA FAC can be found in Appendix B and a list of the MPA FAC members and the Federal Interagency MPA Working Group representatives can be found in Appendix E. The MPA Center also held a series of five regional public dialogue meetings around the country to provide stakeholders with an opportunity to include their input and advice and three regional state workshops to solicit their views. Comments and recommendations received during the scoping process were reviewed and considered in the development of the initial Draft Framework and copies of these and other related materials can be found at <http://www.mpa.gov>.

The initial Draft Framework was available for public comment between September 2006 and February 2007. The MPA Center received over 11,000 comment submissions comprised of approximately 100 comments from individual commenters and a petition from nearly 11,000 people requesting the development of a nation-wide system of fully protected or "no-take" reserves. In addition, in April and October 2007, the MPA Center solicited and received additional advice and comments from the MPA FAC about options for revising the Framework.

The Revised Draft Framework was made available for public comment from March 15, 2008, through May 16, 2008. The MPA Center received 34 comment submissions during this comment period. During both comment periods, comments were received from

state government agencies, industry and conservation organizations, tribal groups, various advisory bodies, and members of the public. In developing this final Framework, the MPA Center considered all comments received during both comment periods as well as the recommendations of the MPA FAC. With the publication of this final Framework, the MPA Center will now initiate implementation of the national system. Plans and guidance documents outlining next steps in the implementation process will be posted at <http://www.mpa.gov>.

### C. BENEFITS OF AN EFFECTIVE NATIONAL SYSTEM

The national system offers numerous benefits above and beyond the benefits realized by participating MPA sites and programs individually. These benefits would accrue to the nation as a whole, as well as at regional and local levels. Benefits would extend across the full spectrum of users and stakeholders, including both consumptive and non-consumptive users. The following list reflects some of the potential benefits from the creation and effective management of the national system.<sup>4</sup>

#### Enhanced Conservation

- **Representativeness** – The national system will significantly boost ongoing efforts to preserve the natural and cultural heritage of the United States by ensuring that the diverse characteristics of the natural and social environment of the nation's seas are conserved for future generations in a systematic way. The representation of all ecosystem or habitat types in all the nation's marine regions, which includes the Great Lakes, within a single system will help ensure that the full complement of biodiversity and valued areas will be protected.
- **Connectivity** – The national system provides an opportunity to identify and establish networks of MPAs that are ecologically

<sup>4</sup> Adapted from MPA FAC, October 2007.



connected. An ecological network of MPAs is a set of discrete MPAs within a region that is functionally connected through dispersal of reproductive stages (eggs, larvae, spores, etc.) or movement of juveniles and adults. Properly designed and located, these networks can enhance linkages between sources and sinks for many marine organisms, which may be essential for some local populations to persist—an increasingly serious challenge in a rapidly changing environment. Planning at the national and regional scales provides an opportunity to address connectivity for many different marine organisms at different spatial scales.

- **Enhanced Stewardship** – The national system can help protect MPAs against the harmful effects of onsite or offsite activities through enhanced regional coordination, public awareness, site management capacity, recognition of these MPAs as important conservation areas, and application of the protective measures in Section 5 of the Executive Order.

## Social and Economic Benefits

- **Increased Visitation** – The establishment and recognition of the national system could be an incentive for increased tourism and visitation of some MPAs, as well as an increase in visitation and enjoyment of areas system-wide, providing for uses such as recreational fishing, diving, whale watching, and swimming.
- **Sustained Fisheries** – One goal of the national system is supporting sustainable production of harvested marine resources. Improved regional coordination and support for management, using MPAs where appropriate, could lead to enhanced fishing opportunities for both commercial and recreational fishermen as a result of species recovery, spillover and seeding effects, habitat protection, conservation of old-growth age structure and genetic diversity, establishment of reference sites to examine the regional effects of fishing, and better information on access opportunities.

- **Maintained Coastal Community Identity** – Creation of the national system could help foster social stability by helping to maintain cultural heritage and economic viability.
- **Non-extractive Uses** – Establishment of the national system could create additional system-wide non-consumptive benefits, such as aesthetic, bequest, and spiritual values; opportunities for viewing and photographing marine wildlife; wilderness experiences; scientific research; education; and appreciation of natural resources and the importance of their management.
- **Enhanced Planning for Ocean Uses** – Identification of national system MPAs, as well as identification of areas important for conservation identified through a gap analysis, will help inform regional-scale planning and decision making associated with a wide range of ocean uses. This could also contribute to a more predictable regulatory environment for ocean industry.

## Public Awareness, Understanding, and Education

- **Increased Support for Marine Conservation** – The national system recognizes the immense value of our nation's oceans and coasts and could help boost marine conservation by elevating the public profile of MPAs as a management tool. The designation of existing MPAs as part of the national system could enhance the stature of these sites within their managing entities and their local communities, as well as nationally and internationally. This designation also could build support for investment in appropriately established MPAs. Recognition of protected areas in other national or global systems (e.g., the National Estuarine Research Reserve, National Trail, and National Wilderness systems; United Nations Educational, Scientific, and Cultural Organization's World Heritage Sites; Ramsar Wetland sites) has had similar results.

- **More Effective and Efficient Outreach** – The national system will be an important and efficient mechanism for increased public awareness and understanding of the importance of marine resources and conservation efforts. Coordinated outreach efforts will increase the impact of outreach by individual MPAs, and could result in cost savings. Including worthy, but currently little known, sites in the national system could bring increased recognition and visibility to these areas.
- **Promotion of Cultural Heritage** – Participation in the national system elevates and enhances the recognition of and appreciation for the cultural heritage value of MPA sites.
- **Enhanced Educational Opportunities** – The creation of the national system will present enhanced opportunities for natural and cultural heritage education. This could include onsite education and interpretation, as well as classroom and web-based resources. The national system will be a valuable tool for educating students and visitors about the nation’s diverse marine and coastal ecosystems and cultural resources.
- **Enhanced Research Opportunities** – The national system will provide scientists and managers more opportunities to understand the dynamics of marine ecosystems and human interactions with them under different management regimes.
- **Improved Gap Analysis and Planning** – The formation of the national system will help highlight gaps in protection of important places for which MPAs might be considered to meet priority conservation objectives. This will inform future planning efforts to create MPAs to fill the identified gaps.
- **Enhanced Interagency Cooperation** – The creation of the national system will provide an unprecedented venue and catalyst for increased cooperation among the diverse entities across all levels of government with management authority for the different types of MPAs that comprise the national system. The existence of national system MPAs in the same region is intended to stimulate cooperative efforts in planning, research and monitoring, sharing of equipment and personnel, enforcement efforts, and educational campaigns.
- **Enhanced Regional Coordination** – The establishment or enhancement of regional MPA coordination forums via the national system offers an opportunity for managing entities and stakeholders to look beyond their individual jurisdictions, mandates, and interests, and consider regional and/or ecosystem-based approaches to MPA planning.
- **Enhanced International Coordination** – The national system will facilitate the identification of opportunities to improve linkages with, and provide technical assistance to, international marine protected area programs, to enhance cooperative conservation across international boundaries.

## **Enhanced Coordination and Strategic Direction**

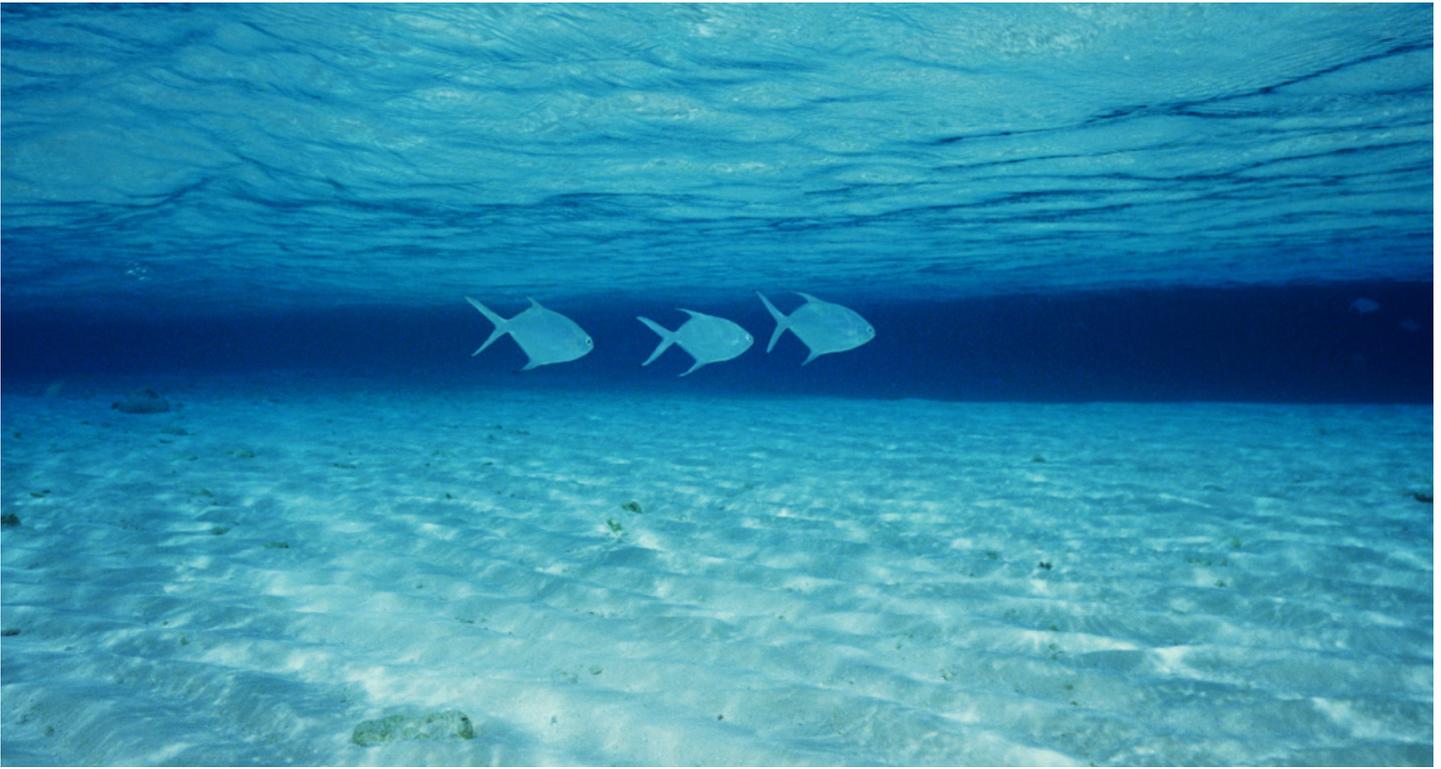
- **Shared National System Conservation Objectives** – The national system will focus on specified priority objectives (see Section III (B)). By providing a focus for national and regional conservation efforts, these shared objectives will help build consensus about priority conservation actions, and ultimately increase the effectiveness of the diverse



**Natural Heritage:** *The nation's biological communities, habitats, ecosystems, and processes and the ecological services, uses, and values they provide to present and future generations.*

**Cultural Heritage:** *The cultural resources that reflect the nation's maritime history and traditional cultural connections to the sea, as well as the uses and values they provide to present and future generations.*

**Sustainable Production:** *The nation's renewable living resources and their habitats (including, but not limited to, spawning, mating, and nursery grounds, and areas established to minimize incidental bycatch of species) and the social, cultural, and economic values and services they provide to present and future generations.*



# III. DEFINING THE NATIONAL SYSTEM OF MPAS

## A. NATIONAL SYSTEM PURPOSE

The purpose of the national system is to support the effective stewardship, conservation, restoration, sustainable use, and public understanding and appreciation of the nation's significant natural and cultural marine heritage and sustainable production marine resources, with due consideration of the interests of and implications for all who use, benefit from, and care about our marine environment.

## B. NATIONAL SYSTEM GOALS AND PRIORITY CONSERVATION OBJECTIVES

The national system's goals and objectives are designed to address the requirements of the Order to develop a comprehensive National System of MPAs representing



diverse United States marine ecosystems and the nation's natural and cultural resources. These goals, which are all of equal importance, have been designed with input and recommendations of the MPA FAC and other stakeholders to meet the purpose of the national system relative to the conservation of the nation's natural heritage, cultural heritage, and sustainable production marine resources (Table 1).

These goals and associated priority conservation objectives are intended to guide the development of the comprehensive national system, including identification of both existing MPAs to be included and conservation gaps which might be addressed through the establishment of MPAs. The national system as a whole will work collectively to achieve these goals and objectives. It is not expected that any individual MPA, MPA program, or system should address all goals or objectives. Measuring progress toward the attainment of these goals is addressed in Section V(C).

### **Prioritization of Conservation Objectives**

Given the magnitude of the task of building a comprehensive national system, the MPA Center will follow a gradual implementation process based on the iterative achievement of the prioritized conservation objectives as outlined in the table below. In this way, building the national system will begin with a focus on a subset of the highest-priority (near-term) objectives for each goal and as completed will move on to the next highest-priority conservation objectives for each goal.

The conservation objectives listed below were prioritized by the MPA FAC and the MPA Center for near-term, mid-term, and long-term implementation based on:

- the availability of existing scientific or other data necessary to achieve the objective;
- the importance of the objective, i.e., its relative urgency and significance as compared to the other objectives; and
- the effort necessary to achieve the objective, in

this case the ability to complete the nomination of existing areas and the identification of conservation gaps relative to the objective(s).

Achievement or completion of each conservation objective will include the following activities:

1. identification of existing MPAs that contribute to that objective and nomination of those MPAs by managing entities to the national system, and
2. identification of associated conservation gaps in the national system.

Priority conservation objectives should be considered together and at the regional scale, recognizing that implementation of the priority conservation objectives may not occur simultaneously and that conservation gaps in some areas may be addressed by MPAs, some other management tool, or a combination of tools, as appropriate. Specific processes for each of these activities are described in later sections of this document. Nonetheless, in practical terms, it is unlikely that all objectives within the same timeframe designation (e.g., near-term) will be able to be addressed simultaneously due to varying complexity of implementation and available staffing and funding resources.

To ensure that partners and stakeholders are kept informed of the status of building the national system, the MPA Center will publish, on an as-needed and sequential basis, "priorities announcements" that list the specific subsets of the near-term, mid-term, and long-term national system conservation objectives for each goal as targets for building the national system.

### **C. NATIONAL SYSTEM DESIGN AND IMPLEMENTATION PRINCIPLES**

The following principles are intended to guide the decisions and actions of managing entities and stakeholders in building and implementing an effective national system. These principles have been adapted from recommendations of the MPA FAC and the World

**Table 1. National System Goals and Priority Conservation Objectives**

<b>Goal 1: For Natural Heritage Marine Resources</b> – Advance comprehensive conservation and management of the nation’s biological communities, habitats, ecosystems, and processes and the ecological services, uses, and values they provide to present and future generations through ecosystem-based MPA approaches.	
<b>Priority Conservation Objectives for Goal 1 – Conserve and manage:</b>	
Key reproduction areas and nursery grounds	<b>Near Term</b>
Key biogenic habitats	
Areas of high species and/or habitat diversity	
Ecologically important geological features and enduring/recurring oceanographic features	
Critical habitat of threatened and endangered species	<b>Mid Term</b>
Unique or rare species, habitats, and associated communities	
Key areas for migratory species	<b>Long Term</b>
Linked areas important to life histories	
Key areas that provide compatible opportunities for education and research	

<b>Goal 2: For Cultural Heritage Marine Resources</b> – Advance comprehensive conservation and management of cultural resources that reflect the nation’s maritime history and traditional cultural connections to the sea, as well as the uses and values they provide to present and future generations through ecosystem-based MPA approaches.	
<b>Priority Conservation Objectives for Goal 2 – Conserve and manage:</b>	
Key cultural and historic resources listed on the National Register of Historic Places (NRHP)	<b>Near Term</b>
Key cultural and historic resources determined eligible for the NRHP or listed on a State Register	
Key cultural sites that are paramount to a culture’s identity and/or survival	
Key cultural and historic sites that may be threatened	<b>Mid Term</b>
Key cultural and historic sites that can be utilized for heritage tourism	
Key cultural and historic sites that are underrepresented	<b>Long Term</b>

<b>Goal 3: For Sustainable Production Marine Resources</b> – Advance comprehensive conservation and management of the nation’s renewable living resources and their habitats (including, but not limited to, spawning, mating, and nursery grounds and areas established to minimize bycatch of species) and the social, cultural, and economic values and services they provide to present and future generations through ecosystem-based MPA approaches.	
<b>Priority Conservation Objectives for Goal 3 – Conserve and manage:</b>	
Key reproduction areas, including larval sources and nursery grounds	<b>Near Term</b>
Key areas that sustain or restore high-priority fishing grounds	
Key areas for maintaining natural age/sex structure of important harvestable species	<b>Mid Term</b>
Key foraging grounds	
Key areas that mitigate the impacts of bycatch	<b>Long Term</b>
Key areas that provide compatible opportunities for education and research	



Commission on Protected Areas/International Union for Conservation of Nature (WCPA/IUCN) report, “Establishing networks of marine protected areas: A guide for developing national and regional capacity for building MPA networks” (WCPA/IUCN, 2007).

## National System Design Principles

Design principles will be used to guide the development of the national system, including the identification of priority conservation gaps in the national system (Section IV (D)) and regional MPA planning (Section V (A) (2)).

- **Prioritized resource conservation targets** – Focus first on conservation objectives that are of highest priority based on significance and urgency, availability of existing scientific and other data, and ability of the managing entity(ies) to act on objectives in the near-term.
- **Representativeness** –
  - *Geographically representative* – represents the range of geographic regions of the nation.
  - *Ecologically representative* – represents the range of marine and coastal biological diversity (from genes to species to habitats to ecosystems) and associated physical environments within the region or nation.
  - *Culturally and/or historically representative* – represents the range of cultural and/or historic resources and values of a particular ecosystem or region or the nation.
  - *Levels of government* – includes areas managed by federal, state, tribal, and local governments and communities.
- **Replication** – Includes multiple sites to ensure continued representation in the face of harmful impacts.
- **Precautionary design** – Decisions are based on the best information currently available

from natural science, social science, customary and local knowledge, and other sources. Where information is limited, decisions should reflect a precautionary approach.

- **Resilience** – Designed to maintain ecosystems’ natural states and to absorb shocks, particularly in the face of large-scale and long-term changes (such as climate change).
- **Viability** – Inclusion of self-sustaining, geographically dispersed component sites of sufficient extent to ensure population persistence through natural cycles of variation.
- **Connectivity** – Maximize and enhance the linkages among individual MPAs, groups of MPAs within a given eco-region, or MPA networks in the same and/or different regions.

## National System Planning and Implementation Principles

Planning and implementation principles that will guide national system efforts are discussed further under Section V, “Implementing the National System,” including regional coordination and MPA planning.

- **Cooperation and coordination** – Fosters cooperation and coordination among federal, state, tribal, local, and other management entities to reduce administrative costs, promote efficiency, and effectively utilize existing management infrastructure.
- **National scope, ecosystem and regional scale** – Embraces regional and ecosystem approaches to planning, participation, and implementation. Provides a mechanism for coordinating across regions, nationally, and where appropriate, internationally.
- **Adaptive management** – Employs a systematic process for continually improving national system management policies and practices by learning from the outcomes of operational programs.

- **Monitoring and assessment** – Promotes sound monitoring and evaluation at the site and system levels to assess management effectiveness, relying on established evaluation processes and methodologies, where possible.
- **Compliance and enforcement** – Promotes effective compliance with and enforcement of MPA regulations through design recommendations for MPAs and networks, capacity building, public education, and other mechanisms.
- **Balanced stakeholder involvement** – Provides meaningful opportunities for input from and participation by the nation’s MPA stakeholders, including the general public.
- **Active outreach and education** – Raises awareness and understanding of MPAs and stewardship of marine resources.
- **On-site and off-site influences and impacts** – Recognizes and seeks appropriate mechanisms to address both on-site and off-site influences, including impacts to coastal and marine resources from land-based activities.
- **Respecting local and indigenous values** – Considers and addresses local values, including those of indigenous cultures.
- **Appropriate access and compatible uses** – Provides opportunities for appropriate access to and/or compatible use of marine resources consistent with conservation goals and objectives.

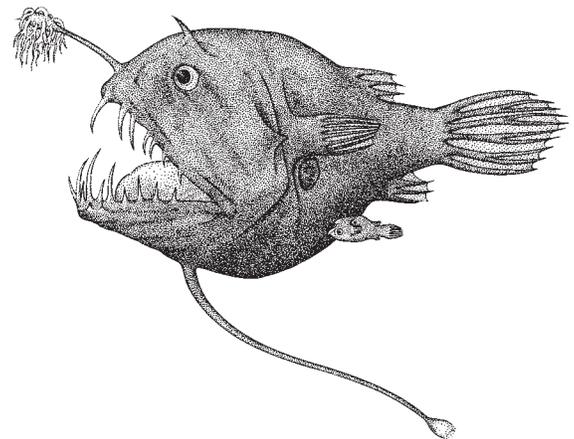
## D. MPA ELIGIBILITY CRITERIA

To be eligible for nomination to the national system, existing MPAs must meet three (four for cultural sites) criteria, shown in Figure 2 and described in more detail below:

1. Meet the definitional criteria of an MPA, including each of its key terms (see definitions in Table 2) – area, marine environment, reserved, lasting, and protection.

2. Have a management plan.
3. Support at least one priority goal and conservation objective of the national system.
4. Cultural heritage MPAs also must conform to criteria for including sites on the National Register of Historic Places.

Additional sites not currently meeting the management plan criterion can be evaluated for eligibility to be nominated to the system on a case-by-case basis based on their ability to fill gaps in national system coverage of the priority conservation objectives and design principles described in Sections III (B) and (C), respectively. To the extent practicable, the MPA Center intends to assist otherwise qualified sites that do not meet the management plan criterion to develop or strengthen their management plans.

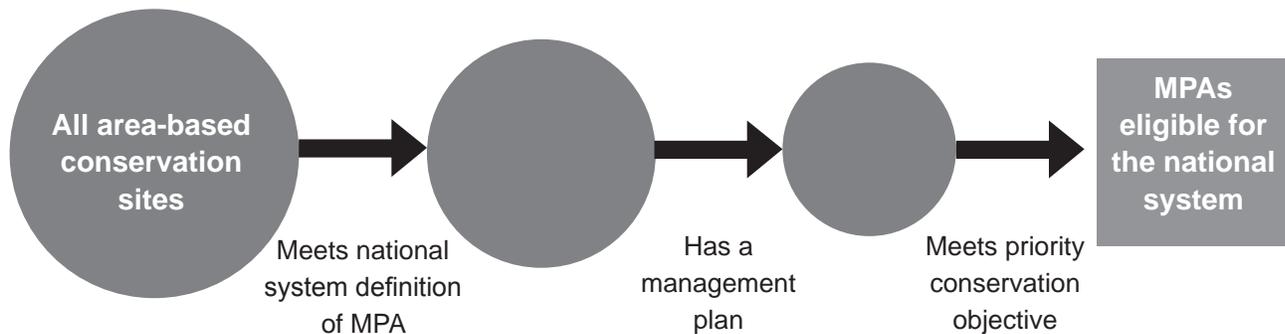


### (i) Definition of MPA and its Key Terms

With the goal of standardizing the term “marine protected area” for the purposes of the national system, the Order defines an “MPA” as “[a]ny **area** of the **marine environment** that has been **reserved** by Federal, State, territorial, tribal or local laws or regulations to provide **lasting protection** for part or all of the natural and cultural resources therein.”

Without further clarification, the key terms of “area,” “marine environment,” “reserved,” “lasting,” and “protection” found in the MPA definition are subject to a range of interpretations and lead to an uncertain scope for the national system. The

**Figure 2: Eligibility Criteria for the National System**



definitions of key terms for “MPA” listed in Table 2 were guided by recommendations from stakeholders, including the MPA FAC, the analysis of existing place-based conservation efforts, and *Federal Register* comment processes for the Draft and Revised Draft Frameworks.

**(ii) Management Plan Criteria**

To be eligible for nomination to the national system, an MPA must have a management plan that:

Has been developed at one of the following scales:

- a site-specific MPA management plan,
- part of a larger MPA programmatic management plan,
- component of a broader, non-MPA programmatic management plan (e.g., fishery management plan or species recovery plan), or
- a verbal or written community agreement.<sup>5</sup>

Includes both of the following components:

- specified conservation goals, and
- a process or requirement for monitoring and evaluation of goals.

**(iii) Priority Goals and Objectives of the National System**

An MPA’s conservation purpose must specifically contribute to at least one of the priority goals and objectives published by the MPA Center as current conservation priorities, as described in Section III (B) above.

**(iv) National Register of Historic Places Criteria**

Cultural resources in the national system of MPAs can include submerged archeological resources, cultural landscapes, and structures as well as ethnographic resources with tribal or traditional cultural meaning, value, and use. Given the cultural resource management community’s widespread acknowledgement of the standards developed by the National Park Service for inclusion of a cultural resource in the National Register of Historical Places (NRHP), the national system will integrate core elements of those standards into its criteria for MPAs with cultural marine resources. As such, the cultural marine resources within those MPAs must be historic and defined as at least 50 years of age, unless otherwise determined to be unique to the nation’s maritime history or traditional connections to the sea as defined by the NRHP. In addition, the resources must meet the following NRHP evaluation criteria:

<sup>5</sup> Given the unique nature of community agreements, whether verbal or written, the requirement for these management agreements to include conservation goals and monitoring and evaluation components may be met through traditional or science-based approaches. In some Pacific Island cultures, for example, management agreements may be part of local oral tradition, and are not written, but would still be considered as meeting this criterion.

**Table 2. Definition of Key Terms for the Purposes of the National System**

Key Term	Definition
<b>Area</b>	<p>Must have legally defined geographical boundaries, and may be of any size, except that the site must be a subset of the United States federal, state, local, or tribal marine environment in which it is located. Application of this criterion would exclude, for example, generic broad-based resource management authorities without specific locations and areas whose boundaries change over time based on species presence. The area must be one over which the United States has jurisdiction, consistent with international law.</p>
<b>Marine environment</b>	<p>Must be: (a) ocean or coastal waters (note: coastal waters may include intertidal areas, bays or estuaries); (b) an area of the Great Lakes or their connecting waters; (c) an area of submerged lands under ocean or coastal waters or the Great Lakes or their connecting waters; or (d) a combination of the above. The term “intertidal” is understood to mean the shore zone between the mean low water and mean high water marks. An MPA may be a marine component part of a larger site that includes uplands; however, the terrestrial portion is not considered an MPA. For mapping purposes, an MPA may show an associated terrestrial protected area.</p> <p>For purposes of the national system, NOAA and DOI intend to use the following definition for the term “estuary”: “part of a river or stream or other body of water having unimpaired connection with the open sea, where the sea water is measurably diluted with fresh water derived from land drainage, and extending upstream to where ocean-derived salts measure less than 0.5 parts per thousand during the period of average annual low flow.” Application of this criterion would exclude, for example, strictly freshwater sites outside the Great Lakes region that contain marine species at certain seasons or life history stages unless that site is a component of a larger, multi-unit MPA.</p> <p>Upon request, the agencies will work with individual federal, state, and tribal MPAs and programs to examine unique conditions that may affect applicability of the term “estuary” or “coastal waters” for sites that have national or regional significance or representativeness.</p> <p>Estuarine-like sites on tributaries of the Great Lakes will be considered for inclusion if they are located within the eight-digit U.S. Geological Survey cataloging unit adjacent to a Great Lake or its connecting waters.</p>
<b>Reserved</b>	<p>Must be established by and currently subject to federal, state, local, or tribal law or regulation. Application of this criterion would exclude, for example, privately created or maintained marine sites.</p>



<p><b>Lasting</b></p>	<p>For natural heritage and cultural heritage MPAs, the site’s authority must clearly state its intent to provide permanent protection. This definition recognizes that subsequent to establishment, MPA designation and level of protection may change for various reasons, including natural disasters that may destroy or alter resources or changes in societal values. Should any of these changes occur, the status of the MPA relative to the national system could be re-evaluated.</p> <p>Sites and/or protections that must have a specific legislative or other administrative action to be decommissioned shall be considered to have been established with the intent to provide permanent protection. This would include, for example, sites that have a requirement for periodic renewal contingent on evaluation of effectiveness, with no specified expiration date.</p> <p>For sustainable production MPAs, the site must be established with the intent at the time of designation to provide, at a minimum, the duration of protection necessary to achieve the mandated long-term sustainable production objectives for which the site was established.</p> <p>For all MPAs, the site must provide the same level and type of protection at a fixed location and fixed and regular period of any duration during a year.</p>
<p><b>Protection</b></p>	<p>Must have existing laws or regulations that are designed and applied to afford the site with increased protection for part or all of the natural and submerged cultural resources therein for the purpose of maintaining or enhancing the lasting conservation of these resources, beyond any general protections that apply outside the site.</p> <p>Application of this criterion would exclude restricted areas that are established for purposes other than conservation. The term would not include, for example, areas closed for navigational safety, areas closed to safeguard modern human-made structures (e.g., submarine cable no-anchor zones), polluted shellfish-bed closure areas, areas closed to avoid fishing gear conflicts, and areas subject to area-based regulations that are established solely to limit fisheries by quota management or to facilitate enforcement.</p>

“The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- a. That are associated with events that have made a significant contribution to the broad patterns of our history; or
- b. That are associated with the lives of significant persons in our past; or
- c. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- d. That have yielded or may be likely to yield, information important in history or prehistory.”

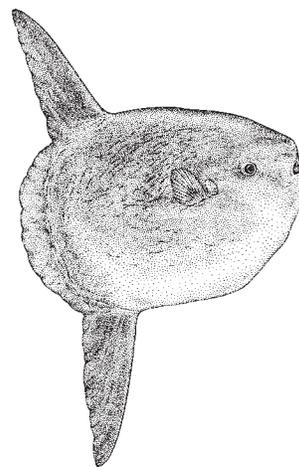
## E. MPA CATEGORIES

The set of national system MPA categories listed below in Table 3 are intended to provide a limited set of user-friendly terms for communicating generally about the purpose of and level of protection for MPAs that become a part of the national system.<sup>6</sup> In addition, these categories will be useful for:

- partitioning the national system into manageably sized groups of comparable sites to ease identification of shared technical or other assistance;
- grouping sites based on comparable conservation objectives and levels of protection to facilitate identification of gaps in conservation; and

- providing a logical framework for organizing and monitoring how sites added to the national system contribute to the system’s conservation objectives.

The MPA Center will work with the respective managing entities to determine the most appropriate category for the MPAs as they become a part of the national system. This categorization will not in any way supersede the designated name or title of the MPA, as established by law or other independent authorities.



<sup>6</sup> A more detailed categorization scheme useful for more in-depth analysis is provided at <http://www.mpa.gov>.



**Table 3. National System MPA Categories**

National System Purpose	MPA Category	Protection and Use Sub-category*	Management Goal(s)
Conserve Marine Heritage	Marine Natural Heritage Areas	Natural Heritage Conservation Areas	Conserve and manage the nation's biological communities, habitats, ecosystems, and processes and the ecological services, uses, and values they provide to present and future generations through ecosystem-based MPA approaches.
		Natural Heritage Reserve Areas	Strongly protect the nation's biological communities, habitats, ecosystems, and processes and the ecological services, uses, and values they provide to present and future generations through ecosystem-based MPA approaches.
	Marine Cultural Heritage Areas	Cultural Heritage Conservation Areas	Conserve and manage cultural resources that reflect the nation's maritime history and traditional cultural connections to the sea and the uses and values they provide to present and future generations through ecosystem-based MPA approaches.
		Cultural Heritage Reserve Areas	Strongly protect cultural resources that reflect the nation's maritime history and traditional cultural connections to the sea and the uses and values they provide to present and future generations through ecosystem-based MPA approaches.
	Marine Natural and Cultural Heritage Areas	Natural and Cultural Heritage Conservation Areas	Management goals of marine natural heritage conservation areas and of marine cultural heritage conservation areas.
		Natural and Cultural Heritage Reserve Areas	Management goals of marine natural heritage reserve areas and of marine cultural reserve areas.
Sustain Marine Production	Marine Sustainable Production Areas	Sustainable Production Conservation Areas	Advance comprehensive conservation and management of the nation's renewable living resources and their habitats (including, but not limited to, spawning, mating, and nursery grounds and areas established to minimize bycatch of species) and the social, cultural, and economic values and services they provide to present and future generations through ecosystem-based MPA approaches.
		Sustainable Production Reserve Areas	Strongly protect the nation's renewable living resources and their habitats (including, but not limited to, spawning, mating, and nursery grounds and areas established to minimize bycatch of species) and the social, cultural, and economic values and services they provide to present and future generations through ecosystem-based MPA approaches.

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**\*Conservation Areas:** Multiple uses allowed; however, uses and activities may be restricted or zoned, and access limited, as necessary to meet site management goals.

**\*Reserve Areas:** No extractive uses allowed, except permitted scientific and educational uses; destructive or disruptive activities limited; other uses and activities may be restricted or zoned, and access limited, as necessary to meet site management goals.



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FRAMEWORK FOR THE NATIONAL SYSTEM OF MARINE PROTECTED AREAS OF THE UNITED STATES OF AMERICA



# IV. BUILDING THE NATIONAL SYSTEM OF MPAS

## A. SUMMARY AND SEQUENCE

Building the national system will involve two major sets of activities:

1. the identification, nomination, and inclusion of existing MPAs in the national system and on the official List of National System MPAs, and
2. the identification of national system conservation gaps in protection of important marine areas that meet the national system's conservation objectives and design criteria, outlined in Sections III (B) and (D) above, with facilitation of subsequent development by the relevant establishing agencies of new MPAs and/or enhancement of existing MPAs to fill those gaps, where appropriate, outlined in Section IV (D) below.



Given the magnitude of the task of developing the national system, the MPA Center will follow an iterative process to build the system gradually over time. The pace of this process will be determined by the availability of resources to carry out the process. The sequence of the iterative process for the above two major sets of national system building activities is as follows, and shown in Figure 3 (a more thorough description of each activity can be found in subsequent subsections):

- As described in Section III (B), the MPA Center will periodically identify near-term priority conservation objectives to guide the phased development of the national system.
- As described in Section IV (B), the MPA Center will lead a nation-wide nomination process for eligible existing MPAs that contribute to the targeted conservation objectives, and include those MPAs in the national system that are successfully nominated and accepted.
- As described in Section IV (D), the MPA Center will lead a collaborative region-by-region process to identify conservation gaps relative to the targeted conservation objectives and national system design criteria. Conservation gaps will be used to inform the development of recommendations for new MPAs through regional MPA planning described in Section V (A), and can also be used by managing entities and stakeholders to guide their efforts to establish new MPAs. It is expected that any management actions taken to fill these gaps will consider different management alternatives and the impacts of those alternatives on human uses of the areas.

- Upon completion of the nation-wide nomination process and region-by-region conservation gap identification for the targeted conservation objectives, or at such other time that resources and capabilities allow, the MPA Center will publish the next iterative set of conservation objectives to serve as targets for building the national system.

## B. NOMINATION PROCESS FOR EXISTING MPAS

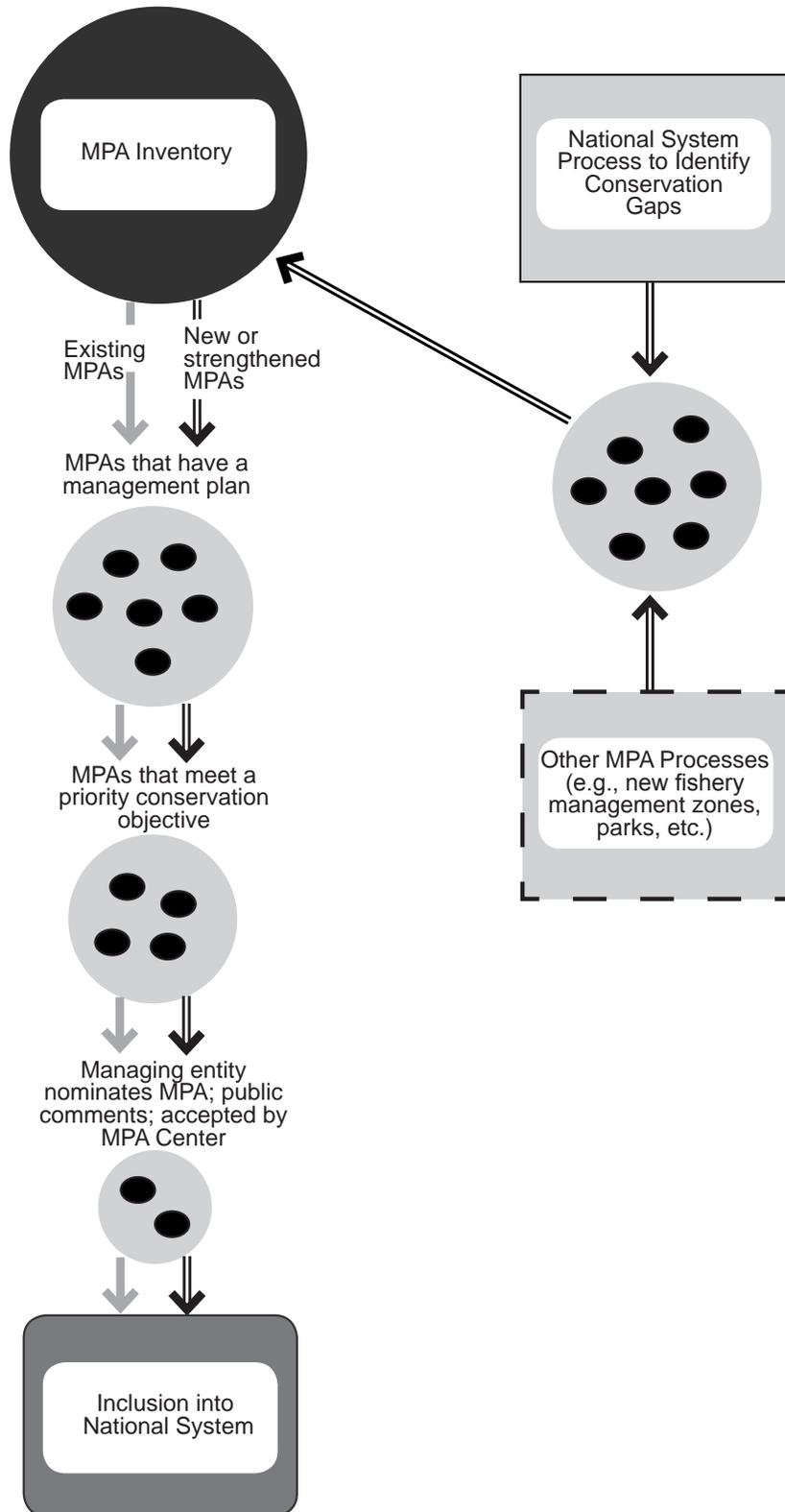
The process for nominating and including eligible MPAs in the national system is as follows. Nominations of existing MPAs originate with the managing entity(ies), with the MPA Center providing background information and analysis (see Figure 4 for summary):

1. The MPA Center will review sites in the United States Marine Protected Areas Inventory and identify the set of sites that meet the three (or four, for cultural sites) MPA eligibility criteria outlined in Section III (D). Information on whether sites meet criterion 3, supporting at least one priority goal and conservation objective of the national system, will be provided by the managing entity. The MPA Inventory (see <http://www.mpa.gov>) is a refinement of the earlier Marine Managed Areas Inventory, which was a broader collection of place-based management areas in U.S. waters.
2. The MPA Center will send the managing entity or entities<sup>7</sup> for those sites found to be potentially eligible a letter of invitation to nominate the site, including the rationale for eligibility.

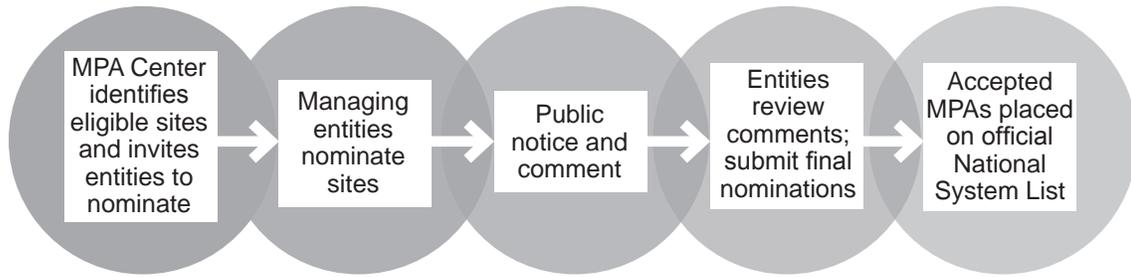
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<sup>7</sup> In most cases, management authority for an MPA lies with one agency or program; however, in certain instances, such as the federal/state National Estuarine Research Reserve System and state/tribe co-management arrangements, authority is formally shared or split among two or more entities. Similarly, Regional Fishery Management Councils have a unique role with the National Marine Fisheries Service in the process for establishing federal fishery management zones and federal fisheries habitat conservation zones. Where explicit agreements and/or legislation govern shared management authority or other formal relationships, the multiple managing entities will be consulted throughout the nomination process. Regional Fishery Management Councils will be a key partner with NOAA in nominating sites to the national system. Through a transparent process, NOAA will consult with its Council partners and fully consider the views and interests of the Councils prior to nominating a site to the national system. These NOAA-Council consultations would take place at the regional-level at key stages of the nominating process, and DOC/NOAA would make final decisions on nominations.

**Figure 3: Building the National System of MPAs**



**Figure 4: Summary of Nomination Process**



3. The managing entity or entities will be asked to consider and nominate some or all of the identified sites for inclusion in the national system, including additional information required to evaluate site eligibility relative to meeting priority conservation objectives.

The managing entity or entities may also provide a brief justification and nomination for: a) unsolicited sites believed to meet the requirements for entry into the national system, or b) other sites that do not appear to currently meet the management plan eligibility criterion but are deemed to be a priority for inclusion based on their ability to fill gaps in national system coverage of the priority conservation objectives and design principles.

4. The MPA Center will review the set of nominated sites to ensure that nominations are sufficiently justified.
5. The MPA Center will notify the public, via the *Federal Register* and other means, of the set of sites nominated for inclusion in the national system and provide the opportunity to comment on the eligibility of nominated sites (or sites that have not been nominated) relative to the eligibility criteria and any additional justification. The MPA Center will work with the managing entities to ensure adequate public involvement, including public meetings, as appropriate.

6. The MPA Center will receive, evaluate, and forward public comment to the relevant managing entity or entities, which will reaffirm or withdraw (in writing to the MPA Center) the nomination based on public comment received and any other factors deemed relevant.

7. The MPA Center will review the final determination for each nomination, consult as necessary with the managing entity or entities should there be any discrepancies, and accept mutually agreed upon MPAs into the national system.

8. MPAs that are accepted into the national system will be listed in the official List of National System MPAs (see below) comprising the national system and made available to the public via the *Federal Register*, the website <http://www.mpa.gov>, and other means.

Where non-governmental stakeholders, including the general public, may have an interest in the nomination of certain MPAs, they are encouraged to contact the respective managing entity or entities to share their perspectives about nomination in addition to participating in the public comment process described in number 5 in this section. Similarly, where government agencies have an interest in the nomination of eligible MPAs for which they do not have management authority, they are encouraged to consult with the respective managing entity or entities.

## C. THE OFFICIAL LIST OF NATIONAL SYSTEM MPAS

### 1. Adding MPAs to the List and National System

Pursuant to Section 4(d) of the Order, and to ensure that managing entities, organizations, and the general public are aware of the MPAs that make up the national system, the MPA Center will maintain a List of National System MPAs. The List of National System MPAs will be the official inventory of all MPAs that have been formally included in and recognized as part of the National System of MPAs under Section IV (B), above. In addition, MPAs on the List of National System MPAs are those sites that are the subject of Section 5 of the Order, "Agency Responsibilities," as described in Section V (D) of this document. This authority does not apply to MPAs not on the List of National System MPAs.

#### The List will include the following information for each national system MPA:

- a. name,
- b. location,
- c. national system MPA category,
- d. priority conservation objective(s) contributed to,
- e. boundaries,
- f. key resources protected,
- g. authorizing legislation,
- h. levels and types of protection,
- i. managing authority or program,
- j. name of point of contact, and
- k. relevant contact information.

The MPA Center will regularly publish an updated, summary version of the List of National System MPAs in the *Federal Register*, and will make it available to the public at <http://www.mpa.gov> or by request.

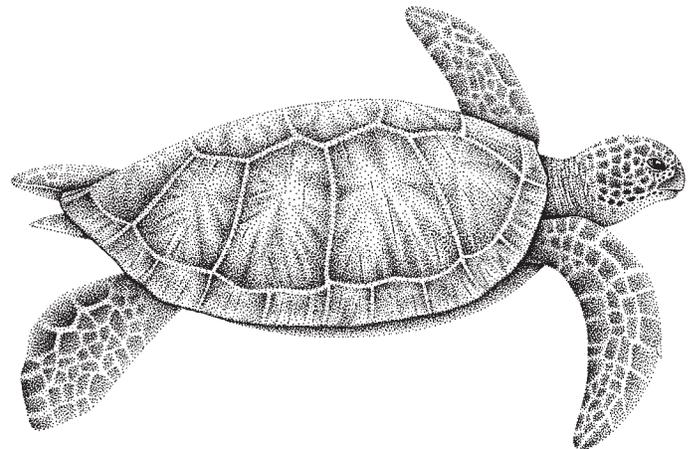
### 2. Modifying MPAs on the List and in the National System

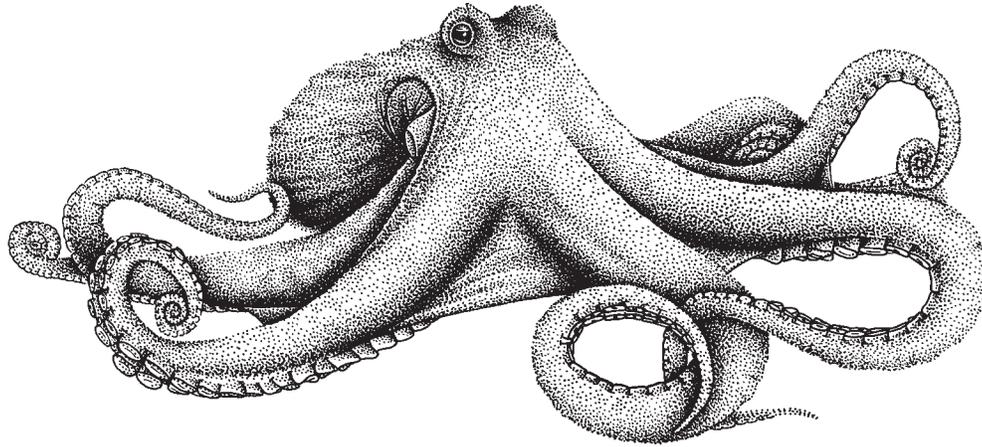
Participation in the national system does not constrain the management entity from changing its management of the MPA. The management entity would still have the ability, within its own authorities and required processes, to add or reduce levels of protection, change the size of the MPA, or make other changes. Management entities would be asked to provide all significant updates to the MPA Center, but would not be required to re-nominate the site. If the MPA no longer meets the national system MPA eligibility criteria, it would be removed from the system (see Section IV (C) 3).

### 3. Removing MPAs from the List and National System

MPA sites or systems that have been included on the List of National System MPAs may be removed at any time by written request of the managing entity(ies) or the MPA Center for reasons including:

- the MPA ceases to exist (e.g., the legal authority or regulations expire);





- the MPA no longer meets the national system MPA eligibility criteria; or
- the managing authority requests removal.

All requests from managing entities or actions by the MPA Center to remove an MPA from the national system must be made in writing, will become part of the public record, and will be published at <http://www.mpa.gov> and in the *Federal Register* for comment. Upon receipt by the MPA Center of a request to remove an MPA from the national system, the managing entity(ies) and the MPA Center will enter into a dialogue on the proposal. Any comments received from the public relating to the removal of an MPA from the national system will be forwarded to the managing entity(ies) for its consideration in making its final determination to have the site removed from the national system. Upon completion of all obligations by the respective managing entity(ies), the MPA will be removed from the List of National System MPAs and all information referencing the site will be removed from national system materials and archived in the national system information on the website.

#### D. IDENTIFYING NATIONAL SYSTEM CONSERVATION GAPS

The nation's suite of existing MPAs contributes significantly to the building of a comprehensive and representative national system. The critical next step toward achieving the national system's conservation

objectives is the identification of conservation gaps: areas in the ocean and Great Lakes that meet priority conservation objectives of the national system but that are currently not adequately protected to ensure their long-term viability, as called for in Section 4 (a) of the Order. Conservation gaps identified herein can be used by existing federal, state, tribal, and local MPA managing entities and others to guide their future efforts to establish new or strengthen existing MPAs using their independent authorities and processes, or to address these gaps through other management tools. In addition, the gaps identified through this process will be used to facilitate regional planning and collaboration that may ensue as described in Section V (A).

This section outlines the process for identifying gaps in the national system. The process will be comprehensive, taking into account existing MPAs and other conservation measures currently in place. The gap analysis process will be implemented iteratively, relative to targeted specific national system conservation objectives, and on region-by-region bases as described below. Conservation gaps in the national system may exist in a number of forms and can be generally described as:

**Representation gaps:** where a particular habitat, ecosystem, or cultural resource type is either unrepresented or underrepresented in the national system.

**Ecological gaps:** where important species, habitats, ecosystems, or processes fundamental to the national system’s goals are not adequately protected to ensure their lasting conservation and sustainable use.

**Management gaps:** where the management regimes (management objectives or governance types) of MPAs in the national system do not fully provide for lasting conservation or sustainable production of a particular species, habitat, cultural resource, or ecosystem.<sup>8</sup>

Efforts to identify conservation gaps will include the collection and analysis of the best available scientific information and analyses, including traditional ecological knowledge, to identify important marine areas on multiple scales, coupled with an analysis of existing levels of place-based protection in those areas. The resulting gaps in protection will be identified relative to fully achieving the national system conservation objectives and design principles outlined in Sections III (B) and (C), respectively.

Gap identification efforts will be focused at the regional scale, and will be collaborative, involving MPA-related and other entities at various levels of government, FMCs, and other organizations and institutions in synthesizing and analyzing existing scientific information, including traditional ecological knowledge, where available, and established conservation priorities. The effort to identify conservation gaps will include opportunities to review and comment on the process and its results by the public, the MPA FAC, relevant federal agencies, state and tribal governments, and other entities, including the National System Management Committee (Management Committee) described in Section V (B).

The MPA Center also will work with existing or incipient regional marine entities and initiatives to coordinate with their broad management efforts, as appropriate. Efforts to identify gaps will also consider and include relevant international participation and

linkages. The effort aims to provide government agencies with a program-neutral opportunity for collaborative assessment and planning, while ensuring that stakeholders are both informed and involved.

The MPA Center will work with diverse partners, as appropriate, through the following processes to identify gaps in fully achieving the national system’s conservation objectives:

1. Publish, on an as-needed and sequential basis, subsets of the near-term, mid-term, and long-term national system conservation objectives listed in Section III (B) as iterative targets for conservation gap identification.
2. On a regional basis, aggregate, map, and describe relevant and readily available existing data and analyses about important species, habitats, cultural resources, and ecosystems that could contribute to the national system goals and priority conservation objectives.
3. Map and describe, by region, the location and management attributes of existing MPAs that contribute to achieving the targeted national system conservation objectives.
4. Integrate spatial data on ecosystems and place-based management to identify important areas where protection is either lacking or potentially inadequate to achieve national system goals and objectives.
5. Identify key stakeholders in the region and provide identified gaps and background information to the public for comment.
6. Seek input on identified gaps from federal agencies, states, and tribal leaders with management authority in the corresponding region.

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<sup>8</sup> Adapted from: Nigel Dudley and Jeffrey Parish (2006). *Closing the Gap. Creating Ecologically Representative Protected Area Systems: A Guide to Conducting the Gap Assessments of Protected Areas Systems for the Convention on Biological Diversity*. Secretariat of the Convention on Biological Diversity. Montreal, Technical Series no. 24, vi + 108 pages.



7. Seek input on identified gaps from the Management Committee.
8. Provide identified gaps, background information, and a summary of all public and Management Committee comments received to the MPA FAC for consideration and development of prioritized recommendations to DOC and DOI.
9. Upon consideration of all input and recommendations, the MPA Center will publish prioritized national system conservation gaps and corresponding descriptive information for use by managing entities and stakeholders to strengthen existing MPAs or add new MPAs where needed. Information about the conservation gaps identified will be maintained on the <http://www.mpa.gov> website. Gap analyses will be updated periodically as resources permit.

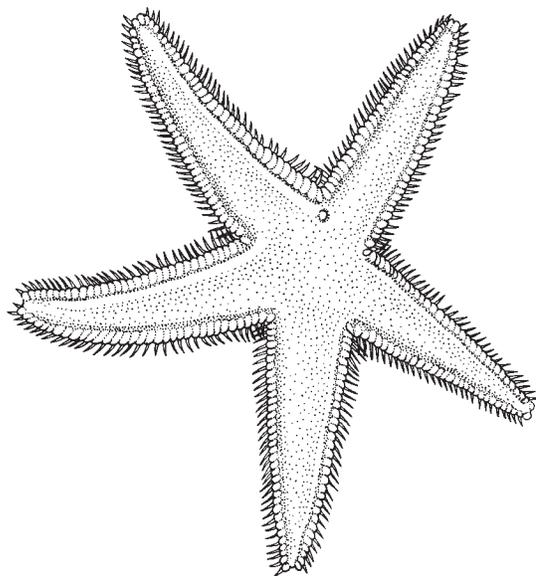
Finally, while the publication of these identified conservation gaps is a major step toward building a comprehensive national system, significant additional evaluation of these gaps and other information will likely be needed by agencies prior to any resulting establishment of new MPAs or changes to existing MPAs' governance. Specifically, managing entities will need to work with stakeholders under the auspices of appropriate MPA authorities to: (i) evaluate these gaps; (ii) incorporate data on human uses and impacts and related societal and economic considerations; and (iii) assess management priorities to make an informed decision about appropriate next steps in response to an identified conservation gap. These steps might include the establishment of a new MPA, changes to existing MPAs, additional research, or some other alternative. Establishment of new MPAs or changes to the governance of existing MPAs must follow relevant processes under established authorities.

The MPA Center can serve as a resource to assist managing entities and stakeholders with such analyses and regional planning processes, as

described in Section V (A). Similarly, identified gaps will be considered by the MPA Center and the Management Committee in prioritizing national system science and stewardship actions. The MPA Center also will report on actions taken by managing entities to address these gaps.

## E. ESTABLISHING NEW NATIONAL SYSTEM MPAS

The Framework lays out the processes for identifying conservation gaps in the national system (see Section IV (D)) and developing recommendations for new or enhanced MPAs through collaborative ecosystem-based MPA planning (see Section V (A) (2)). However, neither the Order nor the Framework provides authority to designate or establish new MPAs or alter protections afforded by existing MPAs. Section 4(e) of the Order states:



*The goal of the MPA Center shall be, in cooperation with the Department of the Interior, to develop a framework for a national system of MPAs, and to provide Federal, State, territorial, tribal, and local governments with the information, technologies, and strategies to support the system. This national system framework and the work of the MPA Center is intended to support, not interfere with, agencies' independent exercise of their own existing authorities.*

These national system processes are intended to offer a more collaborative, systematic and comprehensive approach to MPA planning than currently exists. Recommendations for new or enhanced MPAs that stem from these processes offer entities with MPA management authority valuable guidance for taking independent or cooperative action to establish and/or manage MPAs that meet program mandates while also enhancing regional and national conservation priorities. Moreover, such processes and recommendations offer stakeholders opportunities and information with which to meaningfully engage in MPA decision making efforts.

New MPAs that may eventually be established based on these national system recommendations would subsequently be considered for inclusion in the national system pursuant to the eligibility criteria and nomination process outlined above. Stakeholder participation in the designation process for new MPAs is unchanged by the national system and occurs as specified through the required public consultation processes associated with the authorized designation process.



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FRAMEWORK FOR THE NATIONAL SYSTEM OF MARINE PROTECTED AREAS OF THE UNITED STATES OF AMERICA



## V. IMPLEMENTING THE NATIONAL SYSTEM OF MPAS

Over time, as MPA sites, programs, and systems are added to the national system, efforts to implement the national system – both regionally and nationally – will be initiated. A major emphasis of the MPA Center will be to facilitate and support collaborative implementation efforts with participating MPA sites and programs, subject to available resources. The timing of the implementation elements, described below, may be sequential, simultaneous, or otherwise, depending on resources available and the priorities of national system partners. Significant additional resources will be needed to realize the full potential of each element. In addition, monetary and nonmonetary incentives would greatly enhance state, tribal, and local participation in the national system, thereby increasing its conservation impact. National system implementation components, guided by the national system’s design planning and implementation principles described in Section III (C), include:



- *Enhancing regional coordination and collaboration* – formalizing new and/or supporting existing regional mechanisms to provide for effective, efficient coordination and collaboration among participating MPA sites, systems, and programs.
  - *Improving MPA stewardship and effectiveness* – identifying and prioritizing shared needs for improvements in MPA science, management, and stewardship at regional and national levels and catalyzing partnerships and action to address identified priorities for existing MPAs.
  - *Regional MPA planning* – developing and applying the natural and social science information, decision making tools, and stakeholder engagement processes to evaluate collaboratively the conservation gaps identified in the national system and make recommendations about the need for new and/or enhanced MPAs.
- *National and international coordination* – establishing and implementing a National System Management Committee to serve to link across regions where resource conservation and MPA planning and management issues span regional boundaries and to identify and pursue international MPA linkages to the national system.
- *Evaluating national system effectiveness* – providing technical and scientific support for fostering sound monitoring and evaluation programs at the participating MPA site or system level, as well as development of a set of standards and protocols for assessing broader national system effectiveness.
- *Federal agency responsibilities to avoid harm* – providing guidance regarding Section 5 of the Order, which requires federal agencies to “avoid harm” to the natural and cultural resources protected by MPAs that become part of the national system.
- *Tracking and reporting* – maintaining the <http://www.mpa.gov> website and producing a biennial

State of the National System report and other mechanisms for communicating national system activities, progress, and plans.

## A. ENHANCING REGIONAL COORDINATION AND COLLABORATION

Within the national system, effective regional coordination and collaboration are critical for sharing information and experiences, identifying common priorities and collaborative solutions for enhancing the effectiveness of existing sites, and improving planning and decision making for new MPAs. In the same way, effective regional collaboration must also include making necessary linkages to other marine management initiatives and collaboration mechanisms. For example, the federal Seamless Network initiative, the developing U.S. Integrated Ocean Observing System, coordination with the Regional Fishery Management Councils and Inter-State Fishery Management Commissions, and ongoing or planned regional ocean or Great Lakes initiatives by state governors may offer opportunities for efficiently strengthening MPA collaboration, in addition to working with individual states.

The national system will use U.S. **large marine ecosystems** (LME) as the broadest framework for regional scientifically-based planning and collaboration, recognizing that certain of these regions do not efficiently or fully encompass the political regions of the United States that would be necessary for effective collaboration (Figure 5). For example, the three LMEs associated with the state and federal waters off Alaska can be combined for the purposes of regional MPA collaboration, as could the United States waters of the Caribbean and Gulf of Mexico. Nonetheless, these regions are intended to serve as the broadest framework for regional collaboration, recognizing that other established regions, whether biophysical (e.g., biogeographic regions) or political (e.g., FMC regions), may be nested within LMEs and may serve as more appropriate scales for MPA planning and collaboration. In addition, some issues, such as those pertaining to endangered and threatened species, may require regional collaboration across two or more LMEs.

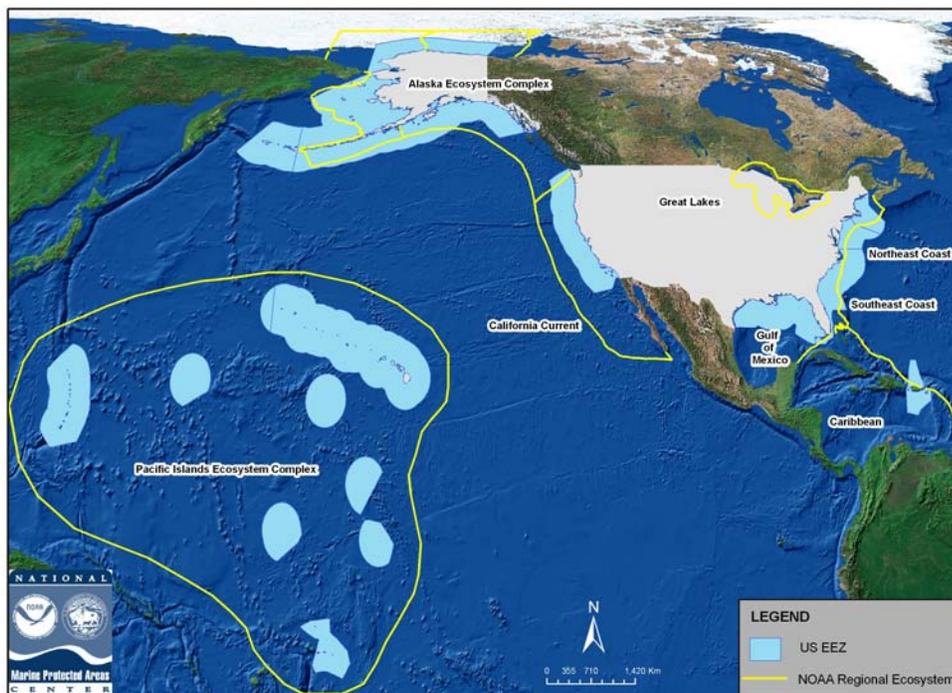


Figure 5. NOAA Regional Ecosystems of the United States

The national system's regional collaboration framework will be built at the broadest level around the following regions, each encompassing state and federal waters, as relevant:

- **Alaska:** Gulf of Alaska, East Bering Sea, and Arctic Seas
- **West Coast:** California, Oregon, and Washington
- **Great Lakes:** Minnesota, Wisconsin, Michigan, Illinois, Indiana, Ohio, Pennsylvania, and New York
- **Gulf of Mexico:** Texas, Louisiana, Mississippi, Alabama, and Florida
- **Caribbean:** U.S. Virgin Islands, Puerto Rico, and Navassa Island
- **Northeast:** Virginia, Maryland, Delaware, New Jersey, New York, Connecticut, Rhode Island, Massachusetts, New Hampshire, and Maine
- **Pacific Islands:** Hawai'i, American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, and the Pacific Remote Insular Areas (Baker Island, Howland Island, Jarvis Island, Johnston Atoll, Kingman Reef, Wake Island, and Palmyra Atoll)
- **Southeast:** Florida, Georgia, South Carolina, and North Carolina

A variety of approaches exist for enhancing regional MPA coordination and collaboration. The appropriate mechanism for any particular region depends in large part on its biophysical and political characteristics and



on the specific goals for which the coordination and collaboration are initiated. The MPA Center will work with all participating state, tribal, and federal MPA sites and programs and existing regional entities in each region to establish and/or formalize an appropriate regional MPA coordination and collaboration mechanism, such as a regional MPA working group, forum, or dialogue.

The MPA Center will consult with participating managing entities in the region to determine the most suitable type (e.g., informal, formal) of coordination and collaboration and the appropriate regional scale. This task includes identifying existing regional MPA and related marine coordination initiatives and determining efficient ways to complement, support or integrate with those efforts, while ensuring opportunities for all national system partners to be represented and for the public to participate.

The facilitation of formalized regional coordination and collaboration mechanisms for the national system is intended to provide a forum for MPA managing entities to work together in an open, transparent manner to:

- develop regional MPA effectiveness and stewardship strategies that identify and prioritize shared needs for improving the effectiveness of existing MPAs in the region (see Section V (A)(1));
- catalyze collaborative initiatives and projects to address identified science and stewardship needs;
- further evaluate identified national system conservation gaps, undertake collaborative, ecosystem-based MPA planning, solicit stakeholder input, and make specific recommendations about the need for the establishment of new MPAs (see Section V (A) (2));
- facilitate continued and new managerial collaboration among MPAs across regional, national, and international boundaries, to

promote consistent approaches to monitoring, enforcement, emergency response, threat abatement, and coordination with other countries and international organizations (such as through transboundary MPAs) and ensure compliance with international law;

- coordinate ecosystem and/or regional input to the national system and recommend annual and longer-term regional science and other priorities based on shared MPA needs across the region;
- develop informal and formal partnerships to achieve economies of scale. For instance, arrange for the sharing of technical and financial resources for monitoring, surveillance, enforcement, staff training, etc.; and
- develop and implement strategies for engaging and informing stakeholders about regional MPA planning, effectiveness, and stewardship activities.

## 1. Improving MPA Stewardship, Science, and Effectiveness

A significant purpose of the Order is to “strengthen the management, protection, and conservation of existing [MPAs]...” (Section 1 (a)). As such, a major emphasis of the national system is to provide support for the shared science, technical, education, and other priority stewardship needs of partner MPA programs to enhance the national system’s effectiveness. With this in mind, collaborative efforts should work to enhance the effectiveness of and provide benefits to existing efforts of MPA programs without creating additional responsibilities that detract from the important work of partners in meeting their existing programmatic authorities.

Formalizing regional coordination mechanisms via the national system offers a unique forum for collaboration to improve the effectiveness and stewardship of existing MPAs by identifying common needs across MPA programs. To this end, the MPA

Center will consult with participating federal, state, and tribal managing entities through formalized regional MPA coordination and collaboration forums to develop regional MPA Stewardship, Science, and Effectiveness Strategies (Strategies). These Strategies will identify, inventory, and prioritize shared science, education, research, management, and other needs for improving MPA stewardship, science, and effectiveness. Wherever possible, these Strategies will incorporate or build upon relevant priorities previously identified through other mechanisms to avoid duplicative efforts.

The development of Strategies is intended to provide an efficient mechanism for the MPA Center to work with participating MPA sites and programs to gather information that will serve as the basis for catalyzing collaborative actions to address shared priorities. The MPA Center will also aggregate the priorities identified in the regional Strategies into a national set of priorities and use these priorities to catalyze large-scale projects and initiatives.

The following are examples of the types of priority science and stewardship issues that may be identified and addressed through the development of regional Strategies and subsequent collaborative actions among MPA programs to improve MPA effectiveness:

- **Enhancing MPA management capacity**
  - management plan development and review;
  - managing visitor and user impacts;
  - enforcement and compliance practices;
  - best practices for meaningful stakeholder involvement; and
  - sustainable financing mechanisms.
- **Improving MPA science and research**
  - developing science-based tools to identify and measure regional, ecosystem, and site connectivity;

- building collaborative strategies for establishing biophysical, social, and economic baselines for MPAs and monitoring trends in these conditions; and
- examining the effects of invasive species on MPAs.
- **Promoting outreach and education**
  - developing educational programs;
  - improving awareness and understanding of the importance of marine resources and the role of MPAs in marine management; and
  - improving public stewardship of marine resources through volunteer programs and other efforts.
- **Improving the evaluation of MPA effectiveness**
  - training and technical assistance on developing relevant indicators and protocols for monitoring and evaluating management effectiveness for individual MPAs and networks of MPAs;
  - identifying consistent indicators for examining marine habitat and resource recovery and social and economic conditions associated with MPAs; and
  - synthesizing recovery trajectories for marine resources to aid managers, stakeholders, and the public in interpreting monitoring results and understanding habitat and resource restoration.

The Strategies will reflect shared needs, and will be implemented, subject to the availability of funds and other resources, through partnerships among MPA programs and others. Possible mechanisms to implement the Strategies could include:



- training and workshops;
  - direct technical assistance and tools;
  - contractual or grant funding;
  - best practices or technical publications;
  - sharing of knowledge and experience across MPA sites and programs;
  - clearinghouse for research on MPA issues;
  - targeted research;
  - facilitation of linkages with international MPA programs and activities; and
  - other mechanisms as identified.
- The characterization of marine natural resources (natural resources, habitats, ecosystems, ecological processes) and marine cultural resources in the region.
  - An assessment of human uses and their impacts, including the documentation and characterization of the patterns, intensity, and significance of human uses; existing governance frameworks; and assessments of conflicts, compatibilities, and potential impacts of human uses on marine ecosystems.
  - The development and use of decision tools to identify and recommend areas in need of additional or enhanced protection.
  - Facilitation of stakeholder outreach and engagement processes to ensure the public and other stakeholders are informed of planning activities and have an opportunity to provide input into decision making processes.
  - Development of recommendations for new or strengthened MPAs to meet regional and national priority conservation objectives and mechanisms and processes for relevant MPA authorities in establishing new MPAs or otherwise implementing recommended actions.

## 2. Regional MPA Planning

The establishment or enhancement of regional MPA coordination forums via the national system offers an opportunity for managing entities and stakeholders to look beyond their individual jurisdictions, mandates, programs, and interests and consider regional and/or ecosystem-based approaches to MPA planning.

The MPA Center will work with regional, national, and international partners, where appropriate, to develop and apply the natural and social science information, decision making tools, and stakeholder engagement processes to collaboratively evaluate conservation gaps identified in the national system and make recommendations about the need for new and/or enhanced MPAs.

Such an ecosystem-based MPA planning effort could include, but is not limited to, the following critical planning steps or components:

- An evaluation and synthesis of national system design principles and conservation gaps and other regional and/or programmatic marine conservation targets, in order to more comprehensively establish regional conservation objectives to guide ecosystem-based planning.

## B. NATIONAL AND INTERNATIONAL COORDINATION

### National Coordination

In addition to enhancing regional coordination among MPAs, a corresponding national level effort is needed. Such an effort will represent and promote the priorities and issues of the various ecosystems and regions that make up the nation, as well as look more broadly at important national and international trends, developments, priorities, and legal obligations. National coordination also will serve to link across regions where resource conservation issues and MPA planning and management span regional boundaries. As required by the Order, the MPA Center will

facilitate coordination at the national level. The Management Committee, described below, will be established as part of this coordination.

The Management Committee should, where possible, be composed of one representative each from a federal, state, tribal, and local government and Regional Fishery Management Council within the region, as well as the members of the Federal Interagency MPA Working Group. The committee will provide operational guidance to the national system from the perspective of MPA managers. The MPA FAC will continue to provide recommendations to DOC and DOI on the implementation of the Order and on national system implementation from a stakeholder perspective.

**The Management Committee will:**

- provide advice to the MPA Center on annual and long-term priorities and plans for national system support to sites and regions, based on regional stewardship and other priorities and the recommendations of the MPA FAC;
- identify management issues and other priorities that require inter-regional, national, and/or international coordination or efforts; and
- review and provide comment on conservation gaps identified at the ecosystem, regional, and/or national levels.

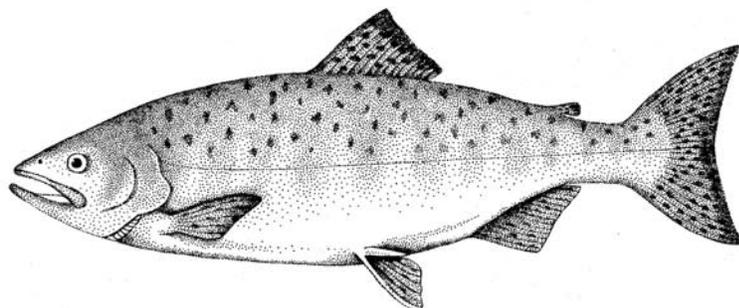
Regional representatives to the Management Committee will be selected by the participating MPA managing entities in the region. Each federal agency will maintain an appointed ex officio member of the Federal Interagency MPA Working Group, who also will serve on the Management Committee. Finally, two MPA FAC members, representing different stakeholder interests, will serve as ex officio members of the Management Committee.

**International Coordination**

In addition to U.S. MPA programs and authorities, there are numerous international MPA efforts and

linkages that can contribute to and benefit from the national system. The United States shares a number of common resources with both neighboring and distant countries, and technical capabilities reside in many countries, organizations, and institutions around the world. In recognition of these important international connections, Section 4(a)(8) of the Order calls on federal agencies to identify opportunities to improve “linkages with, and technical assistance to, international [MPA] programs.”

For instance, migratory species (e.g., whales, sea turtles, pelagic fishes, and birds) rely on the marine and coastal waters of multiple countries during various stages of their lives. In addition, there are also a number of international law and policy issues regarding our underwater cultural heritage. For example, certain cultural resources that rest in the seabed of U.S. MPAs, such as sunken military craft and associated contents that have not been abandoned, have a protected sovereign status and permanent right, title, and interest may be vested in the flag country.



To strengthen international coordination on MPA issues, the MPA Center, representing the National System of MPAs, and the Management Committee, in coordination with the U.S. Department of State and internationally relevant regional forums, can seek to enhance existing or establish new linkages with efforts in other countries, in accordance with international law. Such linkages should be focused on issues of mutual benefit to U.S. and international MPAs and MPA programs, such as policy coordination, collaborative activities, information and capacity sharing, capacity building, and technical assistance.



### C. EVALUATING NATIONAL SYSTEM EFFECTIVENESS

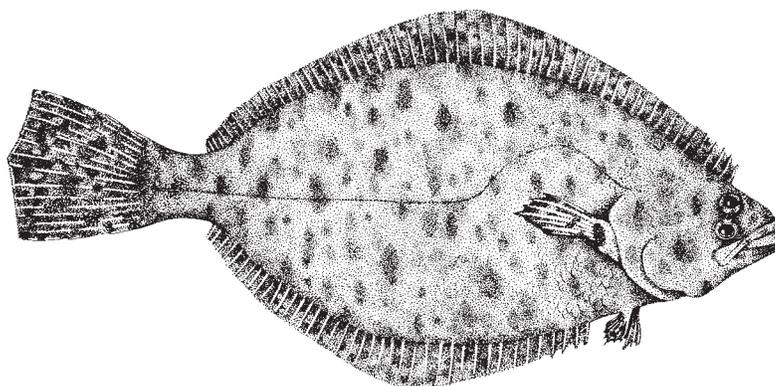
Monitoring and evaluating management effectiveness is a key component of an effective, adaptively managed national system. To this end, the Order calls for “practical, science-based criteria and protocols for monitoring and evaluating the effectiveness of MPAs” (Section 4(a)(5)). Monitoring and evaluation efforts of the national system are focused on measuring the effectiveness of the national system in achieving its priority conservation objectives and management objectives and the contributions of participating national system MPAs and MPA programs in achieving those objectives. It is not a function of the national system to monitor or evaluate individual MPAs or MPA programs, although the national system can provide assistance to MPA programs to assist them in better evaluating their own efforts. Stakeholders with an interest in participating in the monitoring of individual MPAs or MPA programs should consult with the managing entity or entities.

#### The national system’s approach to evaluating effectiveness will include:

- technical and scientific support for fostering sound monitoring, and evaluation programs at the participating MPA site or system level;
- development and implementation of a set of standards and protocols for assessing broader national system effectiveness. In order to be efficient and effective, the development of such standards and protocols requires significant input and advice from participating national system MPA sites and systems; and
- cooperation with existing or developing observation, monitoring and evaluation programs.

The natural and social science data currently collected and used by MPA sites and systems to monitor and evaluate their own effectiveness will not only help in their adaptive management efforts, but also will contribute to the analysis of the national system’s success in meeting its goals. The national system will aim to support the tools and technical assistance needed by partner MPA sites and systems to effectively monitor and evaluate their own effectiveness. It will not create new requirements for sites or systems to undertake new or expanded monitoring and evaluation activities.

With advice from the MPA FAC, the Management Committee, national system MPA partners in the regions, and science and management experts, the MPA Center will develop and publish guidance for monitoring and evaluating the effectiveness of the national system.



These guidelines will provide an integrated approach for monitoring the effectiveness of the national system, including the degree to which the priority conservation objectives are met and the benefits are provided to participating MPA sites and systems.

In addition, if identified as stewardship priorities by participating MPA sites and systems, training and technical assistance efforts targeted at monitoring and evaluation can be developed, such as establishing relevant sets of natural and social science indicators and protocols.

The results of monitoring and evaluating the national system will be used to manage the system adaptively and identify future focus areas for stewardship and other initiatives, including but not limited to: conservation gaps; technical and other forms of assistance in support of MPA sites and programs; and necessary changes to the national system's goals, objectives, or other components.

## D. FEDERAL AGENCY RESPONSIBILITIES TO AVOID HARM

Section 5 of the Order calls for federal agencies to “avoid harm” to the natural and cultural resources protected by MPAs that become part of the national system. Each federal agency is responsible for its own implementation of its responsibilities under Section 5.

### The Order states:

*Each Federal agency whose actions affect the natural or cultural resources that are protected by an MPA shall identify such actions. To the extent permitted by law and to the maximum extent practicable, each Federal agency, in taking such actions, shall avoid harm to the natural and cultural resources that are protected by an MPA. In implementing this section, each Federal agency shall refer to the MPAs identified under subsection 4(d) of this order.*

## Implementation

### To implement Section 5 of the Order:

- The MPA Center will collect, maintain, and make publicly available via the MPA Center's website, <http://www.mpa.gov>, and *Federal Register* notices, all relevant regulatory and resource information for MPAs that are subject to agency requirements under Section 5, in the form of a List of National System MPAs. National system MPAs included in the List are those that have satisfied the requirements outlined in Sections III (B)

and (D) of the Framework and are officially a part of the National System of MPAs. Information maintained for each national system MPA on the List will include: site name, location, national system MPA category, priority conservation objective(s) contributed to, boundaries, key resources protected, authorizing legislation, level and types of protection, managing authority/program, name of point of contact, and relevant contact information.

- Federal agencies shall: (1) identify their activities that affect the natural or cultural resources protected by individual national system MPAs, and (2) to the extent permitted by law and to the maximum extent practicable, avoid harm to those resources. Both of these activities should be accomplished through existing natural or cultural resource management or review authorities and procedures, including, but not limited to those under:
  - National Environmental Policy Act;
  - Coastal Zone Management Act;
  - National Historic Preservation Act;
  - Endangered Species Act;
  - Federal Water Pollution Control Act (Clean Water Act);
  - Marine Mammal Protection Act;
  - National Wildlife Refuge System Administration Act;
  - National Park Service Organic Act;
  - Rivers and Harbors Act;
  - Sunken Military Craft Act;



- National Marine Sanctuaries Act (Title III of the Marine Protection, Research, and Sanctuaries Act);
  - Magnuson-Stevens Fishery Conservation and Management Act;
  - Outer Continental Shelf Lands Act;
  - Coral Reef Conservation Act;
  - Energy Policy Act of 2005; and
  - Other pertinent statutes and Presidential Executive Orders.
- Upon receipt of a federal agency's request for assistance, the MPA Center will work to facilitate support for policy and coordination assistance through existing agency review processes.
  - As needed, the MPA Center, working with federal agencies, will produce voluntary technical guidance and best practices on priority issues to assist federal agencies in their determination of impacts to marine resources protected by national system MPAs and options for avoiding harm. The MPA Center also will work with federal agencies to provide clear public outreach materials to educate and inform the public on the requirements of Section 5.
  - Federal agencies will report their actions to implement Section 5, any comments received, and responses to such comments on an annual basis as part of the agency report required by Section 6 of the Order. The MPA Center, as required by the Order, will post these reports on the <http://www.mpa.gov> website.

## Activities to Be Considered

The implementation of Section 5 is governed by existing authorities, each with its own threshold and/or trigger for requiring individual federal agencies

to identify, review, mitigate, or otherwise alter their activities based on impacts to natural or cultural resources. The Order does not provide any new authority for any federal agency or the MPA Center to review activities of any other federal agency or alter standards for existing review. The thresholds and/or triggers for agency action under Section 5 are the same as those listed under any existing authority or authorities that normally require agency review of a proposed activity. Section 5 does, however, require agencies to ensure that their activities avoid harm to the natural and cultural resources as protected by the MPAs included in the national system (to the extent permitted by law and to the maximum extent practicable) when fulfilling their existing requirements for identifying, reviewing and implementing activities.

Furthermore, there is no single definition for key terms used to describe the requirements under Section 5, including but not limited to: "avoid harm," "affect," or "to the extent permitted by law and to the maximum extent practicable." Instead, the meaning of any of these terms, as applied to an agency's requirements under Section 5, is dependent on the agency's interpretation, consistent with any requirements of the legal framework used to protect the resources of the MPA and any other applicable natural or cultural resource review or protection authorities or procedures.

Pursuant to Section 5 of the Order, agency requirements apply only to the natural or cultural resources specifically afforded protection by the site as described on the List of National System MPAs. For example, within national system MPAs established for sustainable production, other resources not specifically protected by the MPA would not be subject to the "avoid harm" provision. For sites that have both a terrestrial (i.e., an area that falls outside of the definitional boundaries of 'marine') and marine area, only the marine portion and its associated protected resources will be included on the List of National System MPAs and subject to Section 5 of the Order. To implement Section 5, each federal agency shall identify its activities that affect the natural or cultural resources protected by a national system MPA through the existing natural and cultural resource review processes normally required for these activities.

Similarly, the determination of whether an agency in taking such actions is avoiding harm to those resources, to the extent permitted by law and to the maximum extent practicable, will be made by the individual agency using its existing natural and cultural resource review processes and/or authorities.

### **Comment and Response on Agency Actions**

Comments from any person, organization, or government entity concerning federal agency compliance with Section 5 should be directed to the relevant lead federal agency for the action or actions that are the subject of the comments. Each agency shall make a determination on the response and take appropriate action. Similarly, any requests for information regarding compliance with Section 5, including those under the Freedom of Information Act (FOIA), should be directed to the lead agency for the action or actions that are the subject of the request. Any comments or requests for information received by the MPA Center or any federal agency in regard to another agency's compliance with this Section shall, pursuant to FOIA procedures, be forwarded in a timely manner to the relevant responsible agency for its consideration, with due notice given to the sender.

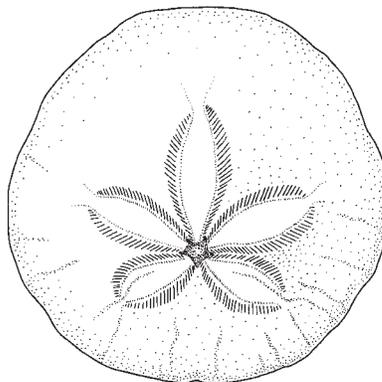
### **Reporting and Periodic Review**

As required under Section 6. Accountability of the Order, “[e]ach Federal agency that is required to take actions under the order shall prepare and make public annually a concise description of actions taken by it in the previous year to implement the order, including a description of written comments by any person or organization stating that the agency has not complied with this order and a response to comments by the

agency.” These annual reports, including a point of contact for each federal agency, will be posted at <http://www.mpa.gov>. In addition, on a biennial basis, the MPA Center will consolidate agency annual reports into a biennial “State of the National System of MPAs” report. The biennial report will include an assessment of overall progress to develop the National System of MPAs and the effectiveness of meeting its stated goals and objectives, including those related to Section 5 of the Order. More information on the biennial report can be found below in Section V (E) of this document.

## **E. TRACKING AND REPORTING**

Tracking and reporting of the national system are important activities for communicating regional and national accomplishments and priority future efforts in need of support. In order to track and report progress, the MPA Center will coordinate a biennial “State of the National System of MPAs” progress report and post all available data and assessments on the <http://www.mpa.gov> website. In addition, the MPA Center will work with the Management Committee and participating



MPA sites and programs to determine how best to comprehensively track overall national system priorities once efforts to establish the system have been initiated. Additional information on these efforts is provided below.

### **Biennial “State of the National System of MPAs” Progress Report**

On a biennial basis, the MPA Center, working with its national system partners, will develop and publish on the <http://www.mpa.gov> website a consolidated “State of the National System” progress report, in accordance with Section 6 of the Order. The report will consolidate and summarize the annual reports submitted by federal agencies for the period and



also will include information from states and other management entities. It will include:

- a list of existing National System MPAs and newly added or removed sites;
  - a summary of federal activities taken in support of the national system;
  - a summary of regional, national, and international planning efforts;
  - a summary of assistance provided to national system MPAs;
  - an evaluation of the effectiveness of the national system in meeting its goals and objectives at the national and regional levels;
  - a summary of actions taken to implement Section 5 of the Order;
  - any recommendations developed by the MPA FAC during the period;
  - a description of public comments received and responses sent during the period; and
  - regional, national, and international priorities for future coordination, planning, technical, and other types of support (see Sections V (A) and (B) of this document).
- MPAs and MPA systems that have been included in the national system;
  - areas and resources identified as national system conservation gaps;
  - recommendations for new or enhanced MPAs resulting from regional MPA planning;
  - regional MPA science, stewardship, and effectiveness strategies and national and other priorities for improving stewardship and effectiveness;
  - international activities and commitments;
  - information on the nomination process and supporting analyses;
  - information related to the evaluation of national system effectiveness;
  - agency and MPA Center reports;
  - public comments received on MPA nominations to and removals from the national system; and
  - the official List of National System MPAs.

### **MPA.gov Website**

As required by the Order, the website <http://www.mpa.gov> will be maintained to communicate and archive all information about the development and implementation of the national system. The website will house information about a variety of technical, scientific, governance, and other MPA topics relevant to the breadth of MPA stakeholders, including the MPA FAC. In addition, the website will house information on national system progress, priorities, and plans, including:

- MPAs found to be eligible for nomination to the national system;

### **F. MPA FEDERAL ADVISORY COMMITTEE**

The MPA FAC is authorized by the Order to provide expert advice and recommendations to DOC and DOI on the development and implementation of the National System of MPAs and implementation of the Order. The MPA FAC is comprised of 30 non-federal members representing regionally diverse perspectives and areas of expertise from all regions of the country, including natural and social science, commercial and recreational fishing, tribal and state governments, oil and gas, tourism, environmental organizations, and others. It also includes ex officio members from pertinent federal agencies. A full description of the MPA FAC can be found in Appendix B and a list of the MPA FAC members, past and present, can be found in Appendix E of this document.

Throughout the development and implementation of the national system, the MPA FAC will continue to advise DOC and DOI on priority topics and issues as identified by the agencies. The MPA FAC also will provide recommendations to the MPA Center concerning national system conservation gaps, as described in Section IV (D) above.

## G. ROLE OF THE NATIONAL MPA CENTER IN THE NATIONAL SYSTEM

**The specific roles of the MPA Center in coordinating the national system are to:**

- provide coordination and facilitation of the national system as a whole (individual MPA programs and managing entities remain responsible for administering their sites and systems);
- coordinate processes to identify, nominate, and include eligible MPAs in the national system, remove MPAs from the national system, and maintain the List of National System MPAs;
- build public and private partnerships and catalyze action to support the identified science, stewardship, and effectiveness priorities of participating MPA programs;
- facilitate the development and maintenance of regionally appropriate MPA coordination mechanisms among participating programs, and, where possible, maintain a Regional MPA Coordinator in the field to support such efforts;
- develop, in consultation with participating programs, regional MPA Science, Stewardship, and Effectiveness Strategies;
- lead collaborative efforts to identify conservation gaps in the national system;
- build and catalyze partnerships and actions to provide technical or scientific information, staff, or other support for collaborative ecosystem-based MPA planning in order to identify and recommend new or enhanced MPAs;
- promote stewardship of the national system through effective outreach and education;
- support the operation of the MPA FAC and the coordination of the MPA Federal Interagency Working Group and Management Committee;
- track, communicate, integrate, and recommend suggested MPA science and other national system priorities, needs, and commitments across the regional, national, and international levels;
- develop a biennial “State of the National System of MPAs” report and maintain comprehensive information about the national system’s priorities and progress on the <http://www.mpa.gov> website;
- monitor and evaluate the effectiveness of the national system and implement adaptive management strategies based on results; and
- maintain the <http://www.mpa.gov> website as a mechanism for communicating information about the national system.



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FRAMEWORK FOR THE NATIONAL SYSTEM OF MARINE PROTECTED AREAS OF THE UNITED STATES OF AMERICA



## VI. GLOSSARY OF KEY TERMS

The following are definitions of key terms as used in this Framework document. See Table 2 for the full definition of key terms used in the definition of an MPA.

**Adaptive management** – “A systematic process for continually improving management policies and practices by learning from the outcomes of operational programs.” (British Columbia Forest Service, <http://www.for.gov.bc.ca/hfp/amhome/Amdefs.htm>).

**Area** – Must have legally defined geographical boundaries and may be of any size, except that the site must be a subset of the United States federal, state, local, or tribal marine environment in which it is located.

**Biodiversity** – The variety of living organisms in all their forms. Technically, biodiversity includes variety at three levels of biological organization: genetic variation within species, the variety of species, and the variety of ecological communities.



**Conservation area** – Multiple uses allowed; however, uses and activities may be restricted or zoned and access limited, as necessary to meet site management goals.

**Cultural heritage** – The cultural resources that reflect the nation’s maritime history and traditional cultural connections to the sea, and the uses and values they provide to present and future generations.

**[Marine] Cultural resource** – A tangible entity that is valued by or significantly representative of a culture, or that contains significant information about a culture. Cultural resources for purposes of the MPA Executive Order are tangible entities at least 50 years in age that reflect the nation’s maritime history and traditional cultural connections to the sea, such as archaeological sites, historic structures, shipwrecks, artifacts, and traditional cultural properties. Cultural resources are categorized as districts, sites, buildings, structures, and objects for the National Register of Historic Places, and as archaeological resources, cultural landscapes, structures, and ethnographic resources for MPA management purposes. Ethnographic resources include natural resources and sites with tribal or traditional cultural meaning, value and use.

**Ecological network** – A set of discrete MPAs within a region that are connected through dispersal of reproductive stages (eggs, larvae, spores, etc.) or movement of juveniles and adults. The effective management of certain marine species may require networks of discrete MPAs encompassing regional collections of local populations linked by dispersal and movement, which may be essential for some local populations to persist. The creation of MPA networks must take into consideration other non-MPA areas that provide similar linkages, which does not necessarily imply additional management measures outside MPAs or the creation of a “super MPA” with boundaries encompassing all MPAs in the network.<sup>9</sup>

**Ecosystem** – A geographically specified system of organisms, including humans and the environment and the processes that control its dynamics.

**Ecosystem approaches to management (or Ecosystem-based management)** – A management approach that “looks at all the links among living and nonliving resources, rather than considering single species in isolation.” This approach “reflects the relationships among all ecosystem components, including humans and nonhuman species, and the environments in which they live. This system of management considers human activities, their benefits, and their potential impacts within the context of the broader biological and physical environment.”<sup>10</sup>

**Extractive** – Activities that remove or are intended to remove living or nonliving resources from an MPA.

**Large Marine Ecosystems** – Regions of ocean space encompassing coastal areas from river basins and estuaries out to the seaward boundary and continental shelves and the seaward margins of coastal current systems. They are relatively large regions on the order of 200,000 square kilometers or greater, characterized by distinct bathymetry, hydrography, productivity, and trophically dependent populations.

**Lasting** – For natural heritage and cultural heritage MPAs, the site’s authority must clearly state its intent to provide permanent protection. For sustainable production MPAs, the site must be established with the intent at the time of designation to provide, at a minimum, the duration of protection necessary to achieve the mandated long-term sustainable production objectives for which the site was established.

**Local government** – A legally established unit of government at a level below state government, including but not limited to county, city, town, or village.

**Management [managing] entity or entities** – The federal, state, local, or tribal entity or entities with legal authority to designate, promulgate regulations for, and/or manage an MPA. In many cases, authority lies with one entity or program; however, in certain instances, such as the federal/state National

<sup>9</sup> MPA FAC, 2005.

<sup>10</sup> U.S. Commission on Ocean Policy (USCOP). 2004. An Ocean Blueprint for the 21st Century, Washington, D.C.

Estuarine Research Reserve System and state/tribe co-management arrangements, authority is formally shared or split among two or more entities.

**Marine environment** – Must be: (a) ocean or coastal waters (note: coastal waters may include intertidal areas, bays, or estuaries); (b) an area of the Great Lakes or their connecting waters; (c) an area of lands under ocean or coastal waters or the Great Lakes or their connecting waters; or (d) a combination of the above.

**Marine Protected Area** – Any area of the marine environment that has been reserved by federal, state, territorial, tribal, or local laws or regulations to provide lasting protection for part or all of the natural and cultural resources therein. See also Area, Marine environment, Reserved, Lasting, and Protection.

**Marine Reserve** – A type of MPA where extractive uses are prohibited (also referred to as “no-take” reserve).

#### **National System of MPAs**

– The group of MPA sites, networks, and systems established and managed by federal, state, tribal, and/or local governments that collectively enhance conservation of the nation’s natural and cultural marine heritage and represent its diverse ecosystems and resources.

National system MPAs work together at the regional and national levels to achieve common objectives for conserving the nation’s important natural and cultural resources.

**Natural heritage** – The nation’s biological communities, habitats, ecosystems, and processes and the ecological services, uses, and values they provide to present and future generations.

**[Marine] Natural resource** – Any biological or physical component of the marine environment that contributes to the structure, function, goods, or services provided by a marine ecosystem.

**Network** – A set of discrete MPAs within a region or ecosystem that are connected through complementary purposes and synergistic protections. A network of MPAs could focus on ecosystem processes, certain individual marine species, or cultural resources. For example, an ecological network of MPAs could be connected through dispersal of reproductive stages or movement of juveniles and adults (see “Ecological network”).

**Precautionary design** – Decisions are based on the best information currently available from natural science, social science, customary and local knowledge, and other sources. Where information is limited, decisions should reflect a precautionary approach.



**Protection** – Must have existing laws or regulations that are designed and applied to afford the site with increased protection for part or all of the natural and submerged cultural resources therein for the purpose of maintaining or enhancing the long-term conservation of these resources, beyond any general protections that apply outside the site.

#### **Region or Regional** –

An area inclusive of and determined by participating national system sites and systems that is based on

common management interests, similar or linked ecological characteristics, and/or other factors that provide a foundation for meaningful coordination.

**Reserve area** – No extractive uses allowed, except permitted scientific and educational uses; destructive or disruptive activities are limited; other uses and activities may be restricted or zoned; and access is limited, as necessary to meet site management goals.

**Reserved** – Must be established by and currently subject to federal, state, local, or tribal law or regulation.



**Stakeholder** – Individuals, groups of individuals, organizations, or political entities interested in and/or affected by the outcome of management decisions. Stakeholders may also be individuals, groups, or other entities that are likely to have an effect on the outcome of management decisions. Members of the public also may be considered stakeholders.

**State** – See United States.

**Stewardship** – Careful and responsible management to ensure goals and objectives are being achieved for the benefit of current and future generations.

**Sustainable production resources** – The nation's renewable living resources and their habitats (including, but not limited to, spawning, mating, and nursery grounds and areas established to minimize bycatch of species) and the social, cultural, and economic values and services they provide to present and future generations.

**System** – A set of MPAs connected by shared programmatic, administrative, or other organizing principles or purposes. A system of MPAs is not necessarily confined to a specific geographic area such as a region or ecosystem.

**Tribe** – A federally recognized American Indian or Alaska Native government.

**United States** – Includes the several states, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands of the United States, American Samoa, the Commonwealth of the Northern Mariana Islands, and Guam.



# VII. ADMINISTRATIVE AND NATIONAL POLICY REQUIREMENTS

1. Nothing in Executive Order 13158 or this Framework shall be construed as altering existing authorities regarding the establishment of federal MPAs in areas of the marine environment subject to the jurisdiction and control of states, the District of Columbia, Commonwealth of Puerto Rico, the U.S. Virgin Islands, American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands.
2. Neither Executive Order 13158 nor this Framework creates any right or benefit, substantive or procedural, enforceable in law or equity by a party against the United States, its agencies, its officers, or any person.
3. Neither Executive Order 13158 nor this Framework diminishes, affects, or abrogates Indian treaty rights or U.S. trust responsibility to Indian tribes.
4. Federal agencies taking actions pursuant to Executive Order 13158 or under this Framework must act in accordance with international law and with Presidential Proclamation 5928 of December 27, 1988, on the Territorial Sea of the United States of America; Presidential Proclamation 5030 of March 10, 1983, on the Exclusive Economic Zone of the United States of America; and Presidential Proclamation 7219 of September 2, 1999, on the Contiguous Zone of the United States.



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FRAMEWORK FOR THE NATIONAL SYSTEM OF MARINE PROTECTED AREAS OF THE UNITED STATES OF AMERICA



# VIII. APPENDICES

## APPENDIX A. ACRONYMS AND ABBREVIATIONS USED

### **Acronyms**

COP – Commission on Ocean Policy  
DOC – Department of Commerce  
DOI – Department of the Interior  
EPA – Environmental Protection Agency  
FOIA – Freedom of Information Act  
FMC – Federal Fishery Management Council  
FWS – U.S. Fish and Wildlife Service  
LME – Large Marine Ecosystem  
MLCD – Manele-Hulopoe Marine Life Conservation District  
MPA – Marine protected area  
MPA FAC – Marine Protected Areas Federal Advisory Committee  
NEPA – National Environmental Policy Act  
NRCE – National Register Criteria for Evaluation  
NRHP – National Register of Historic Places  
NERRS – National Estuarine Research Reserve System  
NMFS – National Marine Fisheries Service  
NOAA – National Oceanic and Atmospheric Administration  
NRCE – National Register Criteria for Evaluation  
NRHP – National Register of Historic Places  
SIMOR – Subcommittee on Integrated Management of Ocean Resources



U.S. – United States of America  
USOAP – U.S. Ocean Action Plan (USOAP)  
USGS – US Geological Survey  
WCPA/IUCN – World Commission on Protected Areas/International Union for Conservation of Nature

## Abbreviations

Framework – Framework for Developing the National System of MPAs  
MPA Center – National Marine Protected Areas Center  
National System – National System of Marine Protected Areas  
NOAA Fisheries Service – NOAA's National Marine Fisheries Service  
Order – Executive Order 13158 of May 26, 2000  
Management Committee – National System Management Committee  
Strategy – MPA Stewardship, Science and Effectiveness Strategy

## APPENDIX B. EXISTING U.S. MPA PROGRAMS, FEDERAL MPA INITIATIVES, AND TRIBAL AND INTERNATIONAL EFFORTS

The nation's existing suite of MPA sites, programs, authorities, and systems at all levels of government are the fundamental components of the national system. The recognition of and full participation by these federal, state, tribal, and local government programs are critical to the national system's success. Working together, these existing programs and authorities, federal MPA coordination initiatives, and linkages to international MPA initiatives will make important contributions to and receive benefits from the development of an effective national system. This section provides an overview of these major efforts and generally describes their respective roles in the national system.

### A. U.S. MPA Programs and Authorities

MPAs in the United States are managed by a number of entities and programs at federal, state, tribal, and local government levels. This section provides a brief summary of these programs and describes the nature of their role in the development of the national system.

#### Federal and Federal/State MPA Programs

Currently, there are several federal MPA programs and one federal/state partnership MPA program in the United States. Each has one or more specific legal mandates that it is required to fulfill. Many of these programs have established and actively manage systems of MPAs designed to fulfill their responsibilities to the nation. As described below, the federal MPA programs include DOI's National Park System and National Wildlife Refuge System and NOAA's National Marine Sanctuary System, National MPA Center, and National Marine Fisheries Service programs. The National Estuarine Research Reserve System is composed of NOAA/state partnerships.

*National Park System:* The National Park System is administered by DOI's National Park Service with a mission to conserve the scenery and the natural and historic objects and wildlife

therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations. The National Park System preserves unimpaired natural and cultural resources and values representative of the nation's ocean heritage in superlative natural, historic, and recreation areas in every region. The National Park System currently contains 72 ocean and Great Lakes parks.

*National Wildlife Refuge System:* The U.S. Fish and Wildlife Service's (FWS) mandate is to provide the federal leadership to conserve, protect, and enhance fish and wildlife and their habitats for the continuing benefit of people. The mission of the National Wildlife Refuge System, a program within the DOI FWS, is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans. There are 177 ocean and Great Lakes refuges.

*National Marine Sanctuary System:* Under the National Marine Sanctuaries Act, NOAA establishes areas of the marine environment that have special conservation, recreational, ecological, historical, cultural, archaeological, scientific, educational, or aesthetic qualities as national marine sanctuaries to: (A) improve the conservation, understanding, management, and wise and sustainable use of marine resources; (B) enhance public awareness, understanding, and appreciation of the marine environment; and (C) maintain for future generations the habitat and ecological services of the natural assemblage of living resources that inhabit these areas. There are currently 13 sanctuaries and one marine national monument in the national marine sanctuaries system.

*National Marine Protected Areas Center (MPA Center):* The mission of the MPA Center is to facilitate the effective use of science, technology, training, and information in the planning, management, and evaluation of the nation's system of marine protected areas. The MPA Center is housed within NOAA and coordinates across NOAA programs, as well as with pertinent federal, state, tribal, and local MPA and MPA-support entities. At the federal level, the MPA Center coordinates closely with DOI. The MPA Center's specific national system roles are described in detail in Section V (G) of this document.

*National Marine Fisheries Service Programs and Federal Fishery Management Councils (FMC):* Under a number of statutory authorities, the National Marine Fisheries Service establishes and manages MPAs to rebuild and maintain sustainable fisheries, conserve and restore healthy marine habitats, and promote the recovery of protected species, including marine mammals and anadromous fish. These sites fall under four major categories: Federal Fisheries Management Zones, Federal Fisheries Habitat Conservation Zones, Federal Threatened and Endangered Species Protected Areas, and Federal Marine Mammal Protected Areas. FMCs have been established for the stewardship of fishery resources through the preparation, monitoring, and revision of fishery management plans. These FMCs enable states, the fishing industry, consumer and environmental organizations, and other interested persons to participate in and advise on the management of marine fisheries and to take into account the social and economic needs of the states. FMC-recommended actions are subject to review and approval by the Secretary of Commerce through a delegation of authority to the National Marine Fisheries Service. The National Marine Fisheries Service is responsible for the promulgation of site-specific regulations to delineate MPA boundaries and establish associated protective measures.



*National Estuarine Research Reserve System (NERRS):* The mission of the NERRS is to promote stewardship of the nation's estuaries through science and education using a system of protected areas. The NERRS, which is currently made up of 27 sites, is a unique partnership program between NOAA and the coastal states to protect estuarine land and water, which provides essential habitat for wildlife, and offers educational opportunities for students, teachers, and the public. The NERRS sites serve as living laboratories for scientists. With its unique state/federal partnership, the NERRS participation with the national system will require close consultation and coordination with the NOAA Estuarine Reserves Division and state agency or university staff of NERRS sites.

*National Monuments:* In June 2006, President Bush established the Northwestern Hawaiian Islands Marine National Monument under Presidential Proclamation 8031 (71 FR 36443, June 26, 2006) under the authority of the Antiquities Act (16 U.S.C. 431). This was the nation's first marine national monument. The Monument – renamed the Papahānaumokuākea Marine National Monument in March 2007 to reflect Hawaiian language and culture – is approximately 100 nautical miles wide and extends approximately 1,200 miles from northwest to southeast around the Northwestern Hawaiian Islands. In December 2006, the Secretaries of Commerce and the Interior and the Governor of Hawai'i signed a Memorandum of Agreement to jointly manage federal and state lands and waters within the Monument as Co-Trustees, to collectively conserve and manage Monument natural and cultural resources.

## **State and Local Government MPA Programs**

Each U.S. coastal state also has a variety of MPA programs and authorities, often at both the state and local government levels. State MPA programs can include: Historic Preservation offices; Fish and Wildlife agencies; Coastal Zone Management programs; Fishery Management agencies; Parks and Recreation agencies, and other authorities. MPAs are used by states for a variety of purposes ranging from managing fisheries, recreation, tourism, and other uses to protecting ecological functions, preserving shipwrecks, and maintaining traditional or cultural connections to the marine environment. In addition, local governments within coastal states, such as counties and other municipalities, have programs that establish and manage MPAs for protecting marine species, nursery grounds, shellfish beds, and other important natural and cultural resources. Similar to their federal analogs, some state MPA programs have also developed and continue to manage their existing sites as systems of MPAs.

Given the significant coastal and marine resources under state jurisdiction, the large number of state MPAs – roughly 83 percent of the national total – compared to federal sites, and the potential impacts and benefits to states from MPAs located in federal waters, full state participation in the development of the national system is critical to its success. It is important to note, however, that state and local government participation in the national system is voluntary under the Order. The MPA Center will work closely with states to determine their interest in participating. State government agencies, programs, and authorities that elect to participate in the national system will be full partners and will have an equal voice in decision making to set priorities for collaborative efforts at the regional and national levels.

## **Tribal MPA Authorities, Programs, and Linkages**

Tribal governments have an integral role to play in resource management—legally, culturally and economically. The Order “does not diminish, affect, or abrogate Indian treaty rights or United States trust responsibilities to Indian tribes,” and calls on NOAA and DOI to “consult

with...tribes...and other entities to promote coordination of federal, state, territorial, and tribal actions to establish and manage MPAs.” Because the federal government has a trust responsibility to all federally recognized tribes, conservation goals and management practices for MPAs should be established through government-to-government consultations.

In addition, several Indian tribes in Western Washington and the Great Lakes have treaty-reserved fishing rights. These tribes share co-management authority and responsibility for marine resources in their usual and customary fishing areas with the federal government and/or states, depending on the specific resource and area identified. Tribes that have sole management authority may choose to establish MPAs as a tool to meet conservation goals for areas where they have management responsibilities. For areas where tribes share co-management authority with the federal government and/or states, any entity wishing to establish MPAs must do so through government-to-government consultations. The MPA Center will work closely with tribes to determine their interest in participating in the national system. Tribal governments that elect to participate in the national system will be full partners and will have an equal voice in decision making to set priorities for collaborative efforts at the regional and national levels.

Numerous opportunities to enhance coordination and collaboration with tribes on issues related to MPAs are possible through the development of the national system. Some of these opportunities could include a range of potential partnerships aimed at the sharing of information; enhancing technical, scientific, and management capacity; and developing conservation strategies for marine resources of mutual concern. The MPA Center and national system partners, many of whom have ongoing relationships with tribes, will consult with tribal governments to determine their interest in participating in the national system and will work with them to develop appropriate mechanisms and protocols.

## **B. Linkages to Related Federal MPA Initiatives**

There are several other significant federal MPA initiatives that are either directly or indirectly linked to the development of the national system. These efforts make important contributions to and can benefit from the development of the national system. This section provides an overview of each of these efforts and further describes their relationship and role in the development of the national system.

### **MPA Federal Advisory Committee**

The MPA FAC is authorized by the Order to provide expert advice and recommendations to DOC and DOI. The MPA FAC is comprised of 30 non-federal members representing diverse perspectives and areas of expertise, including natural and social science, commercial and recreational fishing, tribal and state governments, oil and gas, tourism, environmental organizations, and others. The MPA FAC also includes ten federal ex officio members to provide information and support from entities managing, supporting, or potentially affecting MPAs. The MPA FAC completed its first report in June 2005, which provided recommendations on the goals, objectives, principles, and structure of the national system, and its second report in October 2007, which provided recommendations regarding the



development of the national system. The MPA FAC will continue to advise DOC and DOI on aspects of developing and implementing the national system. Information on MPA FAC members and its work products are posted at <http://mpa.gov/mpafac/fac.html>.

### **The Federal Interagency MPA Working Group**

The Order directs DOC and DOI to work closely with the other federal agencies to develop the national system. To provide a mechanism for this coordination, the MPA Center established the Federal Interagency MPA Working Group, which includes representatives from the Departments of Commerce, the Interior, Defense, Homeland Security, State, Agriculture, Environmental Protection Agency, National Science Foundation, and the U.S. Agency for International Development. The Federal Interagency MPA Working Group meets several times a year to provide input on policy issues related to national system development, coordinate activities related to the Order, and support the work of the MPA FAC. In addition, members of the Federal Interagency MPA Working Group will serve as members of the National System Management Committee (see Section V (B)).

### **U.S. Ocean Action Plan**

The U.S. Ocean Action Plan (USOAP) outlines a variety of actions for promoting the responsible use and stewardship of ocean and coastal resources for the benefit of all Americans. A Cabinet-level “Committee on Ocean Policy” (COP) was established by Executive Order 13366 (December 17, 2004) to coordinate the activities of executive branch departments and agencies regarding ocean-related matters in an integrated and effective manner to advance the environmental and economic interests of present and future generations of Americans. The President further directs the executive branch agencies to facilitate, as appropriate, coordination and consultation regarding ocean-related matters among federal, state, tribal, and local governments; the private sector; foreign governments; and international organizations. Subcommittees of the COP also have been formed as part of the ocean governance structure described in the USOAP, including the Subcommittee on Integrated Management of Ocean Resources (SIMOR) and the Joint Subcommittee on Ocean Science and Technology. Many of the activities outlined in the USOAP and the subsequent work plans of the COP’s subcommittees complement efforts to develop the national system. Similarly, many of the collaborative actions under the national system may offer opportunities to help advance the USOAP. As these efforts proceed, the MPA Center will work closely with SIMOR to evaluate progress and plans for developing the national system in order to ensure coordination and consistency with the USOAP’s governance structure and overall approach.

In support of this effort, the USOAP calls on National Parks, National Wildlife Refuges, National Marine Sanctuaries, and National Estuarine Research Reserves to, “coordinate and better integrate the existing network of marine managed areas.” Many of these sites overlap or lie adjacent to each other and a history of collaboration between parks, marine sanctuaries, refuges, and reserves provides a model for this expanded network. Although these sites were created under separate agency authorities and statutory mandates, they are united by their proximity and similar science and management priorities. These actions to coordinate and better integrate efforts have been aptly named and are referred to as the “Seamless Network” initiative. The

Seamless Network concept reflects the Administration's emphasis on greater scientific and programmatic coordination between ocean agencies, and complements efforts to implement the MPA Executive Order. In addition, the USOAP calls on the National Park Service to adopt an Ocean Parks Stewardship Action Plan. Both the Seamless Network and Ocean Parks Stewardship Action Plan are described below.

### ***Seamless Network Initiative***

The USOAP calls on the four above mentioned MPA systems to work together, "to promote coordination of research, public education, and management activities at neighboring parks, refuges, sanctuaries, and estuarine reserves." Two federal interagency agreements are called for under this effort. The first is a general agreement that enables site-based, regional, and national collaborations among the partner agencies, and is currently under development. The second is a separate cooperative enforcement agreement signed in August 2005 among the National Wildlife Refuge System, National Park Service, National Marine Sanctuary Program, and National Marine Fisheries Service. When implemented, these agreements will ultimately contribute to several important elements of the national system, such as the identification of science and stewardship priorities for enhancing MPA effectiveness through enhanced interagency cooperation and information sharing. Known as the Seamless Network initiative, this effort will provide a coordination mechanism for these MPA systems in the development of the national system and will build on existing collaborative efforts. In many cases these MPAs have ongoing collaborations and the Seamless Network will expand and enhance those relationships. The wider set of eventual national system partners such as other federal programs and state, tribal, and local government MPA sites and systems may benefit from this model. An active dialogue exists and will be maintained between the developing national system and the Seamless Network Initiative efforts in order to ensure that they complement one another.

### ***Ocean Parks Stewardship Action Plan***

The USOAP calls for the adoption of an Ocean Parks Strategy by the National Park Service. Key elements of this strategy include: characterizing marine species and habitats; evaluating and monitoring their condition; increasing the scientific understanding of how marine ecosystems function; and developing cooperative science-based fishery management plans between parks and state agencies. This plan was issued in December 2006 and can be viewed at [http://www.nps.gov/pub\\_aff/oceans/Ocean\\_Park\\_ActionPlan.pdf](http://www.nps.gov/pub_aff/oceans/Ocean_Park_ActionPlan.pdf). This important effort offers opportunities for collaborative approaches between the National Park Service, the Seamless Network initiative, and the national system to address shared science and management priorities.

## **C. International MPA Programs and Authorities**

In addition to U.S. MPA programs and authorities, there are numerous international MPA efforts and linkages that can contribute to and benefit from the national system. Marine ecosystems and their associated natural resources rarely align with the political boundaries of sovereign countries. Moreover, ecosystems often overlap with adjacent countries and



**Table 4. Examples of Existing U.S. MPAs**

MPA Name and Location	Name of Managing Entity and Type of Management	MPA Description*
<p>Ashepoo-Combahee-Edisto (ACE) Basin National Estuarine Research Reserve  South Carolina</p>	<p>Federal/State Partnership Management: National Oceanic and Atmospheric Administration and South Carolina Department of Natural Resources</p>	<p>ACE Basin is one of the largest undeveloped estuaries on the East Coast. Diverse estuarine wetlands provide an extensive complex of wildlife habitat types; the region contains 91,000 acres of tidal marshes, 26,000 acres of managed impoundments, and 12,000 acres of maritime islands.</p>
<p>Manele-Hulopoe Marine Life Conservation District (MLCD)  Hawaii</p>	<p>State Management: Hawaii Department of Land and Natural Resources</p>	<p>The Manele-Hulopoe Marine Life Conservation District (MLCD) is located in the waters offshore of Palawai and Kamao on the southwestern coast of Lanai. Within Manele Bay corals are most abundant along the sides of the bay near the cliffs, where the bottom slopes off quickly to about 40 feet. The middle of the bay is a sand channel. Just outside the western edge of the bay near Pu‘u Pehe rock, is “First Cathedrals,” a popular SCUBA destination. Hulopo‘e Bay has large tidepools at its left point. A shallow reef is just offshore, providing excellent snorkeling opportunities. Pu‘u Pehe Cove has clear water and considerable marine life. Coral growth is interspersed with sand patches, and most coral is found away from the narrow beach in about 10 to 15 feet of water.</p>
<p>North Fork, St. Lucie Aquatic Preserve  Florida</p>	<p>State Management: Florida Department of Environmental Protection</p>	<p>The North Fork, St. Lucie Aquatic Preserve contains various aquatic habitats such as riverine, blackwater stream, tidal marsh, slough, and floodplain forest communities. The headwaters of the North Fork are composed of freshwater from Ten Mile and Five Mile Creeks. Downstream, brackish conditions support tidal marshes with mangroves, leatherfern, and sawgrass.</p>
<p>Monomoy National Wildlife Refuge  Massachusetts</p>	<p>Federal Management: Department of the Interior, U.S. Fish and Wildlife Service</p>	<p>Monomoy is comprised of 7,604 acres of barrier beach, sand dunes, freshwater ponds, and saltwater marshes. Monomoy provides habitat for hundreds of species of resting, feeding, and migratory birds. The refuge supports the largest nesting colony of common terns in the Gulf of Maine and second largest on the Atlantic Seaboard with close to 8,000 nesting pairs in 2001. Monomoy is the largest haul-out site of gray seals on the Atlantic Seaboard as well.</p>

\* Only the marine portion of the described areas are considered to be a part of the MPA; the terrestrial components, while a part of the larger management unit, are not considered to be part of the MPA.

some natural resources may move back and forth between distant countries. In recognition of these important international connections, section 4(a) of the Order calls on federal agencies to identify opportunities to improve “linkages with, and technical assistance to, international [MPA] programs.”

The United States shares a number of common resources with both neighboring and distant countries. For instance, migratory species (e.g., whales, sea turtles, pelagic fishes, and some birds) rely on the marine and coastal waters of multiple countries during various stages of their life. There are also a number of international law and policy issues regarding our underwater cultural heritage. For example, certain cultural resources that rest in the seabed of U.S. MPAs, such as sunken military craft and associated contents that have not been abandoned, retain their protected sovereign status and permanent right, title, and interest may be vested in the flag country.

Enhancing existing or establishing new linkages among systems in other countries can mutually benefit the United States and international MPAs through coordination of efforts, information and capacity sharing, and technical assistance. Along with sharing common resources, the United States also shares the consequences of potentially harmful activities occurring outside of U.S. waters, including pollution, over-harvesting of marine resources, and degradation of associated habitats. By coordinating with international MPA programs, the United States can minimize the harmful impacts of external activities and maximize the benefits of MPAs.

For U.S. MPAs, important international linkages include, but are not limited to, those relating to Canada, Mexico, and Russia, as well as those amongst multiple countries in the Arctic, Pacific Islands, and Caribbean. Several legal mechanisms, such as bi-lateral and multi-lateral agreements and treaties, exist to address many of these resource management issues. For example, the International Maritime Organization’s Particularly Sensitive Sea Areas program and the Wider Caribbean Protocol Concerning Specially Protected Areas and Wildlife are two MPA-related international efforts of significance. The MPA Center and/or its federal partners are actively involved in a number of such efforts, including the Commission on Environmental Cooperation’s development of a North American MPA Network (NAMPAN) and the exchange of training and technical assistance with other nations. The national system can facilitate a dialogue and develop collaborative efforts between the United States and other countries to complement and support the work of MPA programs.

## APPENDIX C. PROGRAMMATIC ENVIRONMENTAL ASSESSMENT

### ***Lead Agency:***

Department of Commerce, National Oceanic and Atmospheric Administration, National Ocean Service

### ***Cooperating Agency:***

Department of the Interior, National Park Service



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## **Purpose and Need for this Programmatic Environmental Assessment**

The purpose of this Programmatic Environmental Assessment (PEA) is to fulfill the requirements of Executive Order (EO) 13158, which are to develop, design and build a National System of Marine Protected Areas (MPAs).

### ***Executive Order 13158 on MPAs***

Executive Order 13158 on Marine Protected Areas (2000) calls on the Department of Commerce and the Department of the Interior (DOI), in consultation with other federal agencies and stakeholders, to develop a national system of marine protected areas (MPAs) to enhance the conservation of the nation's natural and cultural marine heritage. The Executive Order created the National Marine Protected Areas Center (MPA Center) within the National Oceanic and Atmospheric Administration (NOAA) to coordinate this effort. The mission of the MPA Center is to facilitate the effective use of science, technology, training, and information in the planning, management, and evaluation of the nation's system of marine protected areas.

### ***The National System of MPAs***

Currently, nearly 1,700 marine areas have been identified in the United States (U.S.). These areas are managed under the authority of hundreds of federal, state and territorial (state), tribal, and local laws and regulations. Familiar examples of MPAs include national and state marine sanctuaries, parks, wildlife refuges, and some fishery management areas. This patchwork of protected areas is an important component of the nation's marine conservation mission, but would be greatly enhanced by the improved coordination and integration across sites and MPA programs that a national system will provide.

The National System of MPAs (national system) will be built collaboratively by existing MPA sites and systems through partnerships at the ecosystem, regional, and national levels. The national system will focus on supporting shared priorities for enhancing coordination and stewardship of partner MPA sites and systems in order to improve effectiveness. The national system may ultimately include some new areas vital to the conservation of significant natural and cultural marine resources. These may be identified by national system partners through regional planning or other processes, and will be based on the best available science and stakeholder involvement.

Any new MPAs would need to be designated through an existing federal, state, tribal, or local authority, as the Executive Order provides no authority to create new MPAs.

### ***Need for Action***

The Executive Order calls on the MPA Center to develop a Framework for the national system (Framework). The first draft was published for public comment in September 2006, and was

revised after due consideration of comments and recommendations received. A second draft was published for an additional round of public comment during March-May 2008, and again has been revised with consideration of input received. This PEA has also been revised based on comments received during the 2006-2008 comment period.

The purpose of the Framework is to serve as a “road map” for developing the national system that will specify a common vision, and common goals, objectives, and criteria for the national system, as well as the process for partnerships among federal, state, tribal, and local government agencies and stakeholders to develop it. While the Executive Order and the Framework document are non-regulatory, the MPA Center developed this PEA to provide federal and state agencies, tribes, and other stakeholders with the best available information on the potential impacts of the Framework document during its two public comment periods.

### ***Scope of this Analysis***

This PEA considers the programmatic environmental consequences of proposing the Framework. As previously described, the Framework itself only lays out a strategic process to achieve a national system of MPAs. The Framework itself does not propose any new MPAs, nor does it create or recommend any new authority under which they may be designated.

The consideration of designating additional MPAs or expanding existing MPAs will occur solely at the discretion of the state, federal, tribal, and local agencies which have the authority to develop different MPAs to fulfill their own missions and implement the national system. As such, any potential site-specific environmental, economic, and social impacts cannot be meaningfully analyzed until these agencies consider individual MPA proposals under their own authorities. Therefore, the potential effects of any detailed regional, state, or local MPA alternatives proposed by a federal agency under this Framework would be further analyzed under NEPA at the time they are proposed, including in environmental assessments tiered from this PEA as appropriate.

## **Description of Proposed Action and Alternatives**

### ***Alternatives Considered, but Rejected***

In considering alternatives for proposing the Framework, the following three were selected as constituting a reasonable range of alternatives for this PEA: “Alternative A: Take No Action,” “Alternative B: Propose the Draft Framework for Developing the National System of Marine Protected Areas” and “Alternative C: Propose the Framework for the National System of Marine Protected Areas of the United States of America.” Numerous other possible alternatives were, however, considered by NOAA for analysis, but ultimately rejected. For example, a wide range of alternatives would have resulted from all the possible permutations of changes in the Framework’s approach to meeting the various requirements of the MPA Executive Order. Several factors led to the determination that the approach of analyzing a wide range of many potential alternatives should be rejected.

First, the Framework lays out a series of processes for U.S. MPA programs, managing entities, authorities, and other stakeholders around the country to work together to determine eligible MPAs and the most appropriate, specific approaches for developing the national system. Because the Framework is focused on managing entity and stakeholder processes to determine specific approaches and actions, the environmental consequences of these permutations cannot be predicted to be significantly different than Alternative C.



Second, and most important, the processes outlined in the elements of the Framework are based on input received from consultations with and recommendations from MPA stakeholders around the country, including the MPA Federal Advisory Committee, as required by the Executive Order. Creating a range of alternatives that are either independent of these consultations or consider only some of the recommendations received would not meet the requirements of the Executive Order.

Therefore, having considered additional alternatives for proposing the Framework for the national system, NOAA has determined that the three alternatives described below constitute a reasonable and practical range of alternatives for assessing the anticipated environmental consequences of fulfilling the need to develop the Framework.

***Alternative A: Take No Action***

Under this alternative, NOAA would not propose a Framework as required by the MPA Executive Order. The MPA Executive Order would stand alone without any further detail of the processes necessary for developing the national system. There would be no description of processes for identifying and including existing MPAs in the national system, working with MPA programs to collaboratively identify and address common stewardship needs, or identifying place-based gaps in protection.

***Alternative B: Propose the Draft Framework for Developing the National System of Marine Protected Areas***

NOAA proposed the first draft of the Framework published in September 2006. As noted by the MPA Federal Advisory Committee and many public comments, this draft document lacked a strategic focus to describe how the national system would target priority conservation objectives; lacked design and implementation principles to guide development of the system; and provided only a minimal description of how the national system would be coordinated and conduct gap analyses on a regional basis.

***Alternative C: Propose the Framework for the National System of Marine Protected Areas of the United States of America (Preferred)***

This alternative would fulfill the directive of the MPA Executive Order to develop a Framework. The Framework provides guidance for developing the national system and therein implementing key elements of the Executive Order. The full descriptions of the proposed national system elements and associated processes are contained in the Framework and summarized here as:

- Summary of authority for developing the Framework and national system.
- Overview of key U.S. MPA programs and related initiatives.
- Key definitions for developing the national system.
- Goals and objectives for the national system.
- Sequence and steps for implementing the Framework.
- Process for identifying, nominating, and including MPAs in the national system.

- Options for building collaborative efforts to enhance stewardship and regional coordination of MPAs.
- Process for identifying conservation gaps in the national system.
- Maintenance of the official List of National System MPAs.
- Process for implementing the “avoid harm” provision.
- Options for evaluating effectiveness of the national system.
- Mechanisms for tracking and reporting national system progress and priorities.

## **Description of Affected Environment**

The geographic extent of the Framework and the nation’s existing MPAs that it aims to support span the United States’ territorial waters and Exclusive Economic Zone waters of the Pacific Ocean, including the Bering Sea; Atlantic Ocean, including the Gulf of Mexico and Caribbean Sea; Arctic Ocean; and the Great Lakes. This environment encompasses the entire range of the nation’s marine ecosystems, including their natural heritage, cultural heritage, and sustainable production resources and functions, goods, and services. The following are general descriptions of five valued environmental components that may be affected programmatically by the Framework. More detailed descriptions of specific affected environments will be given in future tiered analyses based on future consideration of MPAs which may occur under the authority of individual state, federal, tribal, and local agencies.

### ***Natural Heritage Resources***

The nation’s existing MPAs, whether managed by federal, state, tribal, or an inter-governmental collaboration of entities help to conserve and restore the wealth of U.S. natural marine environments, including but not limited to, kelp forests, warm and cold water coral reefs, rocky intertidal areas, offshore banks and seamounts, estuarine areas, the Great Lakes waters, deep sea vents, and sand and mud flats. In these marine environments, MPAs play an important role in protecting the significant natural biological communities, endangered and threatened species, habitats, ecosystems, processes, and the ecological services, uses, and values they provide to this and future generations. These various components of the nation’s marine environment are critical to maintaining the integrity and health of marine and coastal ecosystems. Oftentimes managing for one of these elements means protecting the others. For example, to effectively manage endangered or threatened species, the habitat they rely upon must also be protected.

### ***Sustainable Production Resources***

Existing U.S. MPAs are also designed and established with the intent to help ensure the sustainability of the renewable living resources and their habitats, including, but not limited to, spawning, mating, and nursery grounds, and areas established to minimize bycatch of species that are important to the nation’s economy and the livelihoods and subsistence needs of its citizens. MPAs can help to sustain commercial and recreational fisheries by controlling fishing effort, protecting critical stages in the life history of fishery species, conserving genetic diversity of exploited species, reducing secondary impacts of fishing on essential fish habitat and other species, and ensuring against fisheries collapse (Murray et al. 1999; NRC, 2001). MPAs may allow site-



specific regulation of selected species, selected gear types, or fishing methods. Certain MPAs or zones within MPAs may be fishery reserves that protect all or nearly all species from fishing. Many studies indicate that abundance and size of target species increase in marine protected areas that limit extractive use (Dugan and Davis, 1993; Crowder et al., 2000; Halpern, 2003).

### ***Cultural Heritage Resources***

The nation's existing MPAs preserve and protect important cultural resources. These cultural resources reflect the nation's maritime history and traditional cultural connections to the sea, as well as the uses and values they provide to this and future generations. Examples include archeological sites that contain significant cultural artifacts; sunken historic ships, aircraft, or other vessels; and areas important to specific cultures. Protecting cultural resources in MPAs reduces the chance that artifacts will be removed or damaged from modern-day commercial or recreational activities. Unlike many biological communities that have some level of resilience to recover from degradation, once cultural sites are damaged, the information and value of these non-renewable resources may be lost forever. MPAs are an important tool for conserving cultural resources by monitoring the environment for change and stabilizing deteriorating structures. MPAs also encourage actions to find, preserve, and interpret the associated artifacts that may otherwise be inaccessible to the public. By protecting marine sites that are important to the nation's diverse cultures, existing U.S. MPAs preserve a part of history for future generations.

### ***Current Governmental Management Structure***

The past several decades have witnessed a dramatic increase in the use of MPAs as a conservation and management tool to protect the nation's most important natural and cultural marine resources and areas. Over 90 percent of U.S. MPAs were established after 1970 (National MPA Center Marine Protected Area Inventory, 2008). The growth in MPAs has not only resulted in increased protections to certain natural and cultural marine resources, but also brought about a significant number of new MPA programs and authorities at all levels of government, each with their own requirements, levels of protection, and associated terms.

These programs and the MPA sites that they manage are components of a complex sociopolitical landscape that features diverse institutions, governance structures, and processes. They include, for example, federal programs such as the National Marine Sanctuaries and National Parks; tribal MPA authorities and co-management arrangements with states; state programs such as fish and wildlife, coastal zone management, and historic preservation; and other governmental approaches to MPAs.

Each of these programs has its own mandate it is required to fulfill. These mandates often overlap in both geographic scope and the conservation purposes for which they were established. In addition, while many existing MPA programs comprise a system of MPAs, there are a limited number of mechanisms in place to coordinate MPA efforts across ecosystem, regional, national, or international levels among MPA programs and levels of government. This is not to say that no such coordination is happening. In fact, there are a number of good examples of existing MPA sites and programs in a common geography working together, which serve as excellent models. However, there is no overarching MPA framework for facilitating and promoting such coordination across levels of government and at an ecosystem or regional scale around the nation. Similarly, the effectiveness of the existing

suite of MPAs in contributing to the long-term sustainability of important resources, habitats and ecosystems, and the services and values they provide, is largely yet to be determined.

### ***Social, Economic and Cultural Benefits***

MPAs in the United States and its territories provide social, economic, and cultural benefits by protecting resources and environments. These benefits come in many forms, both tangible and intangible and direct and indirect. Direct, tangible benefits may include supporting the socioeconomic well-being of communities tied to our nation's fisheries by enhancing stocks for sustainable harvest and recreational opportunities. These communities provide significant inputs to the U.S. economy and many have long and storied historical connections to the marine environment. MPAs that ensure sustainable production have the intangible benefit of promoting cultural continuity and identity, which is instrumental in maintaining healthy communities.

By protecting key resources and habitats, MPAs can also promote greater economic returns from tourism through enhanced visitor experiences. These direct economic benefits are inextricably linked with the intangible quality of visitor experience. Good water quality, abundant living resources, and scenic, aesthetic ocean environments attract visitors to coastal areas around the globe. These visitors engage in diverse activities that include non-extractive uses of the marine environment, such as scuba diving, snorkeling, wildlife watching, boating, and surfing, as well as extractive uses such as fishing. All of these activities rely on healthy marine environments. U.S. MPAs help ensure that marine environments will continue to draw the visitors that have become critical to many coastal economies. For example, in Monroe County, Florida, location of the Florida Keys National Marine Sanctuary and other marine-related parks and wildlife refuges, the estimated total tourist contribution to the economy (1995-1996) is over 60 percent (English et al., 1996).

MPAs also provide direct, tangible benefits by providing opportunities for research and education. Certain MPAs feature academic and applied monitoring of short-term events and long-term environmental trends, as well as biomedical research (Salm et al, 2000).

MPAs can provide hands-on experience and outdoor laboratories for bringing classroom studies to life. MPA educational programs have the potential to promote public awareness of the importance of marine ecosystems and their many benefits.

MPAs also protect historic connections to our nation's heritage that are critical to social and cultural continuity. People and communities are connected to marine resources, including both natural and cultural features. These connections are affirmed through direct practice, oral and written narrative, and everyday discourse. MPAs can enhance cultural connectivity to places by ensuring their protection for future generations, allowing traditional cultural practices, promoting awareness of our nation's heritage, and acknowledging existence and bequest values inherent in marine resources.

### **Environmental Consequences of Proposed Action and Alternatives**

As previously noted, the Framework only provides a strategic process for establishing the National System of MPAs, rather than proposing any specific action itself. Therefore, at a programmatic level, the environmental consequences of the proposed action and alternatives are negligible.



The specific environmental, economic, social, and cumulative impacts of proposed new or expanded MPAs later proposed by a federal agency under this Framework would be further analyzed under NEPA at the time they are proposed, including in environmental assessments tiered from this PEA as appropriate.

### ***Alternative A: Take No Action***

#### ***Environmental Impacts***

Taking no action would result in no predictable direct or indirect environmental impacts, either positive or negative. The ‘Take No Action’ alternative would not allow for the realization of the benefits expected from the proposed Framework’s greater integration and coordination of conservation efforts among existing authorities and sites.

#### ***Socioeconomic Impacts***

Taking no action would result in no predictable direct socioeconomic impacts, either positive or negative. The ‘Take No Action’ alternative would not allow for the realization of the benefits expected from the proposed Framework’s greater integration and coordination of conservation efforts among existing authorities and sites.

### ***Alternative B: Propose the Draft Framework for Developing the National System of Marine Protected Areas***

#### ***Environmental Impacts***

The Draft Framework would not be expected to result in adverse impacts on the environment. The Draft Framework proposed to coordinate the activities among federal, state, tribal, and local MPA sites and systems to reduce administrative costs and promote efficiency and the effective use of existing management infrastructure for marine resource protection. However, because of the lack of a strategic focus within this alternative, the expected beneficial long-term environmental impacts and improved quality of the nation’s marine resources would not be as great as those under Alternative C.

#### ***Socioeconomic Impacts***

Similar to Alternative C, the proposed Draft Framework would not be expected to result in adverse socioeconomic impacts. However, because of the lack of focused design and implementation principles, and a clear vision for regional coordination, there is less potential, relative to Alternative C, for long-term positive socioeconomic impacts from promoting integration among government authorities, enhancing knowledge and awareness of MPAs as a tool of ecosystem-based management, and supporting processes for incorporating stakeholders and communities in ecosystem management.

### ***Alternative C: Propose the Framework for the National System of Marine Protected Areas of the United States of America (Preferred)***

#### ***Environmental Impacts***

The Framework is not expected to result in adverse impacts on the environment. The Framework proposes to coordinate the activities among federal, state, tribal, and local MPA

sites and systems to reduce administrative costs and promote efficiency and the effective use of existing management infrastructure for marine resource protection.

Implementation of the Framework provides opportunities for shared information, resources, scientific expertise, and lessons learned for individual MPAs. The proposed Framework mostly involves a number of low or no impact activities that will positively affect the stewardship and management of individual MPAs and ultimately lead to beneficial long-term environmental impacts and improved quality of the nation's marine resources relative to Alternative A. Additional environmental analysis of future activities, as required under the National Environmental Policy Act (NEPA) and other acts and executive orders, would be prepared as necessary by the relevant entity or entities taking any such actions.

The Framework also promotes activities over time to identify gaps in protection of important marine resources and subsequent area-based conservation priorities that would be needed to manage and protect those resources. This component of the Framework is similarly comprised of a number of low or no impact activities that ultimately could lead to beneficial long-term environmental impacts relative to Alternative A. In order to realize these benefits, however, actions to implement new or increased protections would be needed. Activities taken by individual entities in the future, such as changes in MPA regulations or the establishment of new MPAs as a result of the implementation of the proposed Framework will undergo separate NEPA analysis by entities taking such actions as required and appropriate.

### ***Socioeconomic Impacts***

The proposed Framework is not expected to result in adverse socioeconomic impacts. The Framework provides guidance for the implementation of the national system. It does not establish new MPAs or directly affect the stewardship and management, including human uses and values, associated with existing MPAs. The socioeconomic impacts of, for example, the long-term cumulative effects of developing the national system will be assessed as necessary under NEPA and other federal mandates for specific actions taken by those entities or programs with the authority to establish and manage MPAs and/or alter MPA regulations.

In proposing to integrate the activities and conservation objectives among the various authorities, the Framework will have its most immediate effects upon the communication and organizational structures across the various levels of MPA governance. As a result, there is great potential, relative to Alternative A, for long-term positive socioeconomic impacts from promoting integration among government authorities, enhancing knowledge and awareness of MPAs as a tool of ecosystem-based management, and supporting processes for incorporating stakeholders and communities in ecosystem management.

Furthermore, the implementation of the national system as proposed by the Framework will have long-term positive impacts, relative to Alternative A, for participating MPA sites, their associated marine resources, and the wider ecosystems of which they are a part. The national system will seek to integrate natural heritage, cultural heritage, and sustainable production objectives in order to minimize adverse socioeconomic impacts and promote comprehensive MPA conservation and management. It will focus on improving the effectiveness of MPA design, management, and evaluation through dissemination and use of the best available science and tools.



Additional socioeconomic analysis as required under NEPA and other acts and executive orders, would be prepared by the relevant entity or entities as necessary for future specific actions.

### ***Cumulative Effects***

The Council on Environmental Quality regulations (40 CFR 1508.8) define cumulative effects as “impacts on the environment that result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such actions.” At a programmatic level, the integration and coordination of federal, state, local and tribal agencies to improve MPA conservation and management are anticipated to have no significant adverse cumulative impact to environmental or socioeconomic resources. Relative to Alternative A, the proposed action has beneficial cumulative impacts to the resources that the National System of MPAs will protect. At a programmatic level, socioeconomic impacts are anticipated to be negligible (see above). Future tiered analyses on specific alternatives and resources will occur as entities consider future actions which fall under this Framework.

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### **Finding of No Significant Impact**

The Council on Environmental Quality (CEQ) Regulations state that the determination

of significance using an analysis of effects requires examination of both context and intensity, and lists ten criteria for intensity (40 CFR 1508.27). In addition, the National Oceanic and Atmospheric Administration Administrative Order (NAO) 216-6 Section 6.01b. 1 - 11 provides eleven criteria, including the same ten as the CEQ Regulations and one additional, for determining whether the impacts of a proposed action are significant. Each criterion is discussed below with respect to the proposed action and considered individually as well as in combination with the others.

**1. Can the proposed action reasonably be expected to cause both beneficial and adverse impacts that overall may result in a significant effect, even if the effect will be beneficial?**

NOAA expects the implementation of the proposed Framework will result in a number of activities that will positively affect the stewardship and management of individual MPAs and ultimately lead to beneficial long-term environmental impacts and improved quality of the nation's marine resources. The specific environmental, economic, social, and cumulative impacts of any proposed new or expanded MPAs later proposed by a federal agency under this Framework would be further analyzed as required by NEPA at the time they are proposed.

**2. Can the proposed action reasonably be expected to significantly affect public health or safety?**

No negative impacts to public health or safety are associated with these activities.

**3. Can the proposed action reasonably be expected to result in significant impacts to unique characteristics of the geographic area, such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas?**

The Framework for the national system will not have significant adverse impacts on the areas listed above. It will provide a mechanism for coordination among existing marine protected areas, including those that protect significant natural and cultural marine resources. The Framework is expected to enhance the effectiveness of participating MPAs in contributing to national conservation objectives, such as the protection of spawning and nursery areas or the conservation of resources listed on the National Register of Historic Places.

**4. Are the proposed action's effects on the quality of the human environment likely to be highly controversial?**

While individual MPAs are often a contentious subject, the effects of the proposed Framework on the human environment are not likely to be controversial. The actions and activities associated with the various components of the Framework focus on promoting coordination, collaboration, opportunities for stakeholder input, and enhancing scientific understanding in support of the effective use of MPAs. These activities largely have little or no impact on the human environment, but are envisioned to positively affect the stewardship and management of individual MPAs and ultimately lead to beneficial long-term impacts on the human environment and improved quality of the nation's marine resources.

**5. Are the proposed action's effects on the human environment likely to be highly uncertain or involve unique or unknown risks?**

The Framework's effects are not expected to involve unique or unknown risks. Work will focus on enhancing coordination; sharing best management practices, technologies and science; and establishing conservation partnerships across all levels of government and with stakeholders.



**6. Can the proposed action reasonably be expected to establish a precedent for future actions with significant effects or represent a decision in principle about a future consideration?**

The Framework does not establish a precedent for future actions with significant effects. Regional conservation gap analyses will identify ecologically and culturally significant areas that may require additional protection. However, the Framework does not have any authority to establish a new MPA or another type of protection for these areas. Any additional protection would be provided under existing federal, state, local or tribal laws, and would be subject to the required review processes under the respective authority.

**7. Is the proposed action related to other actions that when considered together will have individually insignificant but cumulatively significant impacts?**

The activities associated with the proposed Framework largely have little or no impact on the human environment, but are envisioned to positively affect the stewardship and management of individual MPAs and ultimately lead to beneficial long-term impacts on the human environment and improved quality of the nation's marine resources. By providing the first national geospatial database of MPAs across all levels of government, the national system will provide an opportunity to better understand the cumulative effectiveness of existing MPAs and to identify opportunities for collaboration. The cumulative effects of specific MPAs that may be proposed under the Framework will be analyzed in the NEPA analysis prepared for that proposed action.

**8. Can the proposed action reasonably be expected to adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources?**

The Framework will not adversely affect any of the aforementioned areas. It will benefit significant scientific, cultural and historical resources and areas listed in or eligible for listing in the National Register of Historic Places, as the protection of these areas is included in the goals and objectives of the national system.

**9. Can the proposed action reasonably be expected to have a significant impact on endangered or threatened species, or their critical habitat as defined under the Endangered Species Act of 1973?**

The Framework will not adversely affect endangered or threatened species or their critical habitat. The conservation of critical habitat for threatened and endangered species is an objective of the national system. The national system will provide tools for analyzing and mapping existing protected areas that contribute to the conservation of threatened and endangered species, as well as gaps in the protection of critical habitat where new MPAs may be needed.

**10. Can the proposed action reasonably be expected to threaten a violation of Federal, state, or local law or requirements imposed for environmental protection?**

The Framework will not threaten any violation of Federal, state, or local law or requirements for environmental protection.

**11. Can the proposed action reasonably be expected to result in the introduction or spread of a nonindigenous species?**

The Framework will not result in the introduction or spread of any nonindigenous species. By providing a mechanism for regional coordination, it will help MPAs develop shared strategies and partnerships to prevent and contain the impacts of nonindigenous species.

***List of Preparers and Agencies Consulted***

Department of Commerce, National Oceanic and Atmospheric Administration  
Department of the Interior, National Park Service

**APPENDIX D. EXECUTIVE ORDER 13158**

***Executive Order 13158***

***Presidential Documents***

***Executive Order 13158 of May 26, 2000***

***Marine Protected Areas***

By the authority vested in me as President by the Constitution and the laws of the United States of America and in furtherance of the purposes of the National Marine Sanctuaries Act (16 U.S.C. 1431 et seq.), National Wildlife Refuge System Administration Act of 1966 (16 U.S.C. 668dd-ee), National Park Service Organic Act (16 U.S.C. 1 et seq.), National Historic Preservation Act (16 U.S.C. 470 et seq.), Wilderness Act (16 U.S.C. 1131 et seq.), Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1801 et seq.), Coastal Zone Management Act (16 U.S.C. 1451 et seq.), Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.), Marine Mammal Protection Act (16 U.S.C. 1362 et seq.), Clean Water Act of 1977 (33 U.S.C. 1251 et seq.), National Environmental Policy Act, as amended (42 U.S.C. 4321 et seq.), Outer Continental Shelf Lands Act (42 U.S.C. 1331 et seq.), and other pertinent statutes, it is ordered as follows:

Section 1. Purpose. This Executive Order will help protect the significant natural and cultural resources within the marine environment for the benefit of present and future generations by strengthening and expanding the Nation's system of marine protected areas (MPAs). An expanded and strengthened comprehensive system of marine protected areas throughout the marine environment would enhance the conservation of our Nation's natural and cultural marine heritage and the ecologically and economically sustainable use of the marine environment for future generations. To this end, the purpose of this order is to, consistent with domestic and international law: (a) strengthen the management, protection, and conservation of existing marine protected areas and establish new or expanded MPAs; (b) develop a scientifically based, comprehensive national system of MPAs representing diverse U.S. marine ecosystems, and the Nation's natural and cultural resources; and (c) avoid causing harm to MPAs through federally conducted, approved, or funded activities.



Sec. 2. Definitions. For the purposes of this order:

- a. “Marine protected area” means any area of the marine environment that has been reserved by Federal, State, territorial, tribal, or local laws or regulations to provide lasting protection for part or all of the natural and cultural resources therein.
- b. “Marine environment” means those areas of coastal and ocean waters, the Great Lakes and their connecting waters, and submerged lands thereunder, over which the United States exercises jurisdiction, consistent with international law.
- c. The term “United States” includes the several States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands of the United States, American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands.

Sec. 3. MPA Establishment, Protection, and Management. Each Federal agency whose authorities provide for the establishment or management of MPAs shall take appropriate actions to enhance or expand protection of existing MPAs and establish or recommend, as appropriate, new MPAs. Agencies implementing this section shall consult with the agencies identified in subsection 4(a) of this order, consistent with existing requirements.

Sec. 4. National System of MPAs. (a) To the extent permitted by law and subject to the availability of appropriations, the Department of Commerce and the Department of the Interior, in consultation with the Department of Defense, the Department of State, the United States Agency for International Development, the Department of Transportation, the Environmental Protection Agency, the National Science Foundation, and other pertinent Federal agencies shall develop a national system of MPAs. They shall coordinate and share information, tools, and strategies, and provide guidance to enable and encourage the use of the following in the exercise of each agency’s respective authorities to further enhance and expand protection of existing MPAs and to establish or recommend new MPAs, as appropriate:

1. science-based identification and prioritization of natural and cultural resources for additional protection;
2. integrated assessments of ecological linkages among MPAs, including ecological reserves in which consumptive uses of resources are prohibited, to provide synergistic benefits;
3. a biological assessment of the minimum area where consumptive uses would be prohibited that is necessary to preserve representative habitats in different geographic areas of the marine environment;
4. an assessment of threats and gaps in levels of protection currently afforded to natural and cultural resources, as appropriate;
5. practical, science-based criteria and protocols for monitoring and evaluating the effectiveness of MPAs;
6. identification of emerging threats and user conflicts affecting MPAs and appropriate,

practical, and equitable management solutions, including effective enforcement strategies, to eliminate or reduce such threats and conflicts;

7. assessment of the economic effects of the preferred management solutions; and
  8. identification of opportunities to improve linkages with, and technical assistance to, international marine protected area programs.
- b. In carrying out the requirements of section 4 of this order, the Department of Commerce and the Department of the Interior shall consult with those States that contain portions of the marine environment, the Commonwealth of Puerto Rico, the Virgin Islands of the United States, American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands, tribes, Regional Fishery Management Councils, and other entities, as appropriate, to promote coordination of Federal, State, territorial, and tribal actions to establish and manage MPAs.
  - c. In carrying out the requirements of this section, the Department of Commerce and the Department of the Interior shall seek the expert advice and recommendations of non-Federal scientists, resource managers, and other interested persons and organizations through a Marine Protected Areas Federal Advisory Committee. The Committee shall be established by the Department of Commerce.
  - d. The Secretary of Commerce and the Secretary of the Interior shall establish and jointly manage a website for information on MPAs and Federal agency reports required by this order. They shall also publish and maintain a list of MPAs that meet the definition of MPA for the purposes of this order.
  - e. The Department of Commerce's National Oceanic and Atmospheric Administration shall establish a Marine Protected Area Center to carry out, in cooperation with the Department of the Interior, the requirements of subsection 4(a) of this order, coordinate the website established pursuant to subsection 4(d) of this order, and partner with governmental and nongovernmental entities to conduct necessary research, analysis, and exploration. The goal of the MPA Center shall be, in cooperation with the Department of the Interior, to develop a framework for a national system of MPAs, and to provide Federal, State, territorial, tribal, and local governments with the information, technologies, and strategies to support the system. This national system framework and the work of the MPA Center is intended to support, not interfere with, agencies' independent exercise of their own existing authorities.
  - f. To better protect beaches, coasts, and the marine environment from pollution, the Environmental Protection Agency (EPA), relying upon existing Clean Water Act authorities, shall expeditiously propose new science-based regulations, as necessary, to ensure appropriate levels of protection for the marine environment. Such regulations may include the identification of areas that warrant additional pollution protections and the enhancement of marine water quality standards. The EPA shall consult with the Federal agencies identified in subsection 4(a) of this order, States, territories, tribes, and the public in the development of such new regulations.



Sec. 5. Agency Responsibilities. Each Federal agency whose actions affect the natural or cultural resources that are protected by an MPA shall identify such actions. To the extent permitted by law and to the maximum extent practicable, each Federal agency, in taking such actions, shall avoid harm to the natural and cultural resources that are protected by an MPA. In implementing this section, each Federal agency shall refer to the MPAs identified under subsection 4(d) of this order.

Sec. 6. Accountability. Each Federal agency that is required to take actions under this order shall prepare and make public annually a concise description of actions taken by it in the previous year to implement the order, including a description of written comments by any person or organization stating that the agency has not complied with this order and a response to such comments by the agency.

Sec. 7. International Law. Federal agencies taking actions pursuant to this Executive Order must act in accordance with international law and with Presidential Proclamation 5928 of December 27, 1988, on the Territorial Sea of the United States of America, Presidential Proclamation 5030 of March 10, 1983, on the Exclusive Economic Zone of the United States of America, and Presidential Proclamation 7219 of September 2, 1999, on the Contiguous Zone of the United States.

Sec. 8. General.

- a. Nothing in this order shall be construed as altering existing authorities regarding the establishment of Federal MPAs in areas of the marine environment subject to the jurisdiction and control of States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands of the United States, American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, and Indian tribes.
- b. This order does not diminish, affect, or abrogate Indian treaty rights or United States trust responsibilities to Indian tribes.
- c. This order does not create any right or benefit, substantive or procedural, enforceable in law or equity by a party against the United States, its agencies, its officers, or any person.

(Presidential Sig.) William J. Clinton  
THE WHITE HOUSE,  
May 26, 2000.

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## APPENDIX E. MPA FAC AND EX OFFICIO MEMBERS, AND THE FEDERAL MPA INTERAGENCY WORKING GROUP

### CURRENT MEMBERS OF THE MPA FEDERAL ADVISORY COMMITTEE

#### *CHAIR*

Dr. Mark Hixon, Professor, Department of Zoology, Oregon State University

#### *VICE-CHAIR*

Mr. Robert Zales, II, Owner, Bob Zales Charters

#### *MEMBERS*

Ms. Lori Arguelles, President and CEO, National Marine Sanctuaries Foundation

Mr. Charles D. Beeker, Director, Office of Underwater Science, School of Health, Physical Education and Recreation, Indiana University

Mr. David Benton, Benton & Associates

Dr. Daniel Bromley, Professor, Department of Agricultural and Applied Economics, University of Wisconsin

Dr. Anthony Chatwin, Marine Conservation Planner, The Nature Conservancy

Mr. Rick Gaffney, Pacific Boats and Yachts

Dr. Steve Gaines, Professor, Ecology, Evolution and Marine Biology, University of California, Santa Barbara

Ms. Ellen Goethel, Co-Owner, “Ellen Diane” / Ocean Educator

Dr. Dennis Heinemann, Senior Scientist, The Ocean Conservancy

Mr. George Lapointe, Commissioner, Maine Department of Marine Resources

Mr. Victor T. Mastone, Director and Chief Archeologist, Massachusetts Board of Underwater Archaeological Resources

Ms. Melissa Miller-Henson, Program Manager, California Marine Life Protection Act Initiative

Dr. Russell Moll, Director, California Sea Grant College Program, University of California, San Diego

Dr. Elliott Norse, President, Marine Conservation Biology Institute



Dr. John Ogden, Director and Professor, Florida Institute of Oceanography, University of South Florida

Mr. Terry O'Halloran, Hawaii Superferry, Tourism Business Solutions, LLC

Mr. Alvin D. Osterback, Port Director, City of Unalaska/Port of Dutch Harbor

Dr. Walter Pereyra, Chairman, Arctic Storm Management Group, Inc.

Mr. Eugenio Piñeiro-Soler, Chairman, Caribbean Fishery Management Council

Dr. Robert S. Pomeroy, Sea Grant Fisheries Specialist, Connecticut Sea Grant Office, University of Connecticut at Avery Point

Mr. Gilbert Radonski, Fisheries Consultant, Former President, Sport Fishing Institute

Mr. James P. Ray, President, Oceanic Environmental Solutions, LLC

Captain Philip G. Renaud, USN (Ret.), Executive Director, Living Oceans Foundation

Mr. Jesús C. Ruiz, President, California Divers

Mr. Bruce A. Tackett, Manager, Legislative and Regulatory Issues, ExxonMobil Biomedical Sciences, Inc.

Mr. David H. Wallace, Owner, Wallace and Associates

Mr. Robert Wargo, President, North American Submarine Cable Association, Marine Liaison Manager, AT&T

## **EX OFFICIO FEDERAL REPRESENTATIVES**

### ***Department of Commerce***

Ms. Laura Furgione, Assistant Administrator for Program Planning and Integration, NOAA

### ***Department of the Interior***

Dr. Kaush Arha, Deputy Assistant Secretary for Fish and Wildlife and Parks, U.S. Department of the Interior

Designee: Mr. Randal Bowman, Office of the Assistant Secretary, Fish and Wildlife and Parks, U.S. Department of the Interior

### ***Department of Defense/Navy***

Mr. Donald Schregardus, Deputy Assistant Secretary of the Navy (Environment)

Designee: Capt. Robin Brake, Director, Marine Science, Office of the Assistant Secretary of the Navy (Installations and Environment)

***Department of Defense/Army Corps***

Mr. Joseph Wilson, U.S. Army Corps of Engineers, South Atlantic Division

***Department of Homeland Security***

Rear Admiral Wayne Justice, Assistant Commandant for Response, U.S. Coast Guard

Designee: LCDR Chris Barrows, Commandant (CG-3RPL-4), Chief, Fisheries and Marine Protected Species Law Enforcement, US Coast Guard

***U.S. Agency for International Development***

Ms. Jacqueline Schafer, Deputy Assistant Administrator, Bureau for Economic Growth, Agriculture and Trade

Designee: Dr. Barbara Best, Coastal Resources and Policy Advisor, Office of Natural Resources Management, Bureau for Economic Growth, Agriculture and Trade

***National Science Foundation***

Ms. Roxanne Nikolaus, Ocean Sciences Division

***Department of Agriculture***

Mr. Merlin Bartz, Office of the Under Secretary for Conservation, Natural Resources and the Environment

***Department of State***

Ms. Margaret F. Hayes, Director of the Office of Oceans Affairs, Bureau of Oceans and International Environmental and Scientific Affairs

***Environmental Protection Agency***

Dr. Brian Melzian, Oceanographer/Project Officer, U.S. Environmental Protection Agency, National Health and Environmental Effects Research Laboratory, Atlantic Ecology Division

***Designated Federal Official***

Ms. Lauren Wenzel, NOAA Ocean Service, National Marine Protected Area Center

**PAST MEMBERS OF THE MPA FAC*****MEMBERS***

Dr. Tundi Agardy, Executive Director, Sound Seas

Mr. Robert Bendick, Jr., Vice President, Southeast Division, The Nature Conservancy

Dr. Michael Cruickshank, President, Marine Minerals Technology Center Associates

Ms. Carol Dinkins, Partner, Vinson and Elkins Attorneys at Law

Dr. Rodney Fujita, Senior Scientist, Environmental Defense



Dr. Delores Garza, Professor, School of Fisheries and Ocean Sciences, University of Alaska

Mr. Eric Gilman, Marine Ecology and Fisheries Specialist, Blue Ocean Institute

Dr. John Halsey, State Archeologist, Michigan Historical Center, Michigan Department of History, Arts and Libraries

Dr. Bonnie McCay, Professor, Department of Human Ecology, Rutgers University

Mr. Melvin Moon, Jr., Director, Quileute Natural Resources Department

Mr. Robert Moran, Washington Representative, American Petroleum Institute

Dr. Steven Murray, Dean, College of Natural Sciences and Mathematics and Professor of Biological Science, California State University at Fullerton

Mr. Michael Nussman, President and CEO, American Sportfishing Association

Mr. Lelei Peau, Deputy Director, Department of Commerce of American Samoa

Mr. R. Max Peterson, Former Executive Vice President, International Association of Fish and Wildlife Agencies

Ms. Barbara Stevenson, Sellers Representative, Portland Fish Pier

Dr. Daniel Suman, Associate Professor, University of Miami

Mr. Thomas Thompson, Executive Vice President, International Council of Cruise Lines

Ms. H. Kay Williams, Member, Gulf of Mexico Fishery Management Council

Mr. Jim Woods, Sustainable Resources, Makah Fisheries Management

## **EX OFFICIO MEMBERS**

### ***Department of Commerce***

Ms. Mary M. Glackin, Deputy Under Secretary for Oceans and Atmosphere, NOAA

Dr. Paul Doremus, Acting Assistant Administrator, Program Planning and Integration, NOAA

### ***Department of the Interior***

Ms. Kameran Onley, Assistant Deputy Secretary, Office of the Deputy Secretary, U.S. Department of the Interior

***Department of Defense/Navy***

Designee: Mr. Thomas A. Egeland, Director, Environmental Planning and Conservation Policy, Office of the Assistant Secretary of the Navy (Installations and Environment)

***Department of Homeland Security***

Designee: LT Jeff Pearson, Deputy Chief, Marine Protected Species, Commandant (CG-3RPL-4), U.S. Coast Guard

**INTERAGENCY MARINE PROTECTED AREAS WORKING GROUP*****Department of Commerce/NOAA***

Mr. Joseph Uravitch (Chair), Director, National Marine Protected Areas Center

Dr. Mimi D'Iorio, Geographic Information System and Database Manager, National Marine Protected Areas Center

Ms. Rondi Robison, Conservation Planner, National Marine Protected Areas Center

Ms. Kara Schwenke, Communications Coordinator, National Marine Protected Areas Center

Dr. Charles Wahle, Senior Scientist, National Marine Protected Areas Center

Ms. Lauren Wenzel, Federal Agency Coordinator, National Marine Protected Areas Center

Ms. Heather Sagar, NOAA National Marine Fisheries Service

Ms. Laurie McGilvray, Director, Estuarine Reserves Division (National Estuarine Research Reserves)

Mr. Brad Barr, Senior Policy Advisor, National Marine Sanctuaries Program

Mr. Mitchell Tartt, National Marine Sanctuaries Program

***Department of Defense***

Capt. Robin Brake, Director, Marine Science, Office of the Assistant Secretary of the Navy (Installations and Environment)

Mr. Thomas A. Egeland, Director, Environmental Planning and Conservation Policy, Office of the Assistant Secretary of the Navy (Installations and Environment)

Ms. Elizabeth Phelps, Marine Scientist, Chief of Naval Operations, Operational Environmental Readiness and Planning

Ms. Lynn R. Martin, U.S. Army Corps of Engineers, Institute for Water Resources

Mr. Joseph Wilson, U.S. Army Corps of Engineers, South Atlantic Division



***Environmental Protection Agency***

Dr. Brian Melzian, U.S. Environmental Protection Agency, National Health and Environmental Effects Research laboratory, Atlantic Ecology Division

***Department of Homeland Security***

LCDR Chris Barrows, U.S. Coast Guard, Chief, Fisheries and Marine Protected Species Law Enforcement, U.S. Coast Guard Headquarters (CG-3RPL-4)

LCDR Chris German, U.S. Coast Guard, US Coast Guard Liaison, NOAA, Office for Law Enforcement

***Department of the Interior***

Mr. Randal Bowman, Office of the Assistant Secretary, Parks and Fish and Wildlife, U.S. Department of the Interior

Ms. Elizabeth Burkhard, Marine Biologist, Minerals Management Service

Mr. Cliff McCreedy, Marine Management Specialist, Natural Resource Stewardship and Science, National Park Service

Mr. Andrew G. Gude, Program Specialist, Refuge Marine Programs, U.S. Fish and Wildlife Service

***National Science Foundation***

Ms. Roxanne Nikolaus, Ocean Sciences Division

***Department of State***

Ms. Margaret F. Hayes, Director of the Office of Oceans Affairs, Bureau of Oceans and International Environmental and Scientific Affairs

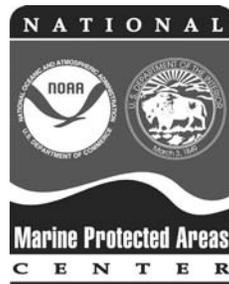
Dr. Winnie Lau, AAAS Science and Technology Fellow/Marine Science Officer, Office of Oceans Affairs, Bureau of Oceans and International Environmental and Scientific Affairs

Dr. Justin Grubich, Marine Science Officer, Office of Ocean Affairs, Bureau of Oceans and International Environmental and Scientific Affairs

***U.S. Agency for International Development***

Dr. Barbara Best, Coastal Resources and Policy Advisor, Office of Natural Resources Management, Bureau for Economic Growth, Agriculture and Trade





FRAMEWORK FOR THE NATIONAL SYSTEM OF  
**MARINE PROTECTED AREAS**  
OF THE UNITED STATES OF AMERICA

# BENEFITS

## of a National System of Marine Protected Areas



The national system of MPAs provides the first comprehensive mechanism for coordinating MPAs managed by diverse federal, state, territorial, tribal and local agencies to work toward national conservation objectives. The system will benefit the nation's collective conservation efforts and participating MPAs, providing those sites with a means to address issues beyond their boundaries. The following list reflects some of the potential benefits from the creation and effective management of the national system.

### Benefits to Participating MPAs



- **Enhancing Stewardship** - The national system will help protect MPAs against the harmful effects of activities through enhanced regional coordination, public awareness, site management capacity, and recognition of these MPAs as important conservation areas.
- **Building Partnerships** - By establishing a mechanism for coordination around common conservation objectives, the national system provides opportunities for MPAs to work together more effectively. The system will also build partnerships between member MPAs and related ocean management initiatives, such as ocean observing systems, ocean mapping, navigational charting, and others.

- **Increasing Support for Marine Conservation** - The designation of MPAs as part of the national system can enhance the stature of these sites within their managing entities and their local communities, as well as nationally and internationally. This designation will also build support for investment in national system MPAs. National system MPAs may benefit from the same type of support and recognition that MPAs who joined international networks have received; such as the World Heritage Sites, Ramsar Wetlands, or other U.S. national level systems like the National Estuarine Research Reserves, National Marine Sanctuaries, National Parks and Wildlife Refuges.
- **More Effective and Efficient Outreach** - The national system will be an important mechanism for increased public awareness and understanding of the importance of marine resources and conservation efforts. Coordinated outreach efforts will increase the impact of outreach by individual MPAs, and could result in cost savings. Including eligible, but currently little known, sites in the national system could bring increased recognition and visibility to these areas.
- **Promoting Cultural Heritage** - Participation in the national system elevates and enhances the recognition of and appreciation for the cultural heritage value of MPA sites, an often overlooked focus of marine conservation.
- **Protecting MPA Resources** - Section 5 of Executive Order 13158 calls for federal agencies to "avoid harm" to the natural and cultural resources protected by MPAs that are part of the national system. Federal agencies are required to identify their activities that affect the natural and cultural resources protected by individual national system MPAs, and, to the extent permitted by law and the maximum extent practicable, avoid harm to those resources. These activities are to be accomplished through existing resource management or review authorities.



## Benefits to the Nation

- **Protecting Representative Ecosystems and Resources** - The national system will significantly boost ongoing efforts to preserve the natural and cultural heritage of the United States by ensuring that the diverse characteristics of the nation's seas are conserved for future generations in a systematic way. The representation of all ecosystem or habitat types in all the nation's marine regions, which includes the Great Lakes, within a single system will help ensure a full complement of biodiversity, habitat types and representative cultural resources.



- **Enhancing Connectivity Among MPAs** - The national system provides an opportunity to identify and establish networks of MPAs that are ecologically connected. An ecological network of MPAs is a set of discrete MPAs within a region that are functionally connected through dispersal of eggs and larvae or movement of juveniles and adults. These networks would enhance linkages between sources and sinks for many marine organisms, which may be essential for some local populations to persist—an increasingly serious challenge in the face of climate change and other impacts. Planning and analysis at the national and regional scales provides an opportunity to address connectivity for many different marine organisms at different spatial scales.



- **Identifying Gaps in Current Protection of Ocean Resources** - The national system will help identify and highlight gaps in protection of important places where MPAs may be an appropriate tool to meet priority conservation objectives. Regional gap analyses will help inform future planning efforts to create MPAs to fill the identified gaps.
- **Providing New Educational Opportunities** - The creation of the national system will enhance opportunities for natural and cultural heritage education. This may include onsite education and interpretation, as well as classroom and web-based resources. The national system will be a valuable tool for educating students and visitors about the nation's diverse marine and coastal ecosystems and cultural resources. It will also provide a mechanism to share educational materials about resources or management approaches among MPAs.
- **Enhancing Research Opportunities** - The national system will provide scientists and managers with more opportunities to understand the dynamics of marine ecosystems and human interactions with them under different management regimes. Increased awareness of the national system may lead to additional funding for research.
- **Improved International Coordination** - By focusing on national objectives, and providing a comprehensive picture of the nation's MPA coverage and focus, the national system will promote more effective links with international MPA programs, encourage the exchange of expertise, and enhance conservation efforts across international boundaries.

## Benefits to Ocean Stakeholders

- **Sustaining Fisheries** - One goal of the national system is supporting sustainable production of harvested marine resources. The national system provides a mechanism to coordinate fisheries management activities by regional fisheries management councils, inter-state fisheries commissions, states and tribes with other conservation efforts at the regional scale. This contributes to species recovery, spillover and seeding effects, habitat protection, conservation of old-growth age structure and genetic diversity, as well as providing improved information about access opportunities.
- **Transparent Process for MPA Planning** - The national system outlines a science-based, transparent process for identifying gaps in current protection where new or enhanced MPAs may be needed to address resource conservation needs. The national system does not provide any new authority for establishing or managing MPAs, but lays out design and implementation principles that will guide the development of the system. These include a commitment to balanced stakeholder involvement, respecting local and indigenous values, and adaptive management.
- **Better Planning for Diverse Ocean Uses** - Identifying national system MPAs, as well as identifying areas important for conservation through regional gap analyses, will help inform regional-scale planning and decision making associated with a wide range of ocean uses. This would also contribute to a more predictable regulatory environment for ocean industries.
- **Better Information on MPA Resources, Uses and Recreational Opportunities** - As part of the development of the national system, the MPA Center has developed a comprehensive database on the number, location and types of U.S. MPAs. This information will answer questions from visitors and other users, such as: "Where can I go fishing?" and "What is the purpose of my local MPA?"



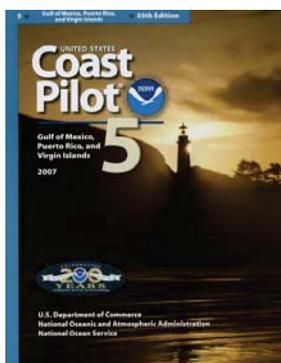
## How the National System of MPAs Can Work for All of Us...

The National MPA Center is committed to focusing its efforts on projects and activities to strengthen MPAs and MPA programs, ocean and Great Lakes planning and management, and through them, the conservation of our Nation's natural and cultural marine heritage and the ecologically and economically sustainable use of the marine environment for future generations. Coordinated, cooperative work to achieve common conservation objectives is especially critical during these times of limited operating resources at all levels of government and the private sector. Priorities include:

- **Recognition for MPA Programs and Sites** - Recognition helps build public support for MPA programs. The national system will highlight participating MPA programs and sites on its web site, [www.mpa.gov](http://www.mpa.gov) -- an internationally recognized resource for MPA information. Participating programs will also receive a Communications Toolkit to assist them in their outreach efforts, and the right to use the national system identity on materials related to participating MPAs.

## How the National System of MPAs Can Work for All of Us... (cont'd)

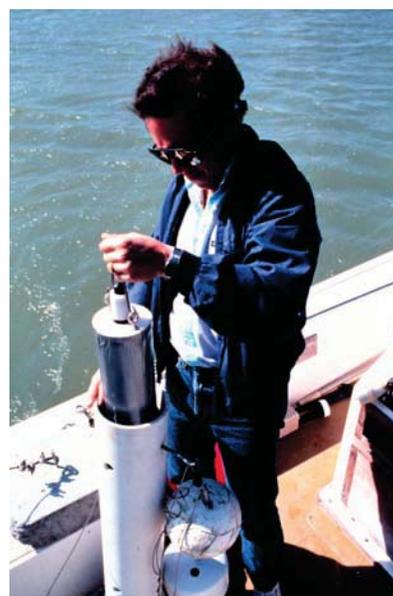
- **Information for Regional Ocean Governance and MPA Planning and Management** - Information about protected areas, other closures, and ocean uses is critical for a wide range of ocean management decisions. The MPA Center has developed several national databases to address this need:
  - MPA Inventory - The only comprehensive national inventory of U.S. MPAs, the MPA Inventory includes information on nearly 1,700 U.S. MPAs, including GIS data for most sites.
  - "De Facto" MPA Inventory - Many areas are restricted for reasons other than conservation, such as military closures, safety zones, hazard areas and anchorages. The MPA Center has developed a national inventory of these federal "de facto" MPAs, which will be available on [www.mpa.gov](http://www.mpa.gov) in 2009.
  - Ocean Uses Atlas - The MPA Center is developing a comprehensive atlas of consumptive and non-consumptive ocean uses for California, and is seeking partnerships to expand this work in other states and regions.
  - MPA Virtual Library - Maintained on [www.mpa.gov](http://www.mpa.gov), the MPA Virtual Library provides searchable citations, articles, web sites and conferences on a wide range of MPA management and design issues.



- **Integration with Ocean and Coastal Management Programs** - The national system provides an opportunity to enhance our collective conservation efforts through the integration of MPA programs with other ocean management programs with complementary goals. For example, the MPA Federal Advisory Committee is currently working on recommendations for integrating the national system with the Integrated Ocean Observing System (IOOS). The needs of the national system can help guide the future development of IOOS, and MPAs in the national system can serve as platforms for ocean observations. The MPA Center is also working with NOAA's Office of Coast Survey to include MPAs in navigational pockets for mariners and recreational users, such as Coast Pilot, Pocket Charts, and electronic navigational charts.

▪ **Facilitation of Regional Assessments and Gap Analyses** - Identifying conservation gaps is a critical step toward achieving the conservation objectives of the national system. These gaps are areas in the ocean and Great Lakes that meet the conservation objectives of the national system but are not adequately protected to ensure their long-term viability. The MPA Center will work collaboratively with partners in each region to complete a gap analysis for U.S. marine ecosystems. These gap analyses can be used by existing federal, state, territorial, tribal and local MPA programs and other ocean and coastal managers to guide future effort to establish new MPAs, strengthen existing ones, or take other protection measures. The gap analysis process will begin on the West Coast (California, Oregon and Washington) in 2009-10.

- **International Linkages to Address Issues of Common Concern** - The national system will help connect regional, state and territorial MPA efforts with relevant international initiatives to address issues of common concern. For example, the North American MPA Network, an initiative of the Commission on Environmental Cooperation (U.S., Canada and Mexico) has focused on the Baja to Bering region, and will begin work in other regions in 2009. Projects include developing common indicators and condition reports from MPAs across the three countries, identification of priority conservation areas, mapping marine ecosystems, training, and technical assistance and exchanges.



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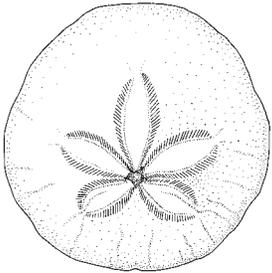
# JOINING THE NATIONAL SYSTEM OF MPAs: FREQUENTLY ASKED QUESTIONS

[www.mpa.gov](http://www.mpa.gov)

## What is the national system of marine protected areas?

The national system of MPAs is the group of MPA sites, networks and systems established and managed by federal, state, tribal and/or local governments that collectively enhance conservation of the nation's natural and cultural marine heritage and represent its diverse ecosystems and resources. Although managed independently, national system MPAs work together at the regional and national levels to achieve common objectives for conserving the nation's important natural and cultural resources.

### Why do we need a national system of marine protected areas?



Over the past century, MPAs have been created by a mix of federal, state, and local legislation, voter initiatives, and regulations, each established for its own specific purpose. As a result, the nation's collection of

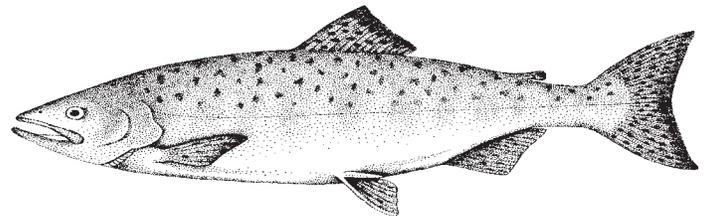
MPAs (reserves, refuges, preserves, sanctuaries, areas of special biological significance, and others) is fragmented, complex, confusing, and potentially missing opportunities for broader regional conservation through coordinated planning and management. In 2000, a broad coalition of scientists petitioned the White House to create a national system of MPAs to improve conservation of the nation's marine ecosystems, cultural resources, and fisheries. Presidential Executive Order 13158 was signed on May 26, 2000, directing the Department of Commerce to work with the Department of the Interior, other federal agencies, states, territories and stakeholders to establish a national system of MPAs to integrate and enhance the nation's MPAs, bringing these diverse sites and programs together to work on common conservation objectives.

## How do I know if my site is an MPA?

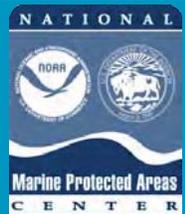
A marine protected area is defined by Executive Order 13158 as "an area of the marine environment that has been reserved by federal, state, territorial, tribal, or local laws or regulations to provide lasting protection for part or all of the natural and cultural resources therein." The key terms within this definition (marine, area, reserved, lasting, and protection) have been further defined, with public review and participation, within the *Framework for the National System of Marine Protected Areas of the United States of America* (Framework), available at [www.mpa.gov](http://www.mpa.gov). MPAs include sites with a wide range of protection, from multiple use areas to no take reserves. The term MPA refers only to the marine portion of a site (below the mean high tide mark).

## How does a specific MPA become part of the national system?

Eligible MPAs can become part of the national system by applying to the National Marine Protected Areas Center through their managing agency. The current nomination process is open until February 13, 2009, and future nominations will be accepted on a periodic basis thereafter. To be eligible for the national system, a site must meet three criteria: (i) fit the definition of an MPA; (ii) have a management plan that has clear goals and objectives and calls for monitoring and evaluation of those goals; and, (iii) contribute to at least one priority conservation objective of the national system as described in the Framework. Cultural resource MPAs must meet additional cultural resource criteria. More information is available at [www.mpa.gov](http://www.mpa.gov).



NOAA's National Marine Protected Areas (MPA) Center's mission is to facilitate the effective use of science, technology, training, and information in the planning, management, and evaluation of the nation's system of marine protected areas. The MPA Center works in partnership with federal, state, tribal, and local governments and stakeholders to develop a science-based, comprehensive national system of MPAs. These collaborative efforts will lead to a more efficient, effective use of MPAs now and in the future to conserve and sustain the nation's vital marine resources.



## **What are the benefits of joining the national system?**

Benefits of joining the system include the opportunity to work with other MPAs in the region and nationally on issues of common conservation concern; greater public and international recognition of MPAs and the resources they protect; and the opportunity to influence federal and regional ocean conservation and management initiatives (such as integrated ocean observing systems, including MPAs on navigational charts, and highlighting MPA research needs). In addition, the national system provides a venue for coordinated regional planning about place-based conservation priorities, as well as an opportunity to engage stakeholders on MPA issues outside a specific proposal. It will leverage scarce resources toward cross-cutting management needs, and initiate collaborative science and technical projects to support conservation priorities. Moreover, managing MPAs as a system will improve ecological viability by identifying potential new sites that enhance connectivity among regional MPAs.



## **Will joining the national system restrict the management of my protected area?**

No. The national system has no authority to restrict or change the management of any MPA. It does not bring state, territorial or local sites under federal authority. The system will provide technical assistance and help establish partnerships to enhance MPA stewardship.

## **My protected area spans terrestrial and marine habitats. Why isn't the whole site included within the national system?**

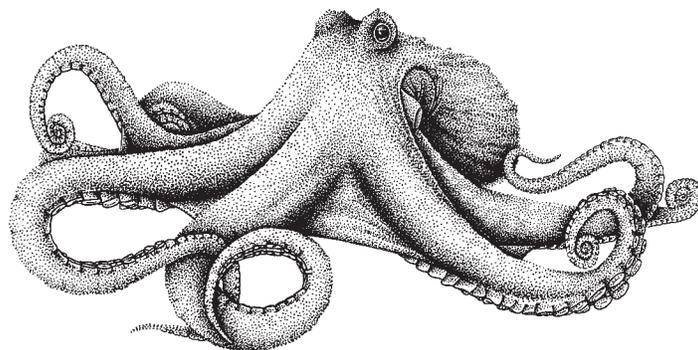
MPAs include only the marine portion of a protected area, as defined in the Framework. So the terrestrial part of the protected area is not considered an MPA and is not included within the national system. All figures on MPA area and GIS boundaries include only the marine portion of sites.

## **How are ocean and coastal stakeholders involved in the national system?**

Stakeholders were extensively involved in the development of the Framework, the road map for the national system, and will continue to be involved in its implementation. In addition, a 30-member Marine Protected Areas Federal Advisory Committee made up of stakeholders from around the U.S., provides ongoing advice to the Departments of Commerce and the Interior about the national system. The Committee includes representatives of commercial and recreational fishing, state and tribal resource agencies, environmental organizations, natural and social scientists and others. Timely information about the national system, such as nominations, is posted at [www.mpa.gov](http://www.mpa.gov).

## **Will the national system create new MPAs?**

The national system has no authority to create new MPAs. These will continue to be created under existing federal, state, territorial, tribal and local authorities. However, to ensure that the national system ultimately represents and protects the nation's key resources and ecosystems, the MPA Center will work with partners and stakeholders on a regional basis to identify significant ecological areas and analyze gaps in our current place-based conservation efforts. MPA management agencies can then use this information to inform their plans about future protection efforts.



## **What is the MPA Center's Role in the National System?**

The MPA Center does not manage any MPAs, but provides coordination, analytical and technical support to MPAs participating in the national system.

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# IMPLEMENTING THE NATIONAL SYSTEM OF MARINE PROTECTED AREAS: NOMINATION PROCESS

[www.mpa.gov](http://www.mpa.gov)

The U.S. is implementing a comprehensive, science-based and effective national system of marine protected areas (MPAs). The national system will include eligible existing MPAs across all levels of government to protect important habitats and resources. For more information, visit [www.mpa.gov](http://www.mpa.gov).

## NOMINATION PROCESS FOR EXISTING SITES TO JOIN THE NATIONAL SYSTEM

The nomination process for the National System of Marine Protected Areas (MPAs) is designed to be transparent, science-based, and to provide an opportunity for public comment. The National Marine Protected Areas Center will be responsible for the technical review of nominations.

There are three entry criteria for existing MPAs to join the national system (plus a fourth for cultural heritage).

Sites that meet the following three criteria (four for cultural heritage) are eligible for the national system:

1. Meets the definition of an MPA as defined in the *Framework for the National System of Marine Protected Areas of the United States of America*.
2. Has a management plan (can be site-specific or part of a broader programmatic management plan; must have site goals and objectives and call for monitoring or evaluation of those goals and objectives).
3. Contributes to at least one priority conservation objective as listed in the Framework.
4. Cultural heritage MPAs must also conform to criteria for the National Register for Historic Places.

The MPA Center will use existing information from the MPA Inventory to determine which sites meet the first two criteria. These identified sites will be potentially eligible MPAs. The managing entities of potentially eligible MPAs will be sent a nomination package and invited to nominate some or all of their potentially eligible sites for inclusion in the national system. To do so, they will be asked to document how each nominated MPA meets criterion number three above.

## ENSURING PUBLIC PARTICIPATION

All nominated sites will be available for public comment. The public will be notified through a *Federal Register* notice, information on [www.mpa.gov](http://www.mpa.gov), and other targeted outreach. The MPA Center will receive, evaluate and forward public comment to the relevant managing entity or entities, which will then reaffirm or withdraw the nomination based on public comment received and other factors deemed relevant. After final MPA Center review, mutually agreed upon MPAs will be accepted into the national system.



The National Oceanic and Atmospheric Administration (NOAA) and the Department of the Interior (DOI) will make a public announcement of the first group of MPAs accepted into the national system. MPAs accepted into the national system will also be added to the official List of National System MPAs, which will be made available to the public via the *Federal Register*, the website [www.mpa.gov](http://www.mpa.gov), and other means.

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NOAA's National Marine Protected Areas (MPA) Center's mission is to facilitate the effective use of science, technology, training, and information in the planning, management, and evaluation of the nation's system of marine protected areas. The MPA Center works in partnership with federal, state, tribal, and local governments and stakeholders to develop a science-based, comprehensive national system of MPAs. These collaborative efforts will lead to a more efficient, effective use of MPAs now and in the future to conserve and sustain the nation's vital marine resources.



The nomination process will remain open after the first group of sites has been accepted. Nominations will be accepted on a rolling basis, with formal updates to the List and public announcements provided on a periodic basis.

## DRAFT TIMELINE FOR INITIAL NOMINATION PROCESS:

### LATE NOVEMBER 2008:

Announce publication of *Framework for the National System of Marine Protected Areas of the United States of America* and beginning of nomination process.

MPA Center sends out nomination packages to federal, state and territorial MPA managing entities with potentially eligible existing sites.

### MID FEBRUARY 2009:

Nomination forms due

### MID MARCH 2009:

MPA Center makes list of nominated national system MPAs available for public review; notice in *Federal Register* and on [www.mpa.gov](http://www.mpa.gov).

### APRIL 2009:

MPA Center and managing entities review public comments received. Managing entities make final determination about which sites to nominate.

MPA Center reviews final nominations to ensure criteria are met.

### LATE APRIL 2009:

MPA Center notifies the managing entities of accepted sites. NOAA and DOI make announcement of first sites to join the National System of MPAs. Official List of National System sites posted on [www.mpa.gov](http://www.mpa.gov).



For more information on the National System of Marine Protected Areas, visit [www.mpa.gov](http://www.mpa.gov)

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Department of Commerce § National Oceanic & Atmospheric Administration § National Marine Fisheries Service

***NATIONAL MARINE FISHERIES SERVICE POLICY DIRECTIVE 01-114***  
***EFFECTIVE DATE: March 9, 2009***

***Fisheries Management***

***Regional Fishery Management Council Consultation in MPA Nomination Process***

**NOTICE:** This publication is available at: <http://www.nmfs.noaa.gov/directives/>.

**OPR:** F/SF (A. Risenhoover)  
**Type of Issuance:** Initial

**Certified by:** F (J. Balsiger)

***SUMMARY OF REVISIONS:***

## 1.0 Introduction

In the United States and around the world, marine protected areas (MPAs) are increasingly recognized as an important and promising management tool for mitigating or buffering impacts to the world's oceans from human activities. Presidential Executive Order 13158 of May 26, 2000 (Order) calls for the development of a National System of Marine Protected Areas (National System) and directs the establishment of a National MPA Center within NOAA to lead its development and implementation. The Order requires collaboration with federal agencies as well as coastal states and territories, tribes, regional fishery management councils (Councils), and other entities as appropriate, including the MPA Federal Advisory Committee. (The collaborative process described in this policy applies only to sites established through conservation and management measures per the Magnuson-Stevens Fishery Conservation and Management Act, 16 U.S.C. §§ 1801 et seq. (MSA), as a result of Council action.)

The Order further specifies that the National System be scientifically based, comprehensive, and represent the nation's diverse marine ecosystems and natural and cultural resources.

The National System provides the first comprehensive mechanism for coordinating MPAs managed by diverse federal, state, territorial, tribal, and local agencies to work toward national conservation objectives. The National System will benefit the nation's collective conservation efforts and participating MPAs, providing those sites with a means to address issues beyond their boundaries. The National System should benefit participating MPAs by enhancing stewardship, building partnerships, increasing support for marine conservation, fostering more effective and efficient outreach, promoting cultural heritage, and protecting MPA resources. The National System should benefit the nation by protecting representative ecosystems and resources, enhancing connectivity among MPAs, identifying gaps in current protection of ocean resources, providing new educational opportunities, enhancing research opportunities, and improving international coordination.

The National System outlines a science-based, transparent process for identifying gaps in current protection efforts where new or enhanced MPAs may be needed to address resource conservation needs. Effective stakeholder review and consultation is critical to this process. The National System does not provide any new authority for establishing or managing MPAs, but lays out design and implementation principles that will guide the development of the system. These principles include a commitment to balanced stakeholder involvement, respect for local and indigenous values, and adaptive management.

Additional information about Marine Protected Areas, the National Framework for a National System of MPAs, and the nomination process can be found at: <http://www.mpa.gov>.

## 2.0 Objective

The objective of this policy directive is to establish the process for consulting with Councils:

1. on whether sites that were established under the authorities of the MSA as a result of Council action should be nominated to be included in the National System, and
2. when adding, modifying, or removing MPAs in the National System.

To provide a roadmap for building the National System, the Order calls for the development of a framework for a National System. The 2008 Framework for the National System of MPAs of the United States of America (Framework) is the result of a multi-year development effort. The Framework proposes a National System that is, initially, an assemblage of existing MPA sites, systems, and networks established and managed by federal, state, tribal, or local governments.

The Framework outlines several key components of the National System, including:

- A set of overarching National System goals and priority conservation objectives;
- MPA eligibility criteria and other key definitions; and
- A nomination process for MPAs to be included in the National System.

MPA eligibility criteria are:

1. Meets the definition of an MPA as defined in the Framework.
2. Has a management plan (can be site-specific or part of a broader programmatic management plan; must have specified conservation goals and call for monitoring or evaluation of those goals).
3. Contributes to at least one priority conservation objective as listed in the Framework.
4. Cultural heritage MPAs must conform to criteria for the National Register of Historic Places.

Additional information about the Framework can be found at:

[http://www.mpa.gov/national\\_system/final\\_framework\\_sup.html](http://www.mpa.gov/national_system/final_framework_sup.html)

### 3.0 Overview of Nomination Process

As established in the Framework, the nomination process includes the following steps:

1. The MPA Center will review sites in the U.S. MPA Inventory and identify the set of sites that, on initial review, meet the three (or four, for cultural sites) MPA eligibility criteria described above. Information on whether sites meet criterion 3, supporting at least one priority goal and conservation objective of the National System, will be provided by the managing entity as part of the nomination process. The MPA Inventory ([www.mpa.gov](http://www.mpa.gov)) is a refinement of the early NOAA Marine Managed Areas Inventory, which was a broader collection of place-based management areas in U.S. waters.
2. For those sites that are potentially eligible, the MPA Center will send the managing entity or entities a letter of invitation to nominate the site, including the rationale for eligibility. In the case of sites established through conservation and management measures per the MSA, the managing entity is NOAA Fisheries.
3. The managing entity or entities will be asked to consider nominating identified sites for inclusion in the National System and provide any additional information required to evaluate site eligibility relative to meeting priority conservation objectives. The managing entity may also provide a brief justification and nomination for (a) unsolicited sites believed to meet the requirements for entry into the National System, or (b) other sites that do not appear to currently meet the management plan eligibility criterion but are deemed to be a priority for inclusion based on their ability to fill gaps in national system coverage of the priority conservation objectives and design principles.
4. The MPA Center will review the set of nominated sites to ensure that nominations are sufficiently justified.
5. The MPA Center will notify the public, via the *Federal Register* and other means, of the sites nominated for inclusion in the National System and provide the opportunity to comment on the eligibility of nominated sites (or sites that have not been nominated) relative to eligibility criteria and any additional justification. The MPA Center will work with the managing entities to ensure adequate public involvement, including public meetings and tribal coordination, as appropriate.
6. The MPA Center will receive, evaluate, <sup>2</sup> and forward public comment to the

relevant managing entity or entities, which will then have the opportunity to reaffirm or withdraw the nomination based on public comment received and any other factors deemed relevant.

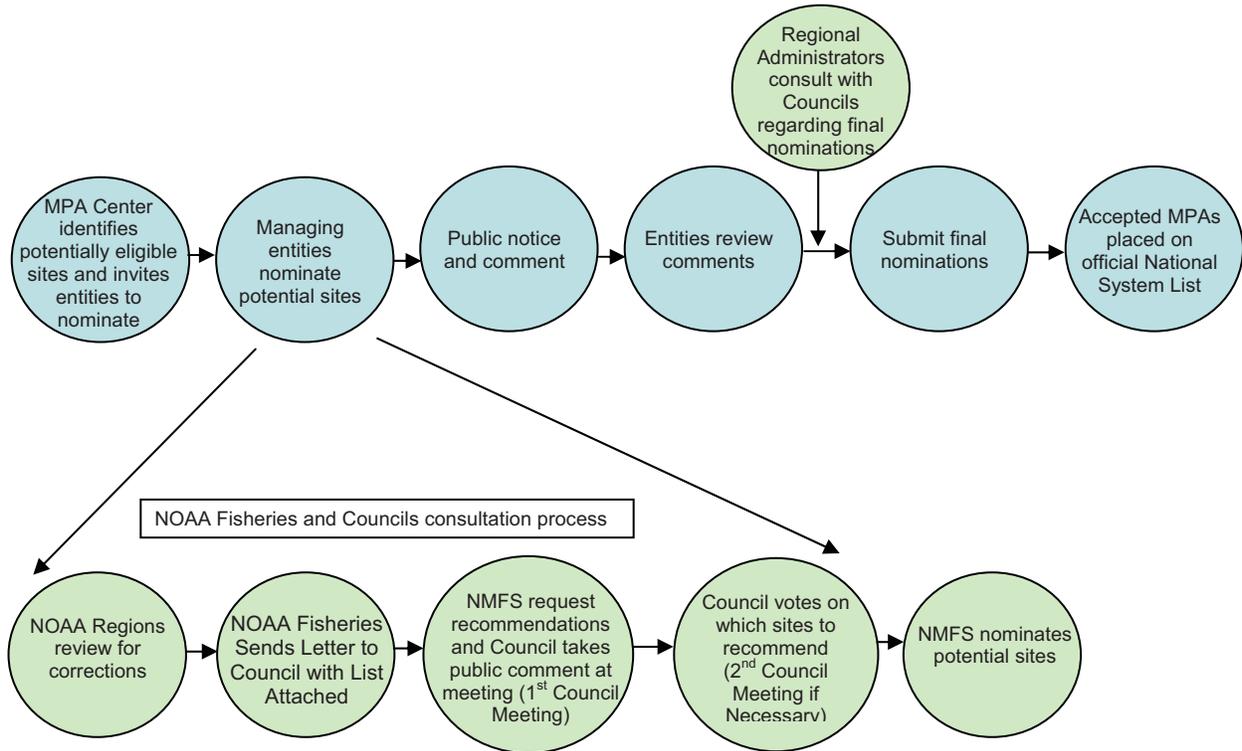
7. The MPA Center will review the final determination for each nomination, consult as necessary with the managing entity or entities should there be any discrepancies, and accept mutually agreed upon MPAs into the National System.
8. MPAs that are accepted into the National System will be listed in the official List of National System MPAs comprising the National System and made available to the public via the *Federal Register*, the website <http://www.mpa.gov>, and other means.

#### 4.0 Process to Consult with Regional Fishery Management Councils in MPA Nominations and Revisions to Designations

The Councils have a unique and important role as partners with NOAA Fisheries in fisheries management, which includes establishing federal fishery management plans and plan amendments and habitat conservation areas. Therefore, the Councils will be a key partner with NOAA Fisheries in nominating sites to the National System and, conversely, identifying sites that should be removed from the National System due to management or other changes. Through a transparent process, NOAA Fisheries will consult with the Councils and nominate fisheries sites to the National System. This process applies only to sites established through conservation and management measures per the MSA as a result of Council action. Figure 1 shows how the Council consultation process fits within the overall nomination process. Because of the need for a transparent consultation process, MSA sites will be nominated and accepted into the National System as indicated below.

Figure 1. Summary of Nomination Process

# Nomination Process



4.1 NOAA Fisheries Service and Regional Fishery Management Council Consultation for Nomination to National System. [Steps in brackets correspond to the overall nomination process discussed in Section 3.0]

- [Steps 1, 2] The MPA center will send NOAA Fisheries a list of sites that are eligible to be included in the National System.
- [Step 3] After receiving the list of eligible sites from the MPA Center, NOAA Fisheries will notify each Council, by letter, of those sites that fall within each Council's jurisdiction.
- [Step 3] In consultation with the appropriate Regional Administrator, each Council will establish a process for reviewing the list of eligible sites, including providing opportunity for public comment at Council meetings. The Council process is expected to occur over the course of two consecutive Council meetings, and conclude with a Council vote on a proposed list of sites to be included in the National System. Should an MPA fall in an area where two Councils or Regions have jurisdiction, the Council or Region that has the lead on the FMP implementing the MPA will nominate the site. The Council recommendations should be documented in a letter to the Regional Administrator and include the following:
  - For sites that a Council recommends be included in the National System, the Council should provide any additional supporting information as required by the MPA Center (<http://www.mpa.gov/pdf/national-system/nominationpackage1208.pdf>)
  - For sites that a Council recommends not be included in the National System, the Council should include a brief justification for that conclusion.
  - Note: The Councils may also use this process to nominate additional sites that are not currently on the list of eligible sites for inclusion in the National System.
- [Step 3] The Regional Administrator will review the Council's recommendation and prepare the proposed list of sites for submission to the MPA Center. NOAA Fisheries will justify the reasons for any changes from the Council's recommendations and in such a case will provide the required supporting information to the MPA Center.
- [Steps 4, 5] NOAA Fisheries will submit the nominations to the MPA Center for review and publication in the Federal Register and provide opportunity for public comment
- [Step 6] After the public comment period has ended, the MPA Center will provide the comments received back to NOAA Fisheries, which will in turn share the public comments received with the applicable Councils.
- [Step 6] The Regional Administrators will coordinate with the respective Council to review the comments and determine whether changes should be made to the list of nominated sites. Council recommendations for changes to the list of nominated sites should be documented in a letter to the Regional Administrator, including any required supporting information required by the MPA Center. It is expected that this process would occur over the course of one Council meeting.
- [Steps 7, 8] The Regional Administrator will review the Council's final recommendation and a final list of sites for submission to the MPA Center. NOAA Fisheries will justify the reasons for any changes from the Council's recommendations and in such a case will provide the required supporting information to the MPA Center.

4.2 Regional Fishery Management Council Consultation for Modifying or Removing MPAs  
Participation in the National System does not constrain the managing entity from changing its

management of the MPA. The managing entity has the ability to, within its own authorities and

processes, add or reduce levels of MPA protection, change the size of an MPA, or make other changes. It is expected that a similar consultation process between NOAA Fisheries and the Council as described in section 4.1 would be followed for modifying or removing sites from the National System, although the process may be modified to fit into the overall management process that a Council is following.

In general, to make changes to the National System, the managing entity will provide all significant updates to the MPA Center, but would not be required to re-nominate a site in the case of changes. If NOAA Fisheries and the appropriate Council determine that an MPA no longer meets the National System MPA criteria, then the MPA would be removed from the system by following the procedures established by the MPA Center.

MPA sites that have been included in the List of National System MPAs may be removed at any time by the MPA Center in response to a written request from the managing entity for reasons including:

- The MPA ceases to exist;
- The MPA no longer meets National System MPA eligibility criteria; or
- The managing entity requests removal

All requests from managing entities or actions by the MPA Center to remove an MPA from the National System will be published at [www.mpa.gov](http://www.mpa.gov) and in the *Federal Register* for comment. Any comments received will be forwarded to the managing entity for consideration in making its final determination for removal. Upon request of the managing entity, and based upon a supporting rationale, the MPA will be removed from the List of National System MPAs.

For additional detail on the process that the MPA Center will follow for adding, modifying, or removing sites from the National System, refer to the MPA Framework at:

[http://www.mpa.gov/national\\_system/final\\_framework\\_sup.html](http://www.mpa.gov/national_system/final_framework_sup.html)

The duration of this policy directive will be indefinite because the National System will be continuously updated with new MPA designations or revisions to existing MPA designations. This policy directive's objective will be attained when the above-described consultation process is carried out effectively on a routine basis.

Procedural directives will be issued to implement this policy as needed.

## References

This policy directive is supported by the references listed in Attachment 1.

/s/ Jim Balsiger  
Assistant Administrator for Fisheries (acting)

2/23/2009

References:

*Framework for the National System of Marine Protected Areas of the United States of America*

*Presidential Executive Order 13158*

*Magnuson-Stevens Fishery Conservation and Management Act, 16 U.S.C. §§ 1801 et seq.*

G/SF3/MPA stuff/2nd round/MPA nomination policy\_final  
F/SF3:Lee Benaka:301-713-2341



RECEIVED

AUG 19 2009

PFMC

UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE  
Northwest Region  
7600 Sand Point Way N.E., Bldg. 1  
Seattle, WA 98115

AUG 14 2009

Mr. Donald K. Hansen  
Chairman  
Pacific Fishery Management Council  
7700 NE Ambassador Place, Suite 101  
Portland, Oregon 97220-1384

Dear Mr. Hansen:

To enhance the coordination of Marine Protected Areas (MPAs) in the United States, the National Oceanic and Atmospheric Administration and the Department of the Interior—in collaboration with federal, state, territorial/tribal agencies; the MPA Federal Advisory Committee; and the public—have been working to establish a national system of MPAs. This national system is a key requirement of Executive Order 13158, and is described in the *Framework for the National System of Marine Protected Areas of the United States of America* ([www.mpa.gov](http://www.mpa.gov)).

The national system will provide regional coordination to help address local and regional MPA priorities through federal ocean management initiatives, raise awareness of MPAs and the ocean resources they conserve, and support targeted regional science and stewardship initiatives.

I would like to invite the Pacific Fishery Management Council to participate in this initiative by working with NMFS to nominate eligible sites. The attached list of potential sites has been provided by the National Marine Protected Areas Center to facilitate your response. In addition, Dr. Charles Wahle from the Center is scheduled to brief the Council and take questions during your September meeting. If you have any questions, please do not hesitate to contact Frank Lockhart at [frank.lockhart@noaa.gov](mailto:frank.lockhart@noaa.gov).

Sincerely,  
  
Barry Thom  
Acting Regional Administrator

Attachment





# Program Summary Sheet - National Marine Fisheries Service Sites

## Pacific FMC

Site Name	Management Agency	Level of Protection	Permanence	Constancy	Protection Focus	Primary Conservation Focus	Fishing Restriction	Management Plan Type	GIS Data	Vessel Traffic	Anchoring
1 Anacapa Island Marine Conservation Area / Bottom Contact Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes
2 Anacapa Island Marine Reserve / Bottom Contact Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes
3 Astoria Canyon Bottom Trawl Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes
4 Bandon High Spot Bottom Trawl Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes
5 Big Sur/Port San Luis Bottom Trawl Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes
6 Biogenic 1 Bottom Trawl Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes
7 Biogenic 2 Bottom Trawl Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes
8 Biogenic 3 Bottom Trawl Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes
9 Blunt's Reef Bottom Trawl Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes
10 Carrington Point Marine Reserve / Bottom Contact Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes
11 Catalina Island Bottom Trawl Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes

# Program Summary Sheet - National Marine Fisheries Service Sites

## Pacific FMC

Site Name	Management Agency	Level of Protection	Permanence	Constasy	Protection Focus	Primary Conservation Focus	Fishing Restriction	Management Plan Type	GIS Data	Vessel Traffic	Anchoring
12 Cherry Bank Bottom Trawl Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes
13 Cordell Bank (50 fm (91m) isobath) Bottom Contact Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes
14 Cordell Bank/Biogenic Area Bottom Trawl Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes
15 Cowcod Conservation Area East Bottom Trawl Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes
16 Daisy Bank/Nelson Island Bottom Trawl Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes
17 Davidson Seamount Bottom Trawl Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes
18 Deepwater off Coos Bay Bottom Trawl Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes
19 Delgada Canyon Bottom Trawl Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes
20 East San Lucia Bank Bottom Trawl Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes
21 Eel River Canyon Bottom Trawl Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes
22 Farallon Islands/Fanny Shoal Bottom Trawl Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes

# Program Summary Sheet - National Marine Fisheries Service Sites

## Pacific FMC

Site Name	Management Agency	Level of Protection	Permanence	Constancy	Protection Focus	Primary Conservation Focus	Fishing Restriction	Management Plan Type	GIS Data	Vessel Traffic	Anchoring
23 Footprint Bottom Contact Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes
24 Gray's Canyon Bottom Trawl Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes
25 Gull Island Marine Reserve / Bottom Contact Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes
26 Half Moon Bay Bottom Trawl Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes
27 Harris Point Marine Reserve / Bottom Contact Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes
28 Heceta Bank Bottom Trawl Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes
29 Hidden Reef/Kidney Bank Bottom Trawl Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes
30 Judith Rock Marine Reserve / Bottom Contact Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes
31 Mendocino Ridge Bottom Trawl Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes
32 Monterey Bay/Canyon Bottom Trawl Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes
33 Nahalem Bank/Shale Pile Bottom Trawl Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes

# Program Summary Sheet - National Marine Fisheries Service Sites

## Pacific FMC

Site Name	Management Agency	Level of Protection	Permanence	Constasy	Protection Focus	Primary Conservation Focus	Fishing Restriction	Management Plan Type	GIS Data	Vessel Traffic	Anchoring
34 Newport Rockpile/Stonewall Bank Bottom Trawl Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes
35 Olympic 2 Bottom Trawl Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes
36 Painted Cave Marine Conservation Area / Bottom Contact Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes
37 Point Arena North Bottom Trawl Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes
38 Point Arena South Bottom Trawl Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes
39 Point Conception Bottom Trawl Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes
40 Point Sur Deep Bottom Trawl Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes
41 Polato Bank Bottom Trawl Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes
42 President Jackson Seamount Bottom Contact Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes
43 Richardson Rock Marine Reserve / Bottom Contact Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes
44 Rogue Canyon Bottom Trawl Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes

# Program Summary Sheet - National Marine Fisheries Service Sites

## Pacific FMC

Site Name	Management Agency	Level of Protection	Permanence	Constancy	Protection Focus	Primary Conservation Focus	Fishing Restriction	Management Plan Type	GIS Data	Vessel Traffic	Anchoring
45 Santa Barbara Island Marine Reserve / Bottom Contact Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes
46 Scorpion Marine Reserve / Bottom Contact Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes
47 Seaward of the 700 fm to 1094 fm Bottom Trawl Closed Area (1280m to 3500 m depth contour)	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes
48 Siletz Deepwater Bottom Trawl Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes
49 Skunk Point Marine Reserve / Bottom Contact Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes
50 South Point State Marine Reserve / Bottom Contact Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes
51 Thompson Seamount Bottom Contact Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes
52 Tolo Bank Bottom Trawl Closed Area	National Marine Fisheries Service	Uniform Multiple Use	Permanent	Year-round	Focal Resource	Sustainable Production	Commercial Fishing Restricted	Non-MPA Programmatic Fisheries Management Plan	Yes	Yes	Yes

# of sites: 52





## Pacific Fishery Management Council

7700 NE Ambassador Place, Suite 101, Portland, OR 97220-1384  
Phone 503-820-2280 | Toll free 866-806-7204 | Fax 503-820-2299 | [www.pcouncil.org](http://www.pcouncil.org)

February 13, 2007

Mr. Joseph Uravitch  
National MPA Center, N/ORM  
National Oceanic and Atmospheric Administration  
1505 East-West Highway  
Silver Spring, MD 20910

Re: Pacific Fishery Management Council Comments on the Draft Framework for Developing the National System of Marine Protected Areas.

Dear Mr. Uravitch:

Thank you for the opportunity to review and comment on the National Marine Protected Areas Center's Draft Framework for Developing the National System of Marine Protected Areas. Your letter and Draft Framework were provided to the Pacific Fishery Management Council (Pacific Council) at its November 2006 meeting in Del Mar, California. Due to the heavy workload associated with the November 2006 meeting, placing this matter on the agenda for the Council and its advisory bodies was not possible. However, on behalf of the Council, I would like to take this opportunity to provide the following general comments on the Draft Framework.

As you are aware the Pacific Council and the National Marine Fisheries Service (NMFS) has implemented several area management concepts including coastwide Rockfish Conservation Areas closed to commercial and recreational fisheries for the protection of overfished groundfish species and areas closed to trawl or bottom contacting fishing gear to protect groundfish essential fish habitat. In developing the later, the Pacific Council worked closely with the National Marine Sanctuary Program to meet shared goals and objectives to protect habitat areas within the Channel Islands, Cordell Bank, and Monterey Bay National Marine Sanctuaries. Many, if not all of these area management actions meet the proposed criteria for marine protected areas (MPAs) in the Draft Framework and should be considered during Phase I efforts to build the initial network or existing MPAs. The Pacific Council is encouraged by this effort to inventory MPAs and marine managed areas and is optimistic that this comprehensive assessment will prove useful to the Pacific Council and the Nation as ecosystem-based fishery management and place-based area management concepts are further investigated.

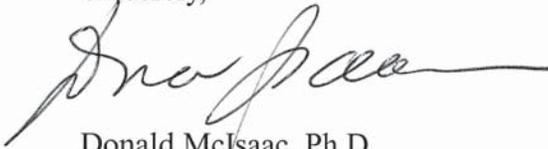
The Pacific Council is in the initial stages of exploring ecosystem-based fishery management principles and is considering the development of a Fishery Ecosystem Plan, in part, to help coordinate, monitor, and assess the effectiveness of area and place-based management efforts. The goals and objectives of the proposed Fishery Ecosystem Plan will likely share attributes of the rational, goals, and objectives of the National System of MPAs. The Pacific Council would welcome collaboration with the MPA Center to ensure the goals and objectives of national and

regional area management plans are based on the best available science and achieve healthy marine ecosystems and sustainable fisheries.

As development of a National MPA Network begins to identify potential gaps and additional conservation needs under Phase 2 of the Draft Framework, it will essential to maintain coordination between the National MPA Center and the Regional Fishery Management Councils, particularly in the early stages of considering new MPAs, if necessary. Should new MPAs or existing MPA's in West Coast National Marine Sanctuaries be deemed to require additional fishery restrictions, the Pacific Council maintains the position that regulation of marine fisheries should occur solely under the authority of the Magnuson-Stevens Fishery Conservation and Management Act via the Pacific Council forum and the regulatory authority of NMFS and the States.

The Pacific Council and I, look forward to continued work with the National MPA Center on the National System of Marine Protected Areas. If you or your staff should have any questions regarding this letter, please contact me or Mr. Mike Burner, the lead Staff Officer on this matter at 503-820-2280.

Sincerely,

A handwritten signature in black ink, appearing to read "Donald McIsaac", with a long horizontal flourish extending to the right.

Donald McIsaac, Ph.D.  
Executive Director

MDB:rdd

c: Council Members  
Dr. Charles Wahle



Dr. Mark A. Hixon  
Department of Zoology  
Oregon State University  
Corvallis, OR 97331-2914

phone: 541-737-5364	fax: 541-737-0501	e-mail: <a href="mailto:hixonm@science.oregonstate.edu">hixonm@science.oregonstate.edu</a>	<a href="http://oregonstate.edu/~hixonm/index.htm">http://oregonstate.edu/~hixonm/index.htm</a>
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30 April 2009

Dr. Jane Lubchenco  
Under Secretary of Commerce for Oceans and Atmosphere, and  
NOAA Administrator  
Department of Commerce  
1401 Constitution Avenue, NW, Rm 5810  
Washington, DC 20230

Mr. Will Shafroth  
Principal Deputy Assistant Secretary of the Interior  
for Fish and Wildlife and Parks  
Department of the Interior  
1849 C Street, NW  
Washington, DC 20240

re: recommendations by **Marine Protected Areas Federal Advisory Committee**

Dear Under Secretary Lubchenco and Deputy Assistant Secretary Shafroth:

On behalf of the Marine Protected Areas Federal Advisory Committee (MPA FAC), it is my pleasure to submit for your consideration two related sets of recommendations from our recent meeting in Annapolis, Maryland, on 21-23 April 2009. Both documents are relevant for effectively evaluating and improving the National System of Marine Protected Areas, the first providing a foundation for the second. I am honored to report that, as has become the norm for this distinguished and highly engaged panel of 30 ocean experts, both documents passed unanimously.

The first set of recommendations, "**Ecological Resilience and Gap Analysis of the National System of Marine Protected Areas**," explains the importance of resilience as a theme for meeting the natural heritage and sustainable production goals and objectives of the National System. We offer a practical definition of resilience, review specific examples, and provide general guidelines applying resilience thinking to a gap analysis of the National System.

The second set of recommendations, "**Guiding Principles for Ecological Gap Analysis of the National System of Marine Protected Areas**," elaborates on the theme developed in the first document, and more specifically applies the concepts of gap analysis to the National System. Here, we focus on major principles and general approaches for assessing the different types of gaps that may occur.

Thanks again for meeting with the MPA FAC and helping us celebrate the launch of the National System of MPAs. In close cooperation with the National MPA Center, the FAC has been working diligently toward this goal since 2003. It is especially gratifying for the FAC to see that a genuine partnership has developed between Commerce and Interior to support the National MPA Center.

Through the years, an excellent partnership has also developed among members of the MPA FAC, our ex officio federal representatives, and the staff of the National MPA Center. Such engaged partnerships are certainly essential for the success of new National System of MPAs.

The MPA FAC looks forward to your response to our recommendations, and to continuing our work with the Departments of Commerce and the Interior to help ensure that the National System of MPAs effectively serves both present and future generations of Americans. Thank you for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark Hixon". The signature is fluid and cursive, with a long horizontal stroke at the end.

Mark Hixon  
Helen Thompson Professor of Marine Conservation Biology and  
Chair, Marine Protected Areas Federal Advisory Committee

attachments

cc: Lauren Wenzel, Designated Federal Official, National Marine Protected Areas Center, NOAA

# ECOLOGICAL RESILIENCE AND GAP ANALYSIS OF THE NATIONAL SYSTEM OF MARINE PROTECTED AREAS

**Executive Summary:** *Ecological resilience is the capacity of an ecosystem or natural population to resist or recover from major changes in structure and function following natural and human-caused disturbances, without undergoing a shift to a vastly different regime that is undesirable and very difficult to reverse from a human perspective. Examples of the causes and losses of resilience in marine ecosystems include the important roles of herbivores in tropical coral reefs, of urchin predators in temperate kelp forests, and of top predators in cold-temperate continental shelf ecosystems. Protecting these ecologically important species in marine protected areas (MPAs) can foster resilience. Resilience is also applicable to individual marine populations, where MPAs can protect specific critical habitats, protect species that regulate the abundance of target species, maintain the old-growth age structure that enhances population replenishment, and protect genetic diversity that enhances stock adaptability, viability and productivity. Ecological networks of MPAs can foster resilience by mechanisms originally described in the "Framework for the National System of Marine Protected Areas of the United States of America" (National MPA Center, November 2008): (1) **representation** – protecting refuges for high-priority ecosystems and populations; (2) **replication** – protecting multiple refuges for insurance against catastrophic loss; (3) **viability** – protecting sufficiently large areas of habitat and numbers organisms to ensure persistence; and (4) **connectivity** – locating and spacing MPAs to allow ecologically important linkages among sites. Relative to the gap analysis of the National System, each of these components could be assessed as follows: (1) **representation** – by comparing the full suite of high-priority marine ecosystems and major habitats within a region with those protected by the existing system; (2) **replication** – by comparing the desired number of MPAs of a given type in a given region with the existing system; (3) **viability** – by comparing the desired location and size of MPAs of a given type in a given region with the existing system; and (4) **connectivity** – either by comparing known patterns of linkages with the existing system or by ensuring no large spatial gaps between MPAs within the same regional network.*

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## Introduction

Once the National System of Marine Protected Areas is established from existing sites, a formal gap analysis will identify where meeting the established goals and objectives of the system is most difficult because of shortfalls in the National System. The document entitled "Framework for the National System of Marine Protected Areas of the United States of America" (hereafter, the 'Framework'; National MPA Center, November 2008) lists multiple goals and objectives regarding natural heritage and sustainable production. A foundational concept for unifying these

goals and objectives under a central theme for which an effective gap analysis can be designed is ‘ecological resilience’. This document clarifies the practical meaning of this concept and uses resilience to develop operational criteria for an effective gap analysis of the National System.

Ecological resilience has emerged as a unifying concept in the science of conservation biology. The MPA Federal Advisory Committee sees the value of resilience as an important theme for meeting the natural heritage and sustainable production goals and objectives of the National System of MPAs. Therefore, our intention is to ensure that ecological resilience as a concept is translated from conservation biology to marine policy. Here, we clarify the meaning of ecological resilience and make practical use of resilience thinking to develop operational criteria for an effective gap analysis of the National System.

## **Practical Definition of Ecological Resilience**

The Framework defines ‘resilience’ in terms of MPA implementation as "*designed to maintain ecosystems' natural states and to absorb shocks, particularly in the face of large-scale and long-term changes (such as climate change)*" (p.16). This definition must be clarified for practical application. The concept of resilience has a long history in the science of ecology. Unfortunately, its meaning and use has changed through time, consequently causing confusion and sometimes threatening its utility. During earlier times, when there was a mistaken belief that individual populations and entire ecosystems tended toward fixed states (stable point equilibria), resilience was seen as the speed at which an ecosystem or population returned to its original state after suffering some natural disturbance (e.g., a large storm) or human impact (e.g., dredging the seafloor). High resilience was seen as a rapid return to the original state. Subsequently, it was recognized that change at all scales of space and time is ever present in natural ecosystems and populations. Instead of each ecological system remaining in or returning to a single fixed state, each system actually exists in a variable yet identifiable range or suite of states (a **regime**<sup>1</sup>) driven by fluctuations in the environment, including both nonlethal changes in living conditions and an assortment of lethal disturbances. In this more realistic context, ecological resilience is now seen as the capacity of an ecological system to remain in the same regime without crossing a threshold to another regime (a **regime shift**), from which return to the original regime is difficult or even impossible.

The human perspective is also essential in practical applications of ecological resilience because humans value some regimes more than others. For example, we value tropical reefs dominated by living coral more than reefs dominated by dead coral rubble covered with slimy seaweeds. Therefore, management is seen as successful to the extent that it fosters tropical reefs remaining in the ‘live-coral regime’. It is important to note that, although human actions can foster ecological resilience (see below), some natural changes are so great, such as the current warming of the Arctic Ocean, that regime shifts are inevitable. Nonetheless, because human value judgments are essential for practical applications of the concept of resilience, especially in the context of assessing the National System of MPAs, we define ecological resilience as follows:

---

<sup>1</sup> Key supplemental terms are in bold text where they are first used and defined.

**Ecological resilience** is the capacity of an ecosystem or natural population to resist or recover from major changes in structure and function following natural and human-caused disturbances, without undergoing a shift to a vastly different regime that is undesirable and very difficult to reverse from a human perspective.

This definition becomes more tangible when considering specific examples from the marine realm relevant to MPAs.

## **Ecological Resilience in Marine Systems and the Role of MPAs**

Resilience is most commonly examined at the level of entire ecosystems (the perspective of many natural heritage MPAs). However, the concept can also be applied to single populations (the perspective of many sustainable production MPAs). The following examples clarify resilience in specific practical terms, and also illustrate the value of MPAs in fostering resilience. Note that not all of these well documented case studies were conducted in U.S waters, but are nonetheless illustrative of issues relevant to the United States.

### *Ecosystem Level*

**Tropical Coral Reefs:** Tropical reefs exist in two primary regimes: one dominated by living coral, and the other dominated by seaweeds. The live-coral regime is preferred by humans because of the many ecological goods and services living reefs provide, including fisheries, coastal protection, recreation, tourism, and aesthetics. In the live-coral regime, natural disturbance (e.g., hurricanes) and human impacts (e.g., coastal pollution) occasionally kill large swaths of coral, but the system normally has high resilience and eventually recovers. Resilience is fostered by a diverse suite of herbivores that keep reef surfaces clean, allowing coral larvae to settle and grow unimpeded by seaweeds. The high diversity of herbivores further enhances resilience because loss of some herbivore species can be compensated by other ecologically similar species (**ecological redundancy**). Such compensation within groups of species that provide the same ecological services demonstrates the value of conserving species diversity. For example, reefs in the Caribbean region remained highly resilient, even after intensive overfishing of herbivorous fishes, because long-spined sea urchins assumed the role of primary herbivores. After a pandemic almost eliminated urchins from the system in 1983, resilience was severely reduced. A combination of human impacts, including siltation from coastal development, eutrophication from agricultural and sewage effluent, and coral bleaching due to a warming ocean, killed corals and pushed the reefs to domination by seaweeds. This degraded regime is itself highly resilient because seaweeds thrive in very warm, silty, eutrophic waters. Seaweeds inhibit coral settlement and growth, and there are now few herbivores to control the seaweeds. Recovery of degraded reefs to the live-coral regime is very difficult, which underscores the value of pre-emptive management for resilience to prevent regime change. Managing for resilience of coral reefs includes (1) fostering natural abundances and diversity of herbivores and (2) providing a favorable environment for corals. MPAs can help foster resilience by allowing herbivores to flourish and by prohibiting local human impacts that degrade coastal seawater quality.

***Temperate Kelp Forests:*** Rocky reefs along the Pacific coast of the United States occur in two regimes: one dominated by large brown seaweeds called kelp, and the other dominated by a layer of living crusts (low-lying plants and sessile animals) covering otherwise bare rock. Humans prefer the kelp-forest regime because of the many ecological goods and services provided, including recreational and commercial fisheries, kelp harvest, high biodiversity, coastal protection, recreation, tourism, and aesthetics. The kelp-forest regime is naturally disturbed by large storms and warm-water periods (El Niño) that kill kelp, but under normal conditions, the kelp eventually recovers. Resilience in this case is fostered by natural controls of invertebrate herbivores (especially sea urchins) by their predators (especially sea otters to the north, and certain fish and spiny lobster to the south). Where these predators have been eradicated by hunting or overfishing, urchins have proliferated and inhibited the recovery of kelp following natural disturbances. Urchins can become so abundant and graze the seafloor so intensely that only a thin layer of encrusting algae and invertebrates can survive; newly settled kelps are soon consumed. This ‘urchin-barrens’ regime is itself resilient until the urchins are greatly reduced in abundance, typically by storms, disease outbreaks, or the recovery of their predators. MPAs that protect urchin predators have been demonstrated to enhance the resilience of kelp forests.

***Cold-Temperate Continental Shelf Ecosystems:*** Stocks of northern cod (*Gadus morhua*) and other top predators of continental shelves of the northwest Atlantic collapsed in the 1990s and have failed to recover, at least partly because the regional ecosystem shifted to an undesirable regime as a result of its relatively low resilience compared to other areas. As cod stocks collapsed off Nova Scotia, Canada, due to intensive overfishing, prey fishes increased in abundance. In turn, herbivorous zooplankton (prey of the prey fish) decreased, and phytoplankton (prey of the zooplankton) increased, a classic ‘trophic cascade’. This new regime has not reversed, despite a virtual ban on fishing cod in this region since 1993, apparently because (1) there are no top predators available to replace cod (all potential candidates were also overfished, causing low ecological redundancy), (2) the now abundant prey fishes consume and/or compete with juvenile cod, and (3) cold water delays population growth and recovery. In this case, MPAs protecting cod and other top predators before the collapse of the fishery could have fostered resilience. Following the regime shift, MPAs for cod that also left prey fishes vulnerable to exploitation could have possibly fostered recovery, yet the entire food web is now fundamentally altered. Similar ecosystems to the south of Nova Scotia in U.S. waters have shown greater resilience to fishing, apparently because, first, non-target predatory species have compensated for overfished cod (ecological redundancy), and second, warmer water has enhanced population growth and recovery.

### *Population Level*

Although ecological resilience is usually considered in terms of entire ecosystems, the concept can also be applied to populations of single species. This extension of the concept is important because it addresses the fact that overexploited populations may undergo internal ‘regime shifts’ that compromise the viability of a fishery. In such cases, sustainable production MPAs may be useful tools for stock restoration and sustainability in at least four ways:

(1) MPAs can protect specific critical habitats, such as spawning and nursery areas, that enhance stock viability and productivity.

(2) MPAs can protect species that regulate the abundance of target species. Population sizes of fish and other marine organisms vary through time, sometimes tremendously, because the birth rate and the death rate can vary independently of each other; births sometimes exceed deaths, and vice versa at other times. A population is resilient, that is, it persists indefinitely and at levels that can support a sustainable fishery, when regulating factors keep the population size at sustainable levels. (In the parlance of resilience, fishery populations can be thought of as existing in two 'regimes': economically viable and economically extinct.) Natural regulating mechanisms include competition, predation and disease, which push populations down when they are too large (births < deaths), while also easing-off and allowing growth when populations are too small (births > deaths). Therefore, managing for population resilience includes conservation of competitors and other species that naturally regulate population size. MPAs can help ensure that regulating species maintain this ecological service by prohibiting their overexploitation

(3) MPAs can maintain old-growth age structure. Among marine fishes, natural selection has favored life-history characteristics, such as high fecundity (egg production), that ensure sufficient birth rates to at least balance the extremely high death rates of larvae and juveniles typical in the sea. In a broad variety of fishery species, including cods, rockfishes, and tunas, it has long been known that older, larger females produce far more eggs than younger, smaller females, and that they have longer spawning seasons. These and other adaptations make big, old, female fish extremely valuable, not only for replenishing populations, but also for fostering population resilience. For example, in black rockfish (*Sebastes melanops*) off the coast of Oregon, a highly variable marine environment, there are years when big, old females produce almost all of the young fish, younger females having spawned too late in the season for their young to survive. Because fishing almost always depletes the abundance of older, larger fish, MPAs can help ensure that a reasonable number of big, old females survive.

(4) MPAs can protect genetic diversity that enhances stock adaptability, viability and productivity.

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In all the above examples, it is important to keep in mind that ongoing directional changes in the ocean environment, especially ocean warming and acidification, may lead to regime shifts in marine ecosystems independent of local human activities and management, including MPAs. Nonetheless, what we know of marine ecosystems indicates that relatively intact systems are more resilient to regime shifts than relatively degraded systems. Therefore, MPAs are clearly useful tools for fostering ecological resilience.

### **Applied Ecological Resilience: MPA Networks**

The above examples illustrate how individual MPAs that protect key ecosystem components can foster ecological resilience in particular locations. However, a system of MPAs functioning as an ecological network can enhance resilience at far broader spatial scales. In this context, an

**ecological network** is a regional system of MPAs ecologically linked by dispersal of larvae and/or movement of juvenile and adult organisms. There are four components of networks that enhance resilience at large scales:

(1) **Representation**: The Framework includes geographical, ecological, cultural, and governmental ‘representativeness’ as fundamental principles for implementing the National System (p.16). For natural heritage goals, it is, of course, essential to protect refuges for high-priority marine ecosystems for which MPAs are likely to be effective. In a practical sense, such protection comes from focusing on a variety of marine habitats; habitat complexity and variety have been shown to be accurate surrogate measures of marine biodiversity. In the context of networks, many marine species occupy different habitats as they grow from larvae to juveniles to adults (ontogenetic habitat shifts), so protecting entire life cycles demands including refuges for all relevant habitats in the network. This fact is applicable to both sustainable production and natural heritage goals.

(2) **Replication**: The Framework includes ‘replication’ as a National System design principle in terms of "multiple sites to ensure continued representation in the face of harmful impacts" (p.16). Just as multiple species within the same ecologically functional group provide redundancy that enhances resilience locally (see examples above), multiple MPAs that protect the same ecosystem and habitat types ensure that the catastrophic loss of any particular site does not jeopardize the entire system. Such catastrophic loss could be due to the formation of a large hypoxic (low-oxygen) zone, coral bleaching over a broad area, a catastrophic hurricane, etc. Representation combined with replication provides both taxonomic and spatial redundancy because different sites can support different species with the same general ecological roles.

(3) **Viability**: The Framework includes ‘viability’ as a National System design principle in terms of "inclusion of self-sustaining, geographically dispersed component sites of sufficient extent to ensure population persistence through natural cycles of variation" (p.16). To some extent, representation combined with replication over the entire geographic range of particular suites of species fosters viability. Viability also includes the notion of an MPA being of sufficient size to ensure the persistence of particular populations. The location of an MPA may also affect ecosystem viability, such as cool-water refugia for tropical coral reefs threatened by ocean warming and coral bleaching.

(4) **Connectivity**: The Framework includes ‘connectivity’ as a National System design principle that "maximizes and enhances the linkages among individual MPAs, groups of MPAs within a given eco-region, or MPA networks in the same and/or different regions" (p.16). Movement of organisms among MPAs ensures that protected populations are replenished. Additionally, connectivity between MPAs and unprotected areas can possibly replenish unprotected populations via larval dispersal (**the seeding effect**) and/or movement of juveniles or adults (**the spillover effect**). Measuring population connectivity at sea is currently a major focus of research, with recent advances in methodology documenting both seeding and spillover effects. In a practical sense, because marine ecosystems harbor a diversity of species with a wide range of individual dispersal capabilities, even in the absence of substantial data on the movement of individual species, linkages throughout the ecosystem are fostered where the spacing of MPAs does not inhibit larval connectivity.

## Applied Ecological Resilience: Gap Analysis of the National System of MPAs

The components of MPA network design that foster ecological resilience -- representation, replication, viability, and connectivity -- provide a practical foundation for developing an operational and effective gap analysis of the National System.

- For **representation**, the analysis would compare the full suite of marine ecosystems and major habitats within a region with those protected by the existing system. This comparison would require both mapping and categorizing ecosystems and habitats at a resolution that is both affordable and ecologically realistic.
- For **replication**, the desired number of MPAs of a given type in a given region would be compared with the existing system. All else being equal, higher replication fosters greater resilience, yet the resulting ecological benefits must be balanced by socioeconomic considerations.
- For **viability**, the desired size and location of MPAs of a given type in a given region would be compared with the existing system. MPA size and spacing guidelines for network design have already been developed in multiple regions.
- For **connectivity**, ideally, patterns of larval dispersal and juvenile/adult movements would be known for key species to identify gaps in connectivity within the National System. Given incomplete data, because nearly all marine ecosystems contain species that differ greatly in their dispersal capabilities, fostering linkages across the diversity of the ecosystem would be enhanced by networks where the spacing of MPAs does not inhibit larval connectivity. Fortunately, existing regional examples of GIS-based marine gap analysis provide practical models for scaling-up to the National System of MPAs. The ultimate challenge may not be the gap analysis itself, but the process of filling the identified gaps.

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**Marine Protected Areas Federal Advisory Committee**  
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# **GUIDING PRINCIPLES FOR ECOLOGICAL GAP ANALYSIS OF THE NATIONAL SYSTEM OF MARINE PROTECTED AREAS**

## **Introduction**

Presidential Executive Order 13158 of 26 May 2000 established a National System of Marine Protected Areas (MPAs). The order specified that the national system be scientifically based, comprehensive, and represent the nation's diverse marine ecosystems and natural and cultural resources.

The "Framework for the National System of Marine Protected Areas of the United States of America" (hereafter, the 'Framework') was developed and released in November 2008.<sup>2</sup> The Framework states, "The critical next step toward achieving the national system's conservation objectives is the identification of conservation gaps: areas in the ocean and Great Lakes that meet priority conservation objectives of the national system but that are currently not adequately protected to ensure their long-term viability, as called for in Section 4(a) of the Presidential Executive Order" (p. 30). In accordance with the Framework, the MPA Center will lead a comprehensive collaborative region-by-region process to identify conservation gaps relative to the targeted conservation objectives and national system design criteria (p. 30). Conservation gaps will be used to inform the development of recommendations for new MPAs through regional MPA planning and can also be used by managing entities and stakeholders to guide their efforts to establish new MPAs. The National Oceanic and Atmospheric Administration (NOAA) and the U.S. Department of Interior (DOI) has sought advice from the Marine Protected Areas Federal Advisory Committee (MPA FAC) to assist with the conceptual design of the gap analysis process.

A gap analysis is a common process used in many different disciplines including business, economics, and ecology. In simplest terms, a gap analysis is a decision support process that enables organizations and managers to evaluate actual performance against potential performance. Two basic questions lie at the core of a gap analysis: (1) "Where are we?" and (2) "Where do we want to be?" When an organization or system is under-utilizing its current resources, then typically it is producing or performing at a level below its potential. In general, gap analysis begins with a clear understanding of organization or system goals and objectives, and evaluation of performance measures related to those goals and objectives. Identifying the

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<sup>2</sup> Framework for the National System Of Marine Protected Areas of the United States Of America. November 2008. National Marine Protected Areas Center, NOAA's Office of Ocean and Coastal Resource Management, National Oceanic and Atmospheric Administration. 92pp.

performance gaps and subsequently taking action to close those gaps follows from such an analysis.

As it applies to the National System of MPAs, gap analysis should be an assessment of the extent to which a protected area system meets established protection goals within the context of the full mosaic of marine conservation and management measures. The gap analysis should take into account all aspects of spatial resource and environmental management, such as marine managed areas, de facto MPAs, and other management entities that are not part of the national system. It should involve comparing the biodiversity and resource patterns relative to the distribution of protected areas, and finding where species, ecosystems, and ecological processes are unprotected or under-protected. The analysis should seek to identify gaps in the National System of MPAs that may be filled through establishment of new MPAs, modification of existing MPAs, or changes in coastal zone management practices. The gap analysis should consider the diversity and wealth of life that exists within the entire Exclusive Economic Zone (EEZ) of the United States. The desired outcome of a gap analysis process and subsequent implementation of gap analysis recommendations is to strengthen the effectiveness of the National System of Marine Protected Areas.

The gap analysis should consider a range of various gaps which have the potential to undermine effectiveness of a marine protected area network as follows:

- (1) **Representation Gaps:** where a particular habitat, ecosystem, or cultural resource type is either unrepresented or underrepresented in the national system.
- (2) **Ecological Gaps:** where important species, habitats, ecosystems, or processes are not adequately protected to ensure their lasting conservation and sustainable use.
- (3) **Management Gaps:** where the management regimes (management objectives or governance types) of MPAs in the national system do not fully provide for lasting conservation or sustainable production of a particular species, habitat, cultural resource, or ecosystem.

It is important to note that, at the present state of marine science, we do not fully understand marine ecological processes, particularly where they involve complex interactions between species, life-cycles, and ecosystem connectivity. That is why one of the most important principles of the gap analysis will be to employ an iterative, adaptive-management approach.

The Framework (p. 31) provides a view of a comprehensive gap analysis process that will include the following factors:

- “Taking into account existing MPAs and other conservation measures currently in place, ... implemented iteratively, relative to targeted specific national system conservation objectives, and on region-by-region bases.”
- “Gap identification efforts will be focused at the regional scale, and will be collaborative, involving MPA-related and other entities at various levels of government, Fishery Management Councils, and other organizations and institutions in synthesizing and analyzing

existing scientific information, including traditional ecological knowledge, where available, and established conservation priorities. The effort to identify conservation gaps will include opportunities to review and comment on the process and its results by the public, the MPA FAC, relevant federal agencies, state and tribal governments, and other entities, including the National System Management Committee (Management Committee).”

- “Managing entities will need to work with stakeholders under the auspices of appropriate MPA authorities to: (i) evaluate these gaps; (ii) incorporate data on human uses and impacts and related societal and economic considerations; and (iii) assess management priorities to make an informed decision about appropriate next steps in response to an identified conservation gap. These steps might include the establishment of a new MPA, changes to existing MPAs, additional research, or some other alternative. Establishment of new MPAs or changes to the governance of existing MPAs must follow relevant processes under established authorities.”

The first step in the comprehensive gap analysis process is an ‘ecological gap analysis’ which is the focus of this document. Ecological systems must also be considered in context with human interactions with the marine environment. Socio-economic and human use factors must be part of the comprehensive gap analysis.

In summary, the comprehensive gap analysis process will be an ambitious undertaking both in terms of scientific research and implementation of measures required to close the gaps. The gap analysis process must be approached pragmatically with due consideration of available funding and other resources. The MPA FAC cautions against imposing unfunded mandates upon the National MPA Center regarding both expectations of the gap analysis process and implementation actions. Success of the analysis and implementation of resulting recommendations will hinge upon adequate funding for the National MPA Center and MPA managing entities.

## **Principles of Ecological Gap Analysis**

**1. Resilience:** *Ensure that the National System of MPAs can effectively withstand stresses and changes.* For the purpose of guiding the gap analysis process, the MPA FAC defines *ecological resilience* as “the capacity of an ecosystem or natural population to resist or recover from major changes in structure and function following natural and human-caused disturbances, without undergoing a shift to a vastly different regime that is undesirable and very difficult to reverse from a human perspective.” For an in-depth discussion about ecological resilience, please refer to the MPA FAC document entitled *Ecological Resilience and Gap Analysis of the National System of Marine Protected Areas*. Recognition of connectivity among ecosystems has created increased interest in MPAs as networks, with core areas joined by complementarily-managed land and water, providing routes or stopping-off places for migratory species, buffering of MPAs against outside pressures, and an opportunity for resident species to interbreed with more distant populations. Protecting and enhancing the resilience of marine ecosystems should be regarded as an overarching principle of the gap analysis with the principles of representation, replication, connectivity, and viability being subsets of resilience as follows:

a. **Representation:** *Ensure protection of biodiversity across the full range of biological scales (species and ecosystems).* Representation focuses on ensuring that all ecosystems and habitats that can benefit from spatial management within a region are represented in an MPA network. Although somewhat idealistic, full representation would be achieved when representative samples of all species and ecosystems existed within the protected area network at a sufficient scale to ensure their long term persistence. As a first step in MPA design planning and gap analysis, it is critical to identify both representative and unique habitats. To accomplish this, a multidimensional classification of habitats should be conducted, including but not limited to water depth, exposure, seafloor type, and dominant flora and fauna. Considering that marine protected areas will likely ever cover only a small part of the marine environment, the key to a successful gap analysis is to identify shortfalls in representative protection, and thus to help to ensure that MPAs are located in the most effective places to capture as much biodiversity in need of protection as possible. In general, species diversity increases with habitat complexity, therefore the greater the variety of habitats protected, the greater the biodiversity conserved. MPA networks should advance priority conservation objectives found in each biogeographic region. MPAs that both represent and replicate (see below) all habitat and community types within well-connected networks are more likely to lead to persistence and resilience in ecosystems and ecological processes in a changing world.

b. **Replication:** *Include replicates of each representative habitat within each biogeographic region to protect against unexpected losses of particular sites, safeguard genetic variation, and ensure ecological redundancy.* An effective MPA network will include multiple sites to provide some measure of insurance against losses of part of the network. Furthermore, biodiversity elements exhibit genetic and/or compositional variation that ensures evolutionary potential, which is necessary for long-term conservation of species and ecosystems. Where applicable, multiple occurrences of this variation *within* single species or ecosystem types should be conserved. These occurrences should ideally be selected across the ecological distribution of the species or ecosystem type to ensure capture of that genetic and compositional variation. In places where the ecosystem is already degraded, MPA networks should include opportunities for restoration. MPAs should also be considered in places that are currently of low conservation value, if there is a realistic chance of such values being regained through the passive effects of time or more active management interventions. Determining the most effective number of replicates should involve a balance among ensuring adequate representation, minimizing socioeconomic costs, and ensuring effective monitoring and enforcement.

c. **Connectivity:** *Ensure ecological connectivity among MPAs.* Connectivity between MPAs should be of prime consideration in gap analysis. Most marine species produce larvae that disperse, often resulting in demographically “open” local populations that are replenished by distant sources of recruitment. Additionally, many species are dependent upon access to a variety of often spatially separated ecosystems to complete their life cycles. Ensuring protection of spawning sites, proper arrangement and spacing of MPA sites to foster larval connectivity, and adequate linkages of ecosystems to support the completion of life cycles should be at the core of a gap analysis. Additional scientific research to adequately understand these life-cycle linkages should be given high priority. This goal is particularly critical when designing MPAs for marine biodiversity. The need for resilience is

increased because major climate changes now seem almost inevitable and will have serious impacts on terrestrial and marine protected areas. Additionally, the effects of climate change on agricultural landscapes means that MPAs will be under increased human pressure and may require active intervention. As agricultural areas migrate due to shifts in climate, new watersheds will be impacted by fertilizer run-off, which will in turn lead to negative impacts on some coastal marine ecosystems. Ecological systems and species will move with changing climates, and therefore foresight and planning for networks will be required to allow this movement over time. In some cases, boundaries may have to be extended; for instance to include a broader range of landscape gradients, or new protected areas may need to be established.

**d. Viability:** *Ensure MPAs have the ability to sustainably host the natural life forms within.* In the Framework, viability is a guiding principle of gap analysis, ensuring the “inclusion of self-sustaining, geographically dispersed component sites of sufficient extent to promote population persistence through natural cycles of variation” (p. 16). The goal of this principle is to identify management actions that will promote the marine environment’s ability to sustainably host an abundance of life forms. Viability is fostered by representation, replication, and by siting and sizing of MPAs in a manner that ensures the persistence of populations and ecosystems.

**2. Ensure lasting protection:** *Network design must provide lasting protection to effectively conserve diversity and provide ecosystem benefits. Long-term arrangements for funding, management and enforcement are essential to sustain the National System.* The use of MPA networks as a key strategy for long-term sustainability of marine ecosystems and the services they provide is dependent on having areas of *lasting protection*, as defined in the Framework (p. 19). The time it takes to accrue social, economic and environmental benefits can vary from a few seasons to decades, depending on the life history of target species, the condition of the ecosystem at the time of implementation, the level of enforcement, and the effectiveness of management within and outside of the MPA. The full effects of an MPA may take decades to be realized. Monitoring and evaluating the effectiveness of MPAs should be implemented as a standard procedure. As with any management intervention, if an MPA is not progressing toward established goals, the management plan must be revised or the MPA itself should be re-evaluated. Therefore, a comprehensive gap analysis must be approached with the objective of creating a network of MPAs that provides lasting protection to effectively and adaptively manage, conserve and replenish resources, and to sustain biodiversity and economic benefits.

**3. Consider various types of gaps:** *Document representation gaps, ecological gaps, and management gaps in the analysis.* Different types of gaps impinge on the effectiveness of the National System and all should be considered to strengthen the system and close the ecological gaps that remain within it. *Representation gaps* refer to species, ecosystems and ecological processes that are missed entirely or functionally absent within the MPA network. *Ecological gaps* relate to biodiversity and habitats that exist within MPAs, but with insufficient quality or quantity to provide long-term protection. *Management gaps* refer to situations where MPAs exist, but are failing to provide adequate protection, either because they have the wrong management objectives or because they are managed poorly. All three of these gaps should be considered by the gap analysis to strengthen the National System of MPAs.

**4. Employ a participatory approach: *Collaborate with stakeholders in conducting an ecological gap analysis.*** A participatory approach, especially including communities adjacent to or affected by potential MPAs, should be pursued. Scientists must work collaboratively with stakeholders in conducting the ecological gap analysis.

**5. Use an iterative process of adaptive management: *Review and improve the gap analysis as knowledge grows and environmental conditions change.*** In many cases, all the information necessary to make informed choices will simply not be available on management decision timelines. It may take many years of research to develop a comprehensive picture of an area's biological diversity. The gap analysis should therefore not be seen as a once and only exercise, but as an hypothesis that provides a series of maps and guidelines that may have to be revised and improved as time passes and understanding improves. This iterative process should rely on the best science and socio-economic knowledge available, while employing sound value judgments that effectively manage risk.

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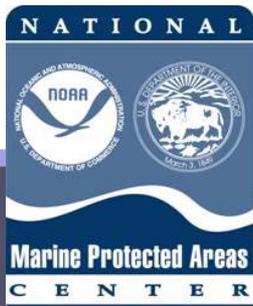
# The National System of Marine Protected Areas: From Design to Implementation

Agenda Item C.3.b  
Supplemental MPA PowerPoint  
September 2009

## Presentation to the Pacific Fishery Management Council

Dr. Charles M. Wahle  
Senior Scientist  
NOAA National Marine Protected Areas Center

Foster City, California  
September 14, 2009



[WWW.MPA.gov](http://WWW.MPA.gov)

# Terminology

**Marine Protected Area (MPA)** – any area of the marine environment that has been reserved by Federal, state, territorial, tribal or local laws or regulations to provide lasting protection to part or all of the natural and cultural resources therein. (Executive Order 13158 of May 26, 2000)

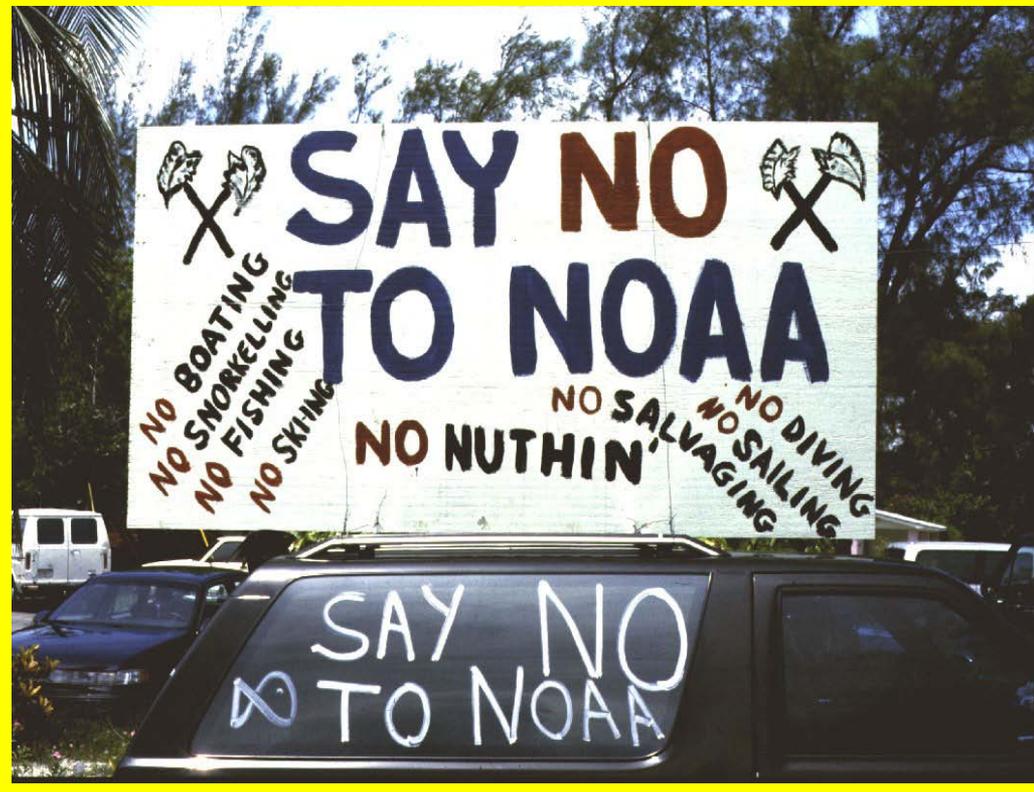
**Marine Reserve** – “no take” area – one type of MPA where extractive uses are prohibited



# Many Perspectives on MPAs

NOAA  
Sanctuary  
Manager

SAC  
Chair



# The US National System of MPAs: Origins and Status

- **Late 1990s** – scientific consensus on importance of MPAs and marine reserves as a conservation tool
- **Feb 2000** – CEQ + MCBI workshop on national system of MPAs
- **May 2000** – Executive Order signed by President Clinton
- **July 2001** – Executive Order endorsed by President Bush
- **November 2008** - System Final Framework Published
- **April 2009** – 225 federal, state/territorial MPAs join system



# Executive Order 13158

- Develop and implement a scientifically based, comprehensive **national system** of MPAs representing diverse U.S. marine ecosystems, and the Nation's natural and cultural resources
- Improve MPA **coordination, stewardship and effectiveness**
- This national system framework and the work of the MPA Center are intended to support, not interfere with, agencies' independent exercise of their own **existing authorities**.

Federal Register/Vol. 65, No. 105/Wednesday, May 31, 2000/Presidential Documents 34909

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## Presidential Documents

Executive Order 13158 of May 26, 2000

### Marine Protected Areas

By the authority vested in me as President by the Constitution and the laws of the United States of America and in furtherance of the purposes of the National Marine Sanctuaries Act (16 U.S.C. 1431 *et seq.*), National Wildlife Refuge System Administration Act of 1966 (16 U.S.C. 668dd-ee), National Park Service Organic Act (16 U.S.C. 1 *et seq.*), National Historic

# Building The US National System of Marine Protected Areas

Executive Order 13158 directs NOAA and DOI to create a US national system of MPAs that:

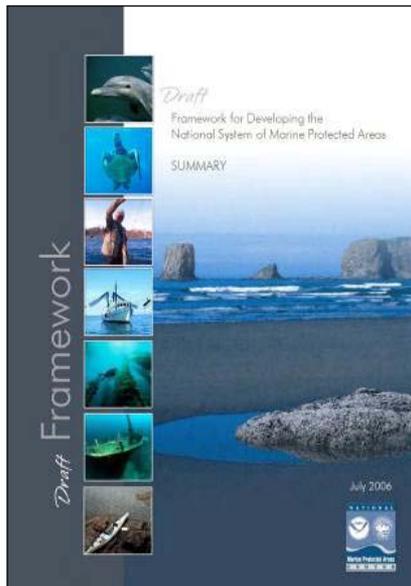
- Comprehensive --> multiple goals & mgmt approaches
- Science-based
- Stakeholder-informed
- Transparent
- Includes existing MPAs meeting NS criteria
- Will include new or enhanced MPAs created by action agencies to meet regional priority conservation goals and objectives

# Stakeholder Input on the System: MPA Federal Advisory Committee Role

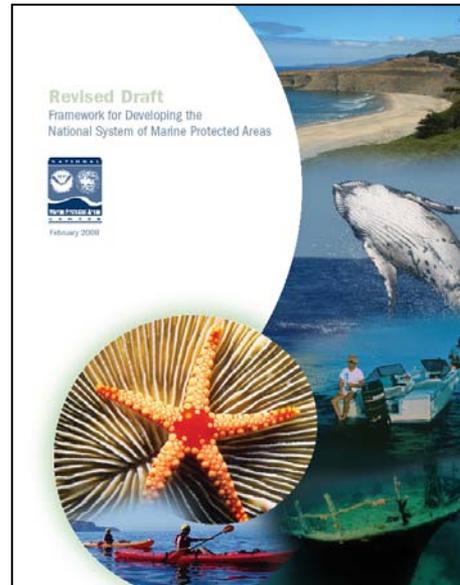
- Authorized by Executive Order 13158
- 30 member stakeholder committee advises NOAA and Department of Interior on national system of MPAs
- Helped craft National System goals and framework
- Currently selecting 14 new members to begin terms in 2010



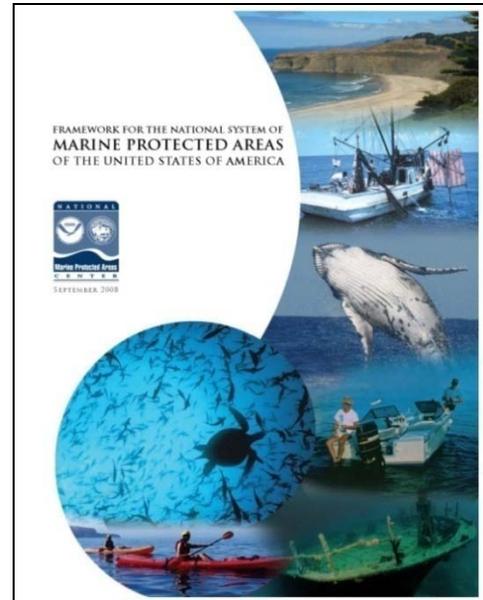
# Stakeholder Input on the Framework: Three Public Comment Periods



- Draft Framework
- Sept 2006
- 11,000 public comments



- Revised Framework
- March 2008
- 34 public comments



- Final Framework
- Nov 2008
- No public comments

# Priority Conservation Objectives: Natural Heritage Goal

**Goal 1: Advance comprehensive conservation and management of the nation's significant natural heritage marine resources through ecosystem-based MPA approaches.**

**Priority Conservation Objectives for Goal 1: Conserve and Manage:**

key reproduction areas and nursery grounds	<b>Near Term</b>
key biogenic habitats	
areas of high species and/or habitat diversity	
ecologically important geological features + enduring/recurring oceanographic features	
critical habitat of threatened and endangered species	
unique or rare species, habitats and associated communities	<b>Mid Term</b>
key areas for migratory species	
linked areas important to life histories	<b>Long Term</b>
key areas that provide compatible opportunities for education and research	

# Priority Conservation Objectives: Sustainable Production Goal

**Goal 3:** Advance comprehensive conservation and management of the nation's renewable living resources and their habitats, including, but not limited to, spawning, mating, and nursery grounds, and areas established to minimize incidental by-catch of species, that are important to the nation's social, economic, and cultural well-being through ecosystem-based MPA approaches.

## Priority Conservation Objectives for Goal 3

Conserve and manage key reproduction areas, including larval sources and nursery grounds	Near Term
Conserve key areas that sustain or restore high priority fishing grounds	
Conserve and manage key areas for maintaining natural age/sex structure of important harvestable species	Mid Term
Conserve key foraging grounds	
Conserve and manage key areas that mitigate the impacts of bycatch	
Conserve key areas that provide compatible opportunities for education and research	Long Term

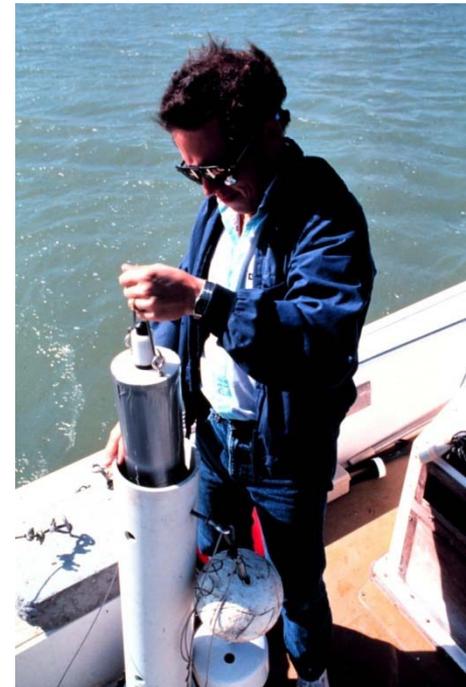
# Benefits of a National System of MPAs

- **To Participating MPA Programs:**
  - Enhancing stewardship through regional coordination
  - Building partnerships
  - Building public & international awareness and support
  - Formal mechanism for addressing large scale issues
- **To the Nation:**
  - Protecting representative ecosystems and resources
  - Enhancing connectivity
  - Identifying conservation gaps
- **To Ocean and Coastal Stakeholders:**
  - Transparent process for MPA planning
  - Better planning for diverse ocean uses
  - Better information on MPA resources, uses and fishing opportunities



# Examples of National System Benefits

- **Recognition for MPA programs and sites**
  - New web pages on [mpa.gov](http://mpa.gov)
  - Communications toolkit
- **Information for regional ocean governance and MPA planning and management:**
  - MPA inventories
  - Ocean Use Atlas (CA)
  - MPA Virtual Library ([www.mpa.gov](http://www.mpa.gov))
- **Program Integration**
  - Observing Systems
  - Navigation resources
- **Facilitation of Regional Assessments & Gap Analyses**
- **International Linkages**
  - North American MPA Network



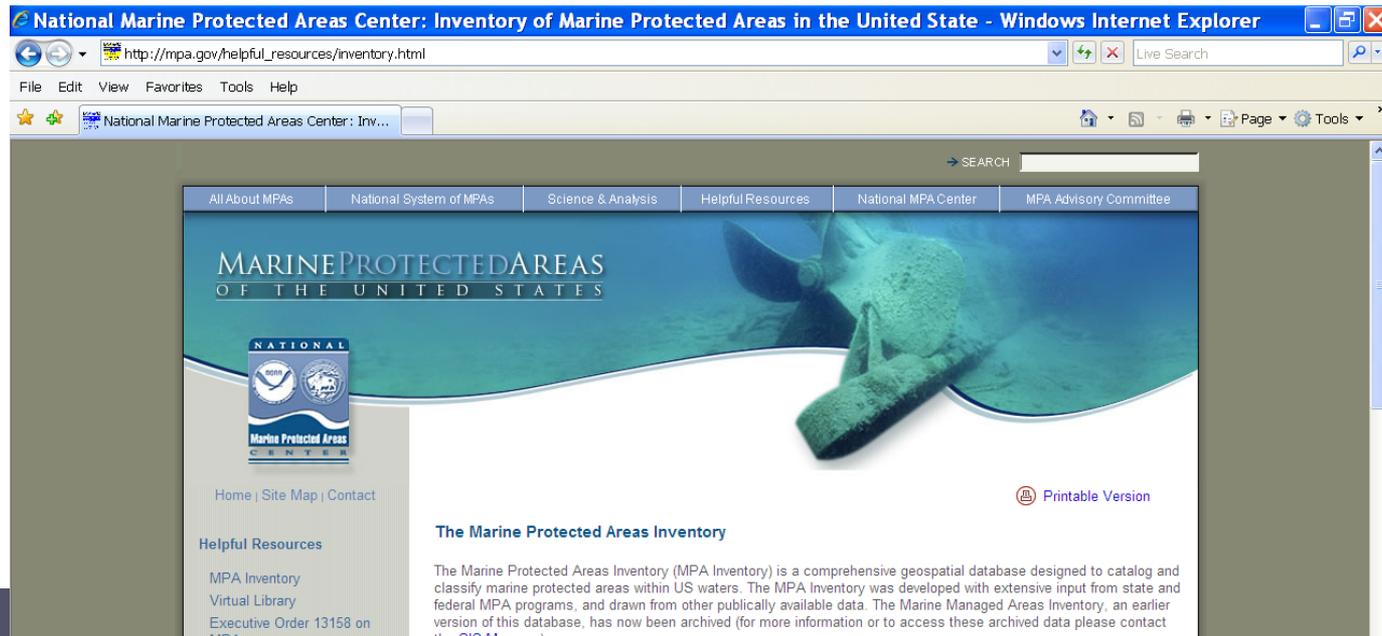
# Benefit To Councils

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- Recognizes major contribution of Councils to marine conservation
- Potential leadership role for Councils in “sustainable production” goal of National System
- Provides Councils with the opportunity to participate in shaping the developing National MPA System partnership
- Provides framework for linkages to
  - Federal, state, territorial & international MPA programs
  - Emerging marine spatial planning initiatives
- Provides information on MPA management + planning at regional scale

# MPA Inventory

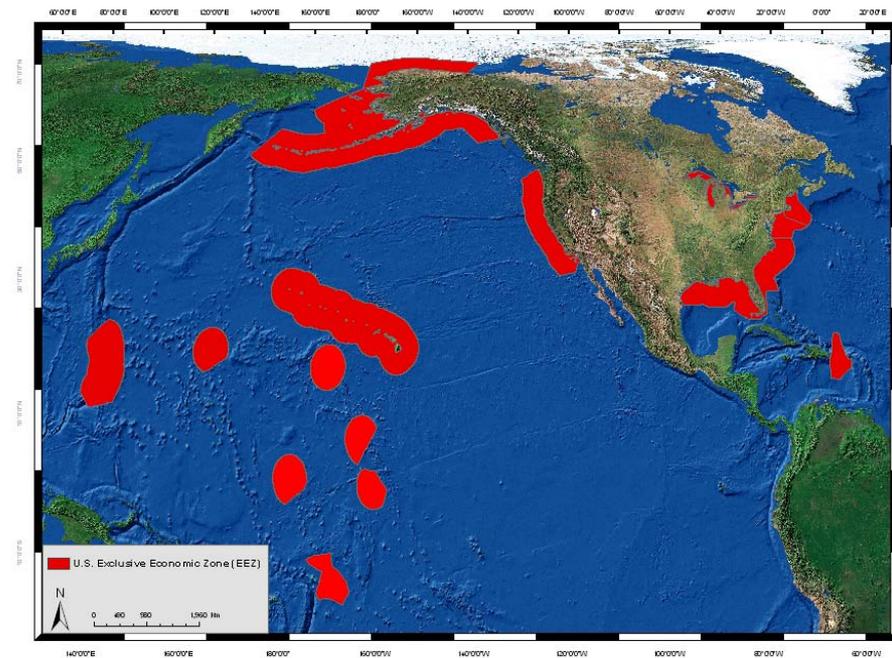
- Baseline to understand extent, location, purpose and type of protection of **existing MPAs**
- **Comprehensive database** for 35 coastal states and five federal MPA programs
- **Partnership** with federal and state managing agencies
- Now being updated for **federal fisheries sites**



The screenshot shows a Windows Internet Explorer browser window displaying the National Marine Protected Areas Center website. The browser's address bar shows the URL [http://mpa.gov/helpful\\_resources/inventory.html](http://mpa.gov/helpful_resources/inventory.html). The website's navigation menu includes links for "All About MPAs", "National System of MPAs", "Science & Analysis", "Helpful Resources", "National MPA Center", and "MPA Advisory Committee". The main content area features a large banner image of a diver underwater with a large marine protected area marker. Below the banner, the text "MARINE PROTECTED AREAS OF THE UNITED STATES" is displayed. A search bar is located in the top right corner. The left sidebar contains a "Home | Site Map | Contact" link and a "Helpful Resources" section with links to "MPA Inventory", "Virtual Library", and "Executive Order 13158 on". The main content area is titled "The Marine Protected Areas Inventory" and contains a paragraph describing the MPA Inventory as a comprehensive geospatial database designed to catalog and classify marine protected areas within US waters. A "Printable Version" link is visible in the bottom right corner of the main content area.

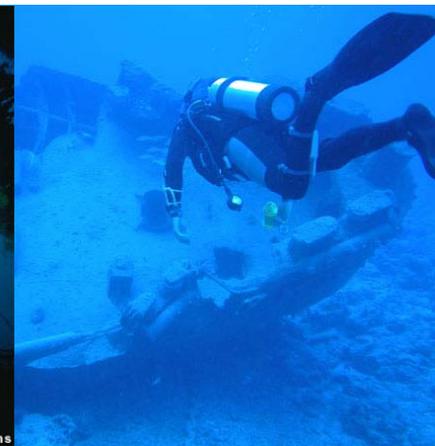
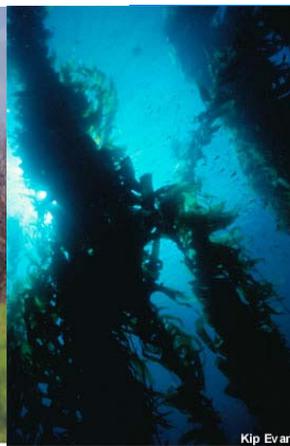
# National Picture of MPAs

- ~ 1,600 MPAs in U.S. waters
- Hundreds of federal, state and local MPA authorities
- About 1/3 of US EEZ in some form of MPA, but purposes narrow
- Majority allow multiple uses (>99% of MPA area)
- Few prohibit all extractive activities (<1% of MPA area); no take MPAs are typically very small
- Federal programs manage most area; states manage most sites



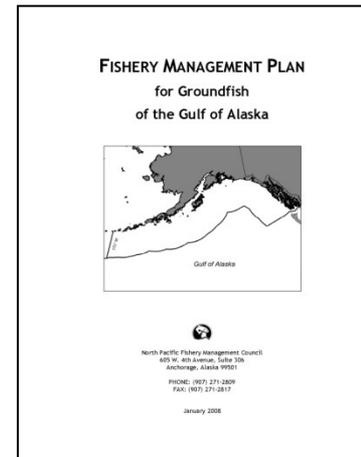
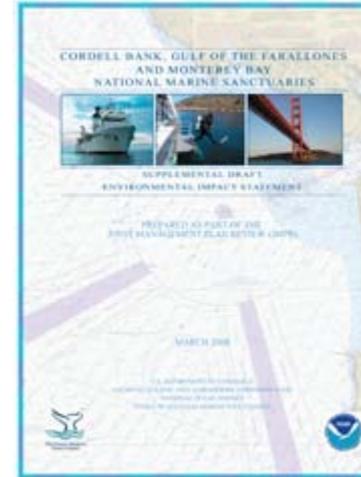
# Getting There From Here: Desired Composition of National System

- Goal is for national system to be diverse in:
  - Conservation goals
  - Geographic region
  - Ecosystem type
  - Approaches to place-based protection
  - Level of government



# Criteria for Entry to the National System

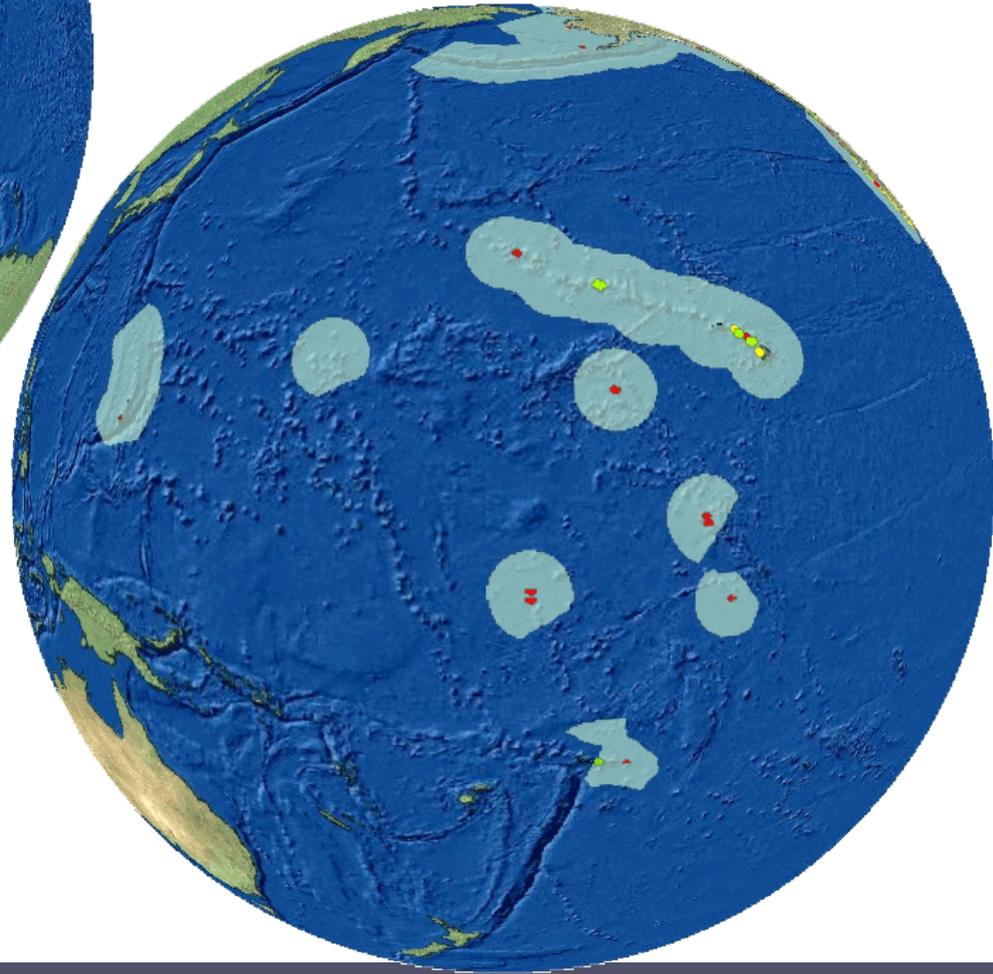
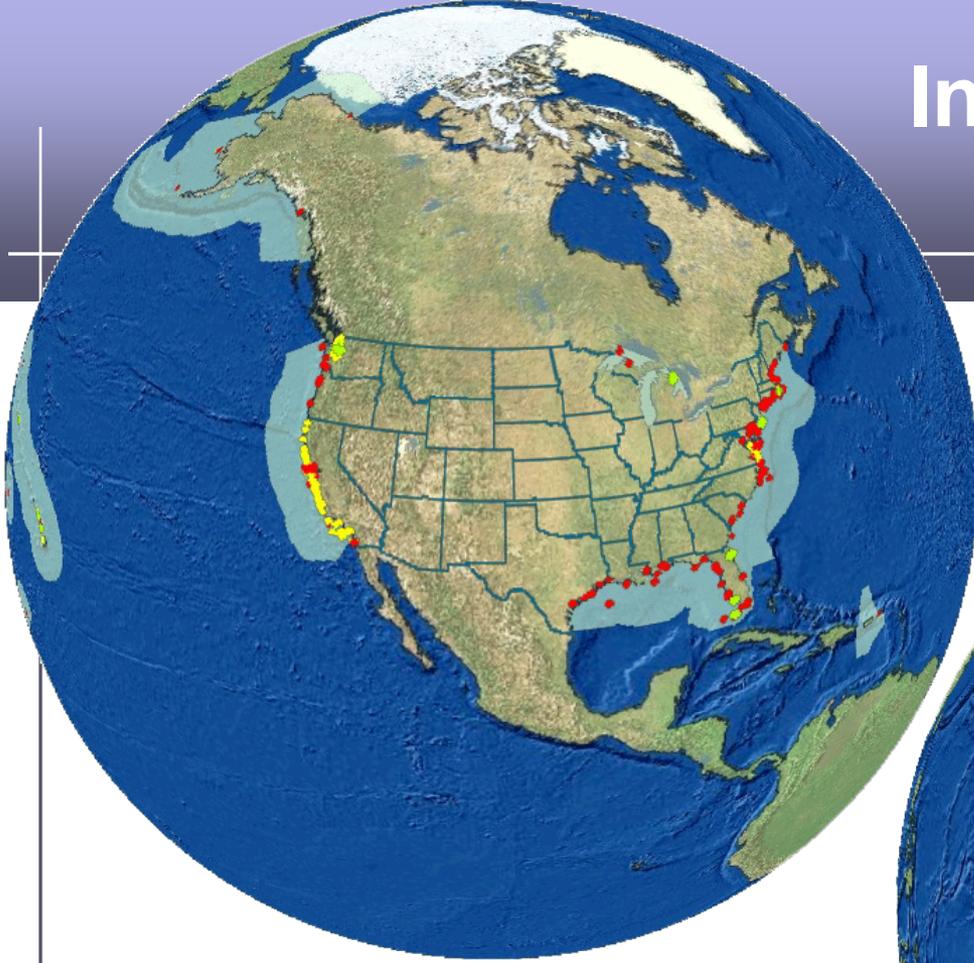
- Meets the definition of an MPA
  - Key terms: area, marine, reserved, lasting, protection
- Has a management plan
  - Includes site specific information; can be part of a broader fisheries management plan
  - Must include goals and objectives; call for monitoring and evaluation
- Contributes to a priority conservation objective of the nation system
- Additional criteria for cultural resources



# First Round of Nominations to the National System of MPAs

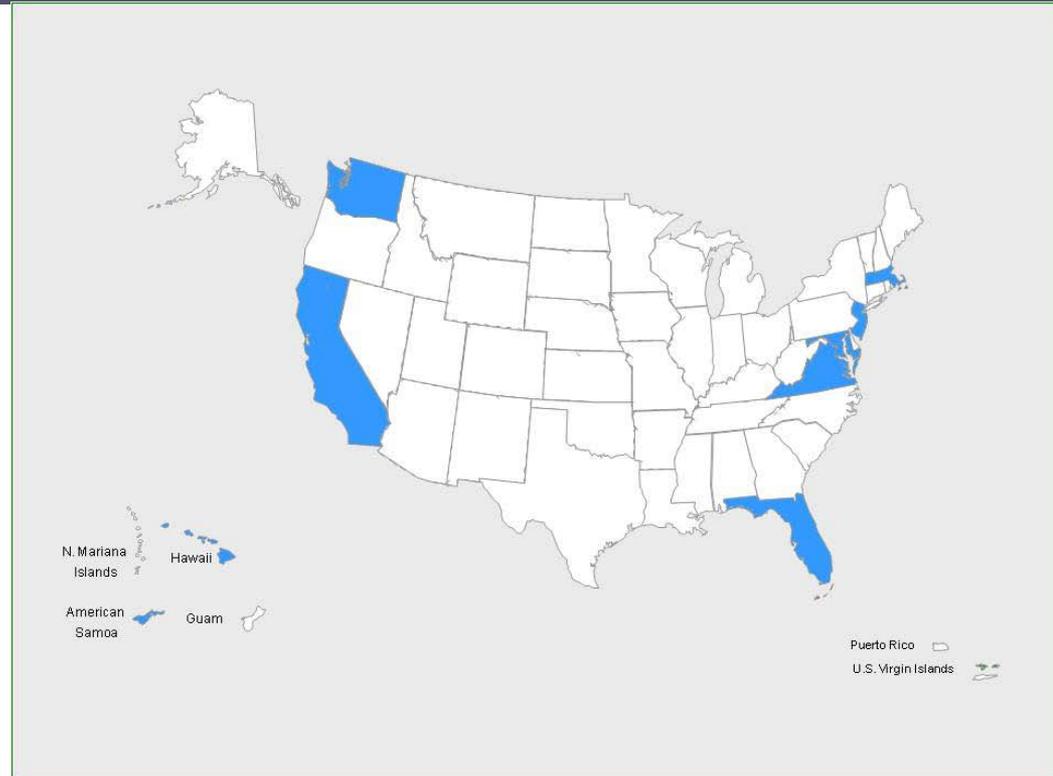
- 225 MPAs
- Federal MPA Programs
  - National Marine Sanctuaries
  - National Parks
  - National Wildlife Refuges
- Federal/State Partnership
  - NERRS
  - Papahānaumokuākea Marine National Monument
- 9 States/Territories (includes NERRS sites)

# Initial National System of MPA Sites

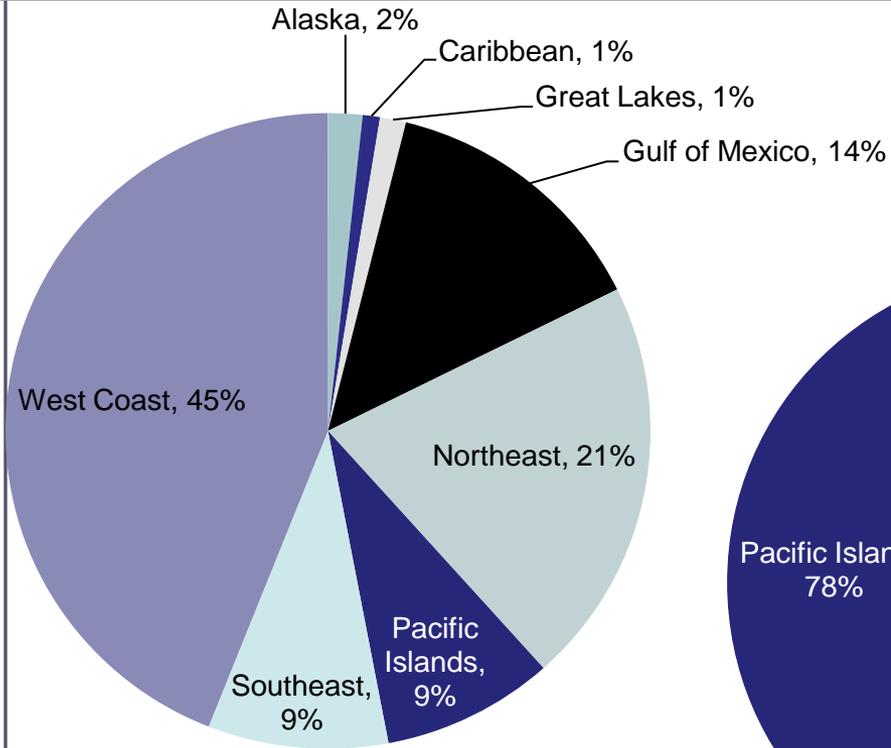


# Initial National System of MPAs: Participating States/Territorial Agencies

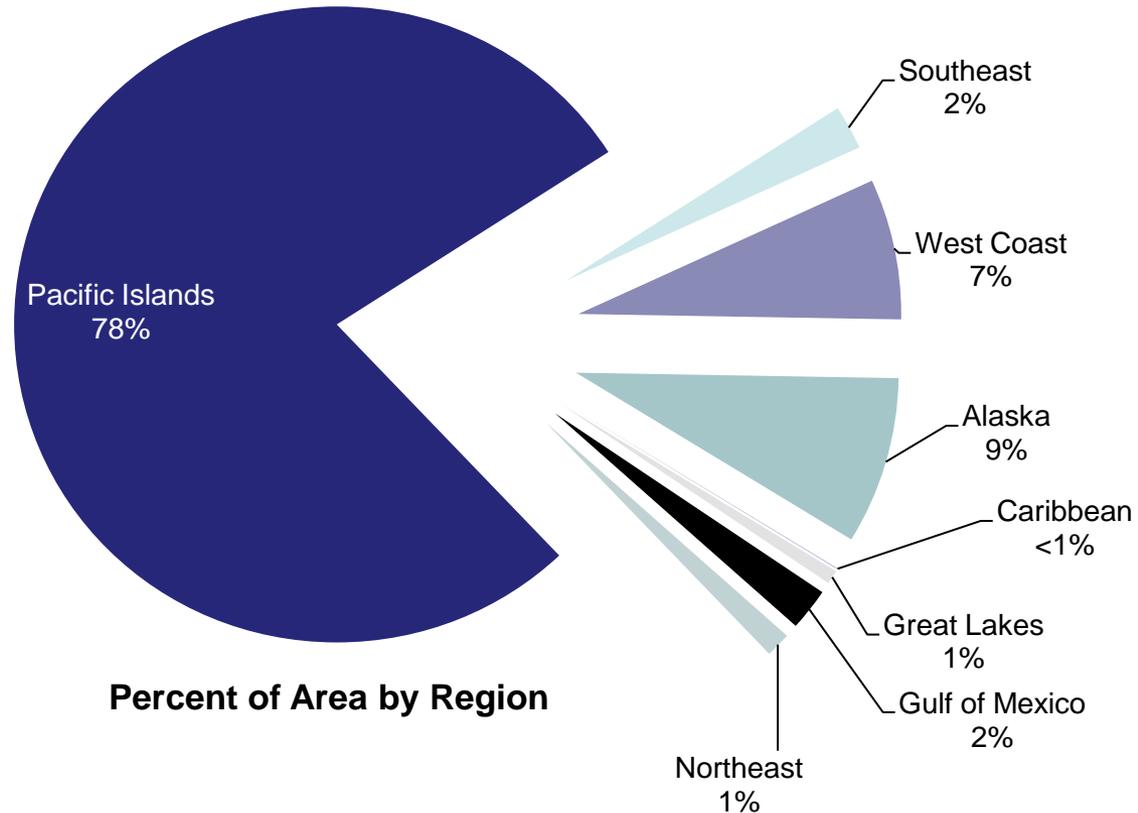
- American Samoa (1)
- California (63)
- Florida (2)
- Hawaii (7)
- Maryland (1)
- Massachusetts (1)
- New Jersey (1)
- Virginia (7)
- Washington (19)



# Distribution of National System Sites by Region



**Percent of Sites by Region**



**Percent of Area by Region**

# Next Steps for the National System

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**Second Round of Member Nominations** – ongoing now

**Fisheries MPAs** – work with NMFS and FMCs to include Sustainable Production MPAs

**Avoid Harm Provision** – develop clear guidelines for agencies to implement

**Priorities for Supporting National System Member MPAs** – enhance science, stewardship and coordination

**Identify Gaps in Protection** – evolving gap analysis project linked to WC California Current IEA

# Growing the National System: Second Round of Nominations



- August 6: MPA Programs invited to nominate sites
  - Nov 6: Nomination packages due to MPA Center
  - Nov 18: Public comment period begins
  - Dec 18: Public comment period ends
  - Dec 22: Public comments sent to managing agencies
  - Jan 15: Managing agencies make final determination
  - Jan 29: List of second set of MPAs accepted & comments in Federal Register
- 
- Nominations to be accepted on annual basis; potential to adapt schedule based on interest

# Examples of NOAA Fisheries MPAs

## North Pacific:

Bering Sea Habitat Conservation Areas = 130,000 nm<sup>2</sup>  
Steller Sea Lion Protection Areas, Gulf of Alaska - Groundfish, Pollock, and Pacific Cod Closures = 83,725 km



## New England:

Closed Area I = 3,940.44 km & Closed Area II = 6,734 km  
Stellwagen Bank/Jeffreys Ledge Restricted Area = 5,271 km

## Pacific:

Klamath River Salmon Conservation Zone = 394.02 km  
Big Sur/Port San Luis Bottom Trawl Closed Area = 10,390 km



## Mid-Atlantic:

Mid-Atlantic (Elephant Trunk) Closed Area = 5,387 km  
Southern Mid-Atlantic Waters Closure Area = 113,534 km

## South Atlantic:

Charleston Bump Closed Area = 125,494 km  
East Florida Coast Closed Area = 103,448 km

## Western Pacific

WestPac Bed = 39.47 km  
Hancock Seamount = 61,481 km

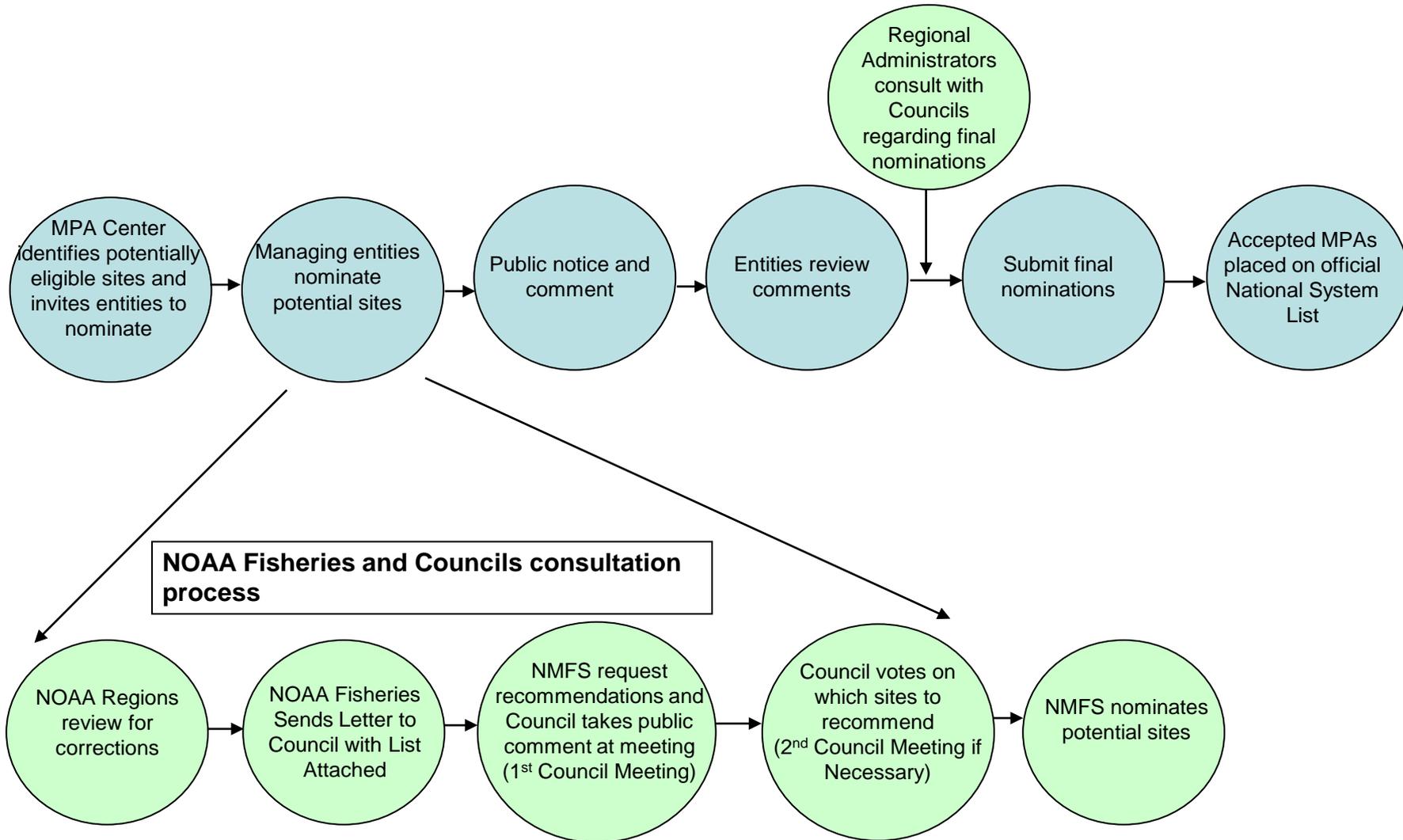
## Gulf of Mexico:

Tortugas Marine Reserves = 348.86 km  
Reef Fish Stressed Area = 99,478 km

## Caribbean:

Red Hind Spawning Aggregation Areas = 104.01 km  
Mutton Snapper Spawning Aggregation Area = 8.72 km

# Nomination Process: Coordination with Councils



# “Avoid Harm”

- Executive Order 13158, Section 5:
  - *“Each Federal agency whose actions affect the natural or cultural resources that are protected by a [national system] MPA shall identify such actions.*
  - *To the extent permitted by law and to the maximum extent practicable, each Federal agency, in taking such actions, shall avoid harm to the natural and cultural resources.”*

# Avoid Harm – What Does it Mean?

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- Each federal agency is responsible for its own implementation of its responsibilities under Section 5
- Compliance is linked to the purpose of the MPA as designated, not to all resources within the defined area
- MPA Center will maintain List of National System MPAs which are subject to the avoid harm provision

# Priorities for Operating the Initial National System

- **Build on existing stewardship efforts**
  - Identify a few national and regional science and stewardship priorities
  - Begin to develop regional MPA Stewardship Strategies
- **Focus on national coordination**
  - Establish of national Management Committee
  - Integration with other ocean management priorities (e.g. regional ocean governance, ocean observation systems)
  - Plan for national system evaluation
  - Initiate second round of member nominations
- **Recognition**
  - Develop new visual identity
  - Outreach materials for use by MPA Programs
  - Web pages



# Growing the National System: Ecological Gap Analysis

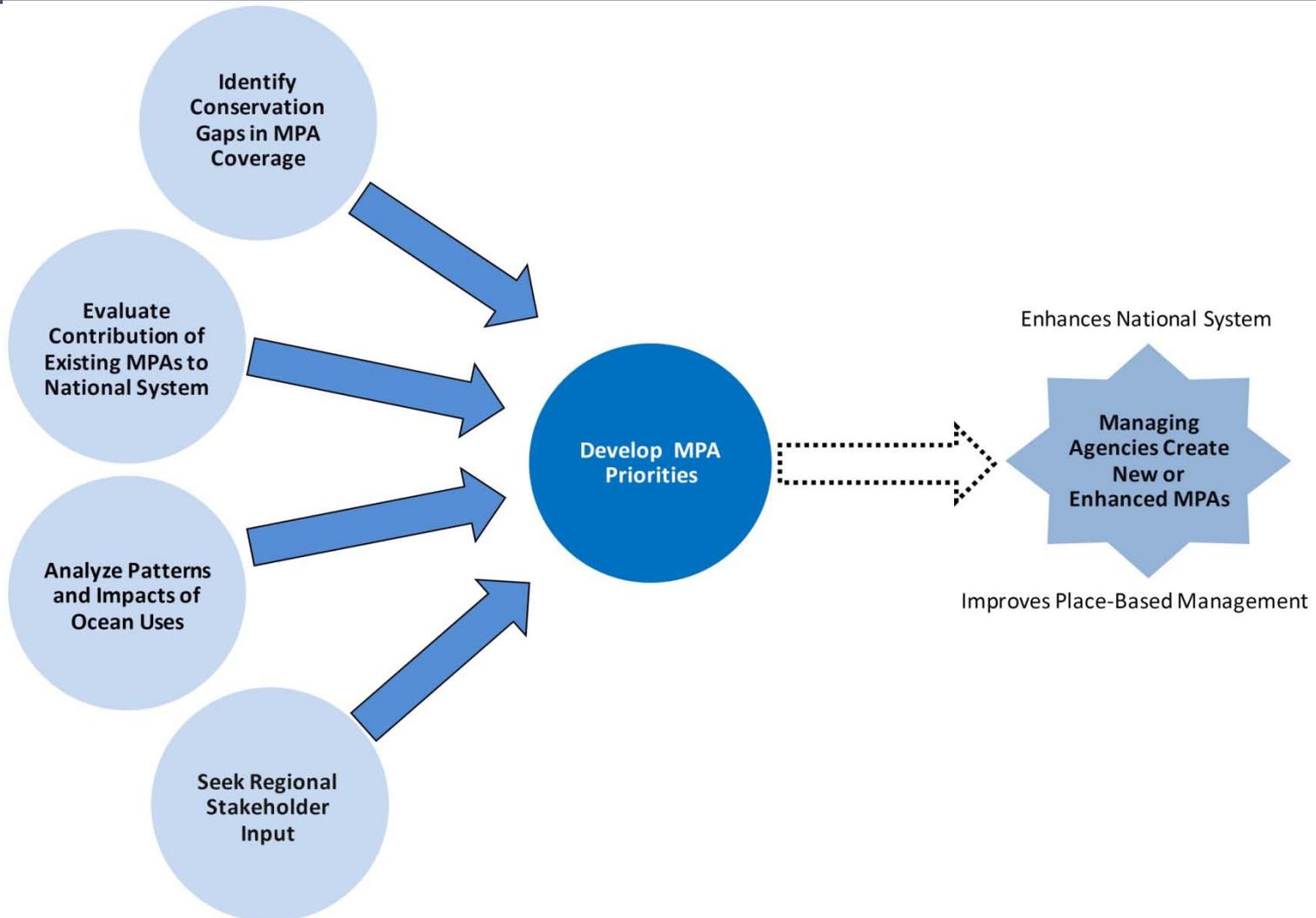
- **Executive Order 13158** calls for NOAA and DOI to:
  - *“provide guidance to .. the exercise of each agency’s respective authorities to enhance and expand protection of existing MPAs and to establish or recommend new MPAs as appropriate”*
- **Gap Analysis Project** -- a science-based process to identify gaps in existing place-based protection of ocean areas that meet the priority conservation objectives of the national system of MPAs

# Gap Analysis Process: Overview

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- Begins on West Coast (initial focus on California)
- Expands to other regions as resources/opportunities permit
- Designed to dovetail with other state, federal, tribal and regional conservation planning efforts, including California Current IEA w/ NMFS and NMS
- Two phases:
  - Phase 1 = assess current protection of PCOs
  - Phase 2 = identify regional place-based priorities and gaps

# MPA Gap Analysis: Overview



# CA Gap Analysis: Status and Plans

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Gap analysis design workshop held – Feb 2009

Science partnership initiated with NCCOS – Apr 2009

CA Ocean Uses Atlas synthesis completed – Sep 2009

Partnership with NMFS-NMS CC-IEA initiated – Sep 2009

Draft gap guidelines reviewed by FAC, IAWG and others by Dec 2009 (tbd)

PCO regional expert workshop(s) – Spring 2010

Phase 1: analysis of existing CA MPAs -- Sep 2010

Phase 2: identifying regional priorities -- tbd

# MPA Gap Analysis: Phase 1 Outputs (GIS data + maps)

MPA Inventories



Location, size, purpose, and type of existing MPAs and *de facto* MPAs

Priority Conservation Objectives (PCOs)



Location of ocean areas where PCOs occur

Ocean Uses Atlas



Patterns of human use across 3 sectors: fishing, non-consumptive, industrial/military

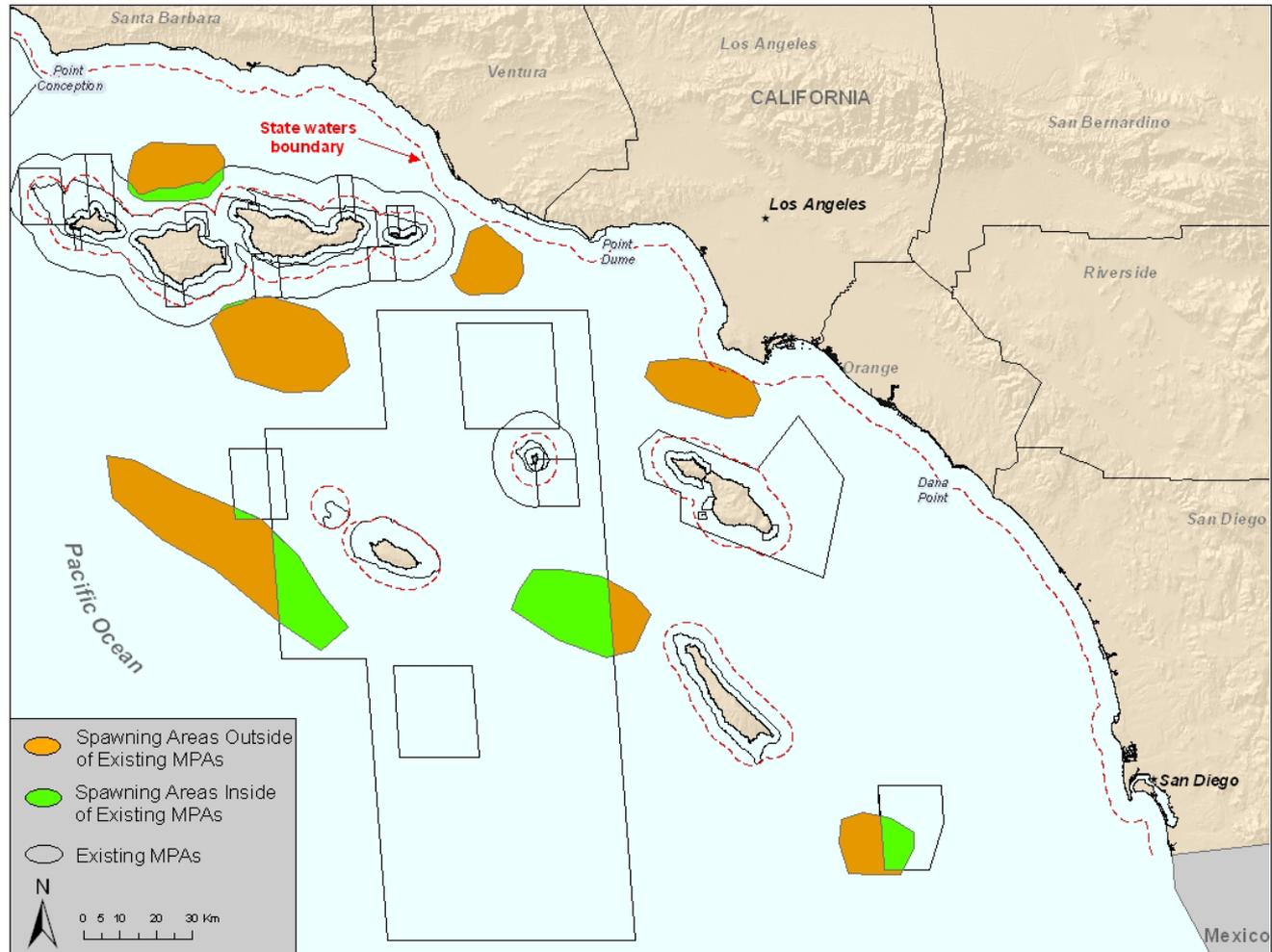
# MPA Gap Analysis: Phase 1 Outputs

MPA Inventories

Priority Conservation  
Objectives (PCOs)

Maps illustrating extent to which  
national system PCOs are currently  
addressed by existing MPAs

# Identify PCO Coverage by Existing MPAs



# MPA Gap Analysis: Phase 1 Outputs

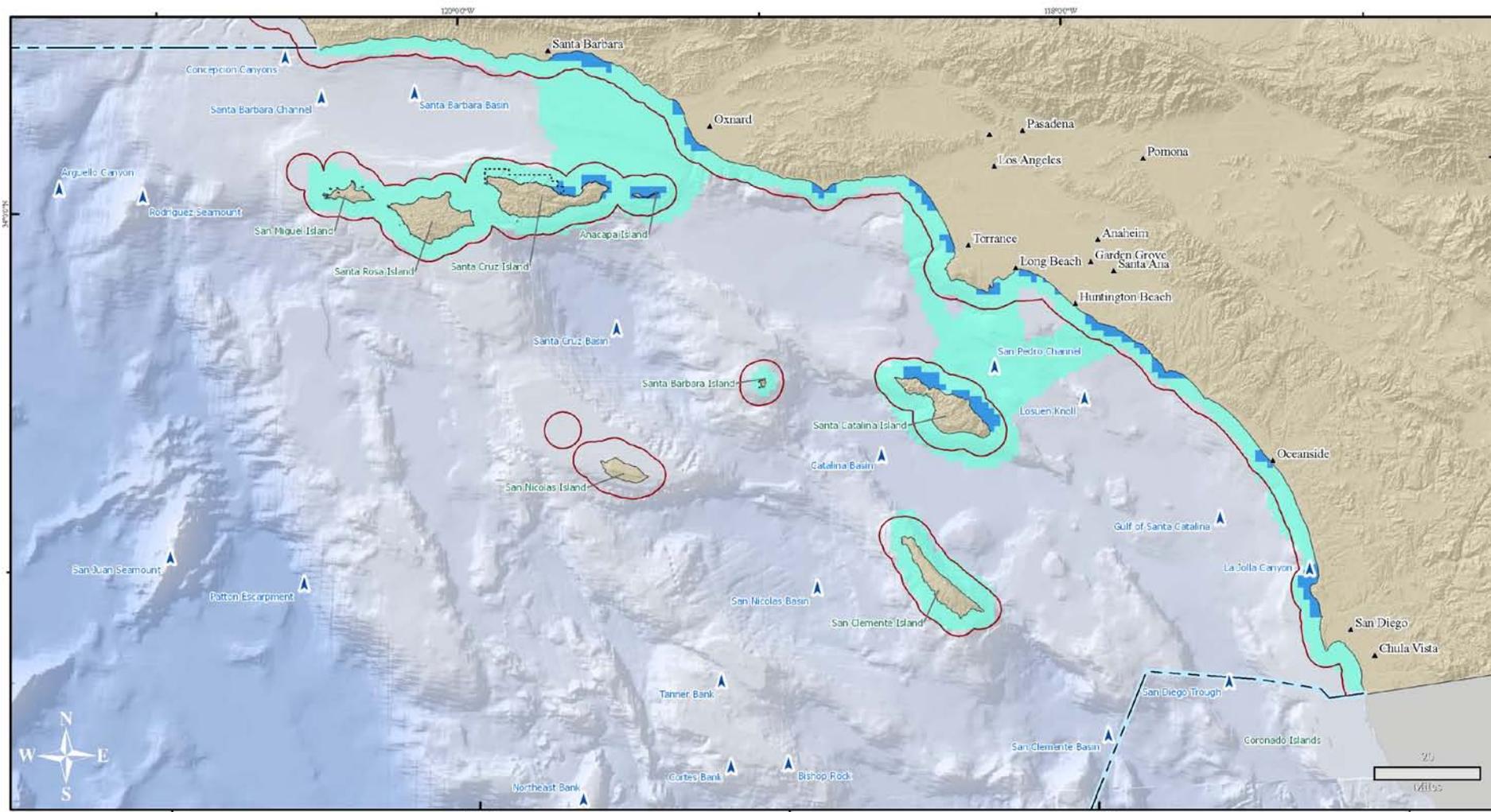
MPA Inventory

Priority Conservation  
Objectives (PCOs)

Ocean Uses Atlas

Maps illustrating the extent to which existing MPAs address both national system PCOs and the potential impacts of current human uses on those PCOs

# Non-Consumptive Sector: Paddling



- ▲ Submerged Features
- Atlas Southern California Region
- Future Use Area
- Dominant Use Area
- Maximum Use Footprint

NATIONAL  
MARINE  
PROTECTED  
AREAS  
CENTER

**DRAFT**

## Ocean Uses Atlas: Southern California Region Paddling

July 2009

Draft mapping product for the California Ocean Uses Atlas Project. With funding provided by The Gordon and Betty Moore Foundation, The Resources Legacy Fund Foundation and NOAA's National MPA Center.



# PFMC + NMFS Engagement in Gap Analysis Process

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- Participated in technical design workshop (Spring 2009)
- Growing linkages with CCIEA (NMFS + NMS)
- Participate in expert science workshop to ID Priority Conservation Objective areas off California (Spring 2010)
- Invite further input and review by PFMC and committees

# Questions?

**A National System of MPAs, collaboratively conserving the nation's...**



**Natural Heritage**



**Sustainable  
Production**

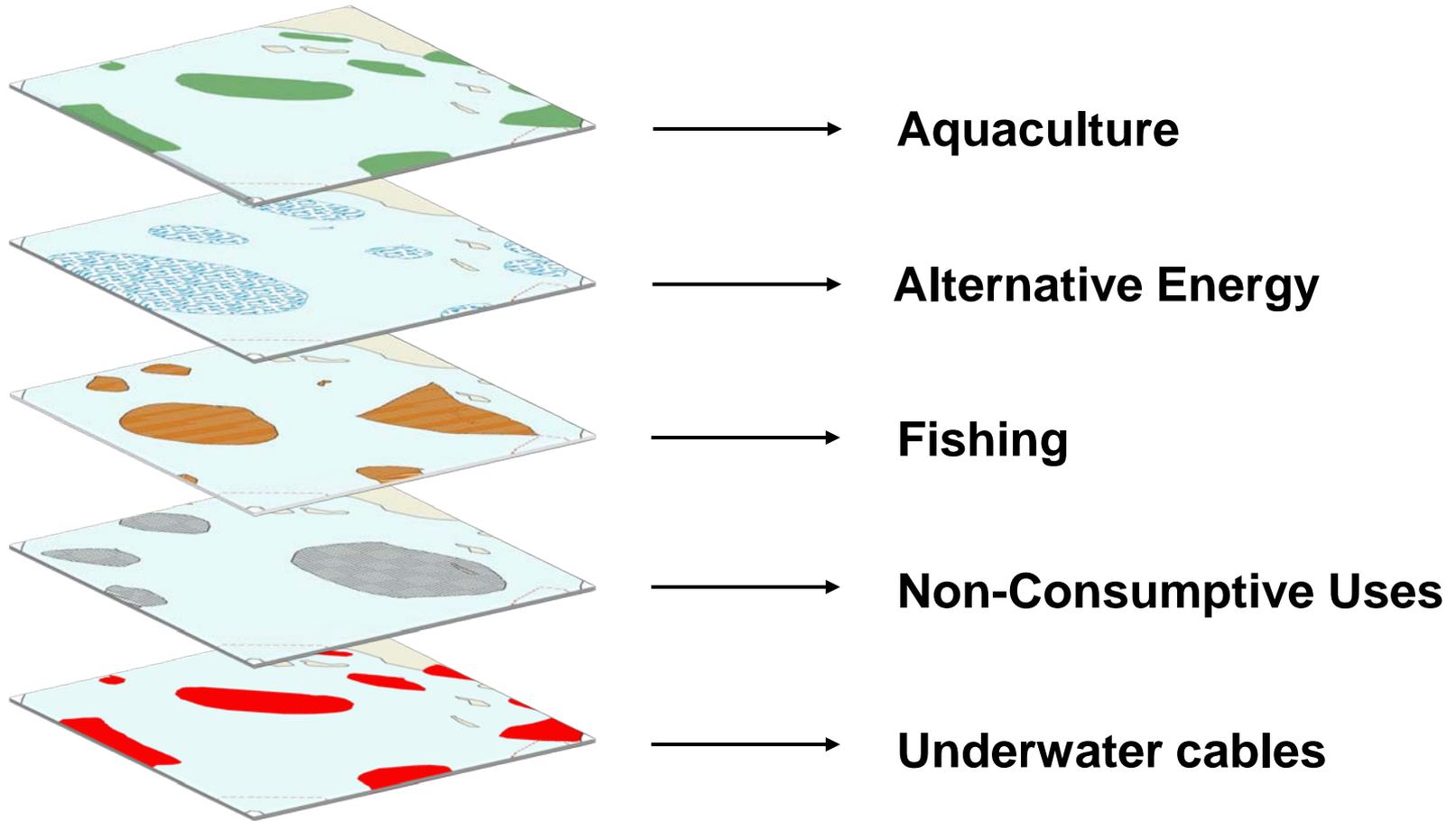


**Cultural  
Heritage**

# Q+A Slides

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# The Missing Puzzle Piece: Comprehensive, Continuous and Consistent Spatial Data on Current and Planned Ocean Uses



# Definition of MPA

**Area:** Legally defined geographic boundaries, may be of any size except that site must be a subset of the U.S. federal, state, local or tribal marine environment in which it is located.

**Marine Environment:** Ocean, coastal or estuarine waters, including intertidal areas (between mean low water and mean high water). Includes areas up to 0.5 ppt. Includes Great Lakes and estuarine-like sites in 8-digit watersheds adjacent to Great Lakes.

**Reserved:** established by and currently subject to federal, state, local or tribal law or regulation.

**Lasting:** Established with the intent to provide permanent protection. For sustainable production sites, of a duration to achieve the mandated long term sustainable production objectives of the site.

**Protection:** Existing laws or regulations that afford the site with increased protection for the conservation of part or all of the natural or submerged cultural resources.

# Gap Analysis General Principles

Work **collaboratively** with managing agencies at the regional scale

Recognize that primary **authority** lies with existing entities

Use the best readily available **science** and information

Provide opportunities for meaningful **stakeholder** engagement

Consider the **broader context** of ocean management

Design the national system for ecological **resilience**

Ensure **lasting** protection

Consider various **types** of gaps

**Adaptively manage** gap analysis process

# Design Criteria for Ecological Gap Analysis

- **Input from Feb 2009 Monterey Workshop & FAC:**
  - Target regional national system priority conservation objectives (PCOs) in Framework
  - Regionally scalable, replicable and nationally consistent
  - Incorporate resilience (representation, replication, viability, connectivity)
  - Use expert/traditional knowledge
  - Repeatable over time (Nat Sys adaptive management)
  - Build on existing regional analyses like IEAs
  - Integrate with PFMC's SST and other Committees

GROUND FISH ADVISORY SUBPANEL REPORT ON NATIONAL SYSTEM  
OF MARINE PROTECTED AREAS

The Groundfish Advisory Subpanel (GAP) has reviewed this agenda item and has the following comments and concerns:

1. We do not know what benefits would be derived from a Federal Marine Protected Area (MPA) registry.
2. National Marine Fisheries Service (NMFS) has sole authority over fishery management within MPAs. NMFS can create, alter, or remove these MPAs without outside consultation. We would like that authority to remain.

The GAP feels that until all jurisdictional authority questions, including the issues listed above, are resolved there is no need to supply a list of sites for nomination to the Federal MPA registry.

PFMC  
09/13/09

HABITAT COMMITTEE REPORT  
ON NATIONAL SYSTEM OF MARINE PROTECTED AREAS

The Habitat Committee (HC) reviewed information about the national system of marine protected areas (MPAs) and had the following comments.

The HC supports the activities of cataloging, coordinating, and collaborating that form the foundation of the National System of MPAs. We see potential benefits such as achieving national recognition for Council implementation of area-based protections, bringing resources to the table that can support Council ecosystem management initiatives, and resulting in more rigorous review of Federal activities that are proposed to occur in these areas.

The HC supports including all sites identified in the August 14, 2009 letter (from Acting NMFS Regional Administrator, Barry Thom, to the Pacific Council) in a public review draft for nomination to the national MPA system, and recommends the Council also consider nominating its other management zones that are not currently on the list, but which meet the national MPA system criteria.

Appointing areas to this system is expected to be an ongoing process, so this will not be the only opportunity to add, remove, or alter nominated sites. Acting now would benefit the Council by acknowledging previous Council actions in implementing place-based area management.

The implementation plan notes that *“the Framework lays out the processes for identifying conservation gaps in the national system ... and developing recommendations for new or enhanced MPAs through collaborative ecosystem-based MPA planning ... However, neither the Order nor the Framework provides authority to designate or establish new MPAs or alter protections afforded by existing MPAs.”* Despite this, the HC had a lively debate on the potential implications of participating in the national system. For example, it is still not clear what will be entailed in “collaborative ecosystem management,” or how development of an “effectiveness strategy” will guide management of MPAs. Further clarification of these points would be beneficial.

PFMC  
09/13/09

## SCIENTIFIC AND STATISTICAL COMMITTEE REPORT ON THE NATIONAL SYSTEM OF MARINE PROTECTED AREAS

The Scientific and Statistical Committee (SSC) reviewed background materials and a list of existing management areas currently nominated by National Marine Fisheries Service (NMFS) for inclusion in a national system of Marine Protected Areas (MPAs). This is the National Marine Protected Area Center's second round of site nomination review and the Council was asked to comment on the candidate area list for the West Coast by early November. The Council will review and comment on the nominations at the September meeting, followed by approval of the list at the November meeting. No representative from the MPA Center or its advisory board was available to present information to the SSC due to a scheduling conflict; however, Lisa Wooninck, Environmental Policy Specialist at the Monterey Bay National Marine Sanctuary was available to answer questions about the nomination process.

Executive Order 13158 (May 2000) requires the establishment of a national coordinated system of MPAs. The stated purpose of the national system of MPAs is to provide a framework for enhancing conservation objectives in marine managed areas and to improve coordination and communication among the many agencies that establish them. The MPA Center has no authority to alter fishery management activities in sites that are included in the national system.

The SSC was requested to review a list of potential sites for nomination developed by NMFS in August 2009. The list consists of areas managed as Essential Fish Habitat (EFH), including Habitat Areas of Particular Concern (HAPCs). National Wildlife Refuges, National Estuarine Reserves, Federal sites within the Marine Sanctuaries and National Park Service, and some state managed areas are already part of the national system. By adding EFH sites to the nomination list, current area management efforts will be explicitly evaluated in the selection of MPAs for the nationwide system, leading to a comprehensive inventory of managed sites. However, the SSC is concerned about costs to the Council process that may be incurred if EFH sites are considered critical components of a network of protected areas. Potential changes to both policy and procedure need to be articulated and considered.

The SSC was asked to comment on an upcoming gap analysis that will be conducted by the Center to evaluate whether the MPA System will meet all of its stated conservation and management objectives. Guidelines for MPA system design were provided in documents by Dr. Mark Hixon, Chair of the Federal MPA Science Advisory Board: "Guiding Principles for Ecological Gap Analysis of the National System of Marine Protected Areas" and "Ecological Resilience and Gap Analysis of the National System of Marine Protected Areas." These documents provide guidance but not practical advice for choosing potential sites, and contain a number of conservation objectives that are different from the objectives of EFH designation. There are some overlaps in EFH criteria with the "Sustainable Production" objectives listed by the MPA Center, and some HAPC sites include habitat or diversity that meets the Center's stated "Natural Heritage" objectives. However, more information on scientifically-based criteria for site selection and the expectations for inclusion of additional sites to meet the MPA Center's objectives is needed.

In its February 13, 2007 letter to the National MPA Center, the Council lent its support for a comprehensive inventory of MPA sites “as ecosystem-based fishery management and place-based area management concepts are further investigated.” The inventory concept has now taken the form of a National System with process requirements for initial nomination of sites and changes to sites once they are included in the System. The SSC has the following questions regarding the implications of Council nomination of MPAs to the National System:

- What is the basis for the MPA Center’s choice of potential sites to be considered by NMFS and the Council for nomination to the National System?
- What are the implications of including certain areas in the National System and excluding others? For example, does exclusion of RCAs from the System imply that protections provided by Rockfish Conservation Areas (RCAs) will not be considered in the gap analysis?
- In cases of disagreement among the MPA Center, NMFS and/or the Council regarding the adequacy of justifications provided for site nomination and changes to sites once they are included in the National System, whose view will prevail?
- Will Council justification for changes to areas managed for fisheries be deemed adequate if it is based on the Council’s management needs? Is such justification expected to address MPA Center objectives as well? For instance, if the MPA Center’s gap analysis leads to future actions involving inclusion of Council-managed sites as part of an MPA network, would Council justification for modification to such sites require consideration of effects on the network?
- Future Council deliberations regarding modification to EFH and other existing area-based restrictions will need to adhere to the Council’s public process requirements. Changes to Council-managed sites included in the National System would also trigger public process requirements. To what extent are the public process requirements for modifying the National System redundant with the Council’s process or likely to slow or impede the Council decision making process?
- Are additional gap analysis documents being prepared that provide operational guidance?

In addition to receiving some comment from the Center on these questions, the SSC recommends that the Council continue dialogue with the MPA Center as it begins its first the gap analysis process on the west coast in 2009-2010. The SSC can assist the Council by providing feedback on documents intended to inform that process.

PFMC  
09/14/09



STATE OF WASHINGTON  
**Department of Fish and Wildlife**

Mailings Address: 600 Capitol Way N • Olympia WA 98501-1091 • 360-902-2200; TDD: 360-902-2200  
Main Office Location: Natural Resources Building • 1111 Washington Street SE • Olympia WA

February 11, 2009

Mr. Joseph A. Uravitch, Director  
National Marine Protected Areas Center  
U.S. Department of Commerce, NOAA  
Office of Ocean and Coastal Resource Management  
Silver Spring, Maryland 20910

Dear Mr. Uravitch:

Thank you for your invitation to nominate eligible sites within Washington State marine protected area (MPA) programs to become part of a national system of MPAs. The enclosed checklists for sites listed in the Program Summary Sheet serve as nominations of eligible MPAs from Washington Department of Fish and Wildlife (WDFW), Washington Department of Natural Resources (DNR), and Washington Parks and Recreation Commission (State Parks).

Concurrently, Washington State is also conducting an inventory of MPAs in state waters. This inventory effort is required by the Washington State Legislature and is led by WDFW. Washington State Senate Bill 6231 (2008 legislative session) creates a MPA work group which is chaired by WDFW and includes representatives from DNR, State Parks, appropriate Marine Resource Committees, as well as representatives from tribal, federal, and other state agencies and local governments. The statute directs the MPA work group to:

- Examine and update the current inventory and management of Washington's MPAs;
- Develop recommendations to improve coordination and consistency among MPAs relative to goals for the MPA, criteria for establishment, management, and monitoring practices, and terminology;
- Develop recommendations to improve the integration of science into the MPA establishment and management decisions;
- Develop recommendations to further integrate local governments and non-governmental organizations into the establishment and management of MPAs; and
- Provide any other recommendations to improve the effectiveness of MPAs in Washington.

The work group is also directed to complete a written report by December 1, 2009, that includes: 1) an inventory of MPAs in all marine waters of the state; and 2) a summary of the issues and recommendations listed above.

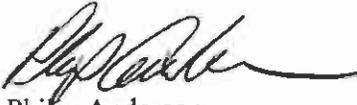


Mr. Joseph A. Uravitch, Director  
February 11, 2009  
Page 2

Recognizing the need for consistency among inventories, the state inventory is based on the structure and criteria used by the MPA Center. The state inventory will be finalized by the end of March 2009. Upon completion, WDFW, on behalf of Washington State, will submit a comprehensive nomination package to the MPA Center. Therefore, please consider our submission of today's nomination package a timely and accurate response to your request for sites listed in the Program Summary Sheet. However, please be aware that these sites represent only a portion of state designated MPAs according to the in-process Washington State inventory.

Thank you for your consideration of these nominations.

Sincerely,



Philip Anderson  
Interim Director

Enclosures:

Washington State Senate Bill 6231  
WDFW Checklists  
DNR Checklists  
Parks and Recreation Checklist

cc: Peter Goldmark, Commissioner of Public Lands, DNR  
Rex Derr, Director, State Parks  
Jay Manning, Director, Washington Department of Ecology  
Ken Sebens, University of Washington Friday Harbor Laboratories

## C.3 National System of Marine Protected Areas

Dear PFMC,

There IS an abundance of groundfish in coastal waters off Alabama because they have created over 14,000 underwater structures that create marine ecosystems. Economic benefits of this to Alabama are HUGE!

Proponents of Marine Protected Areas seem intent on ignoring or minimizing this spectacular achievement; that has been my personal experience dealing with the Monterey Bay Sanctuary Advisory Council.

**Two respected University researchers and the Director of Alabama's Marine Resources Division state the question of production versus attraction of underwater structure re fish is SETTLED!!**

Auburn University fisheries professor Stephen Szedlmayer recently conducted a study of the diets of red snapper and grey triggerfish taken from artificial reefs and concluded that "artificial reefs are productive environments" for both species

And

University of Alabama's Shipp thinks so, too: "We're landing eight to 10 times what we did over 100 years ago. I think the increase in population is doubtless because of the reef program."

And

Vernon Minton, director of the Marine Resources Division of the Alabama Department of Conservation and Natural Resources, agrees that the debate is settled. "We are growing fish here," he insists. "We have some very good published research that shows that in our area we are producing additional biomass of fish. It's a very fair statement to say that the artificial reefs and the program are improving the quality of the environment."

<http://www.reason.com/news/show/28175.html>

These respected researchers and Director of Alabama's MRD can be easily reached for their information; I urge the PFMC to do so and include this information in its consideration of MPA's because in areas where natural reefs have had habitat destruction from trawl damage (which is almost everywhere!!) this constitutes a means to redress that habitat destruction and expand marine ecosystems.

Additionally, I offer the research of UCSB's MSI on oil rig structure and morbidity of groundfish (which is a type of underwater structure!):

## Studies Show That Rockfish Thrive With Offshore Platforms As Their Home Base

The rockfish species called Bocaccio (*Sebastes paucipinis*), which can live up to 50 years, was, until recently, an economically important rockfish species along the West Coast of North America and was abundant from Oregon to northern Baja California.

Overfishing has reduced the stock to less than one-tenth of its former population, according to Milton S. Love, a marine biologist with UCSB's Marine Science Institute (MSI). However, the platforms are helping to restore this species.

"This is the first time that we have solid evidence that platforms can be critical habitat for rebuilding some species of rockfishes," said Love.

AND

Brian M. Emery, a physical oceanographer with (UCSB) MSI, is the lead author of a second paper which reports on ocean currents in the region of Point Conception to Point Arguello, north of the Santa Barbara Channel and near Platform Irene.

The results showed that, on average, about three-quarters of the young Bocaccio settling around Platform Irene would not survive in the absence of the platform. Rather, the prevailing currents would move them offshore where they would have a very low probability of survival.

<http://www.sciencedaily.com/releases/2006/06/060629122443.htm>

AND...

There's Something Fishy About Rigs to Reef  
In a Disturbing Turn of Events, Oil Companies Could Be Doing Good

When I got back, I went straight to a marine biologist who studies the reefs, and asked, indignantly, about Rigs to Reef.

And it turned out that, maybe, oil platforms do help the fish. There're two possibilities.

Either hellacious numbers of fish randomly come from all over the ocean and decide to stay at the platform where they are usually protected by fishing bans, or the platforms are creating fish.

The biologist, Dr. Milton Love, works with the UCSB Marine Science Institute and the U.S. Geological Survey, studying the ecological role of natural reefs and oil platforms for fish.

Despite his two fish tattoos, a USGS study on the oil platforms and a book called *Probably More Than You Want to Know About the Fishes of the Pacific Coast*, Love claims he gets ignored in the Rigs to Reef debate.

He's not exactly ignored, since the L.A. Times seems to quote him whenever they do a story. But he claims he wasn't called about the most recent bill on California's Rigs to Reef program, which the governor vetoed in October. Instead, the governor called some of Love's colleagues at the MSI, who authored another study claiming that there is no scientific evidence that the platforms help the fish.

Love thinks there's some pretty good proof that the platforms work to enhance the fish population. He's been studying the rigs for six years, with two colleagues in the MSI, and he's published several USGS papers on the topic.

It's been suggested that the fish just come from elsewhere to live at the platform base but the numbers make this unlikely. Pick a species and there are thousands at the platform.

Take the platform out and what's left?

Love pulls up another photo: mud. A shot of the huge parts of the Santa Barbara Channel that are just mud with random fish scattered here and there.

Not, Love says, that this is bad. It's up to people to decide what they want: mud or fish.

<http://www.dailynews.com/article.php?a=1887>

To truly build a partnership with fishermen you need to focus on the dramatic success in Alabama and begin focusing on restoring fishing, not just closing areas to fishing. You also need to focus an education program that highlights all this research on creating marine ecosystems.

Lastly, Marine Sanctuaries that have already had the bottom altered by trawl damage, sewer outfalls, desalination effects, erosion and silting of biologically sensitive areas with land based persistent organic pollutants must not have language that prohibits the placement of underwater structure to restore and/or expand marine ecosystems. **DO NOT JUST FREEZE IN THE NEGATIVE PRIOR EFFECTS AND THEN CLOSE FISHING OFF WITH MPA's!**

There's already too much of that going on in Monterey Bay.

A multi-faceted approach is much more fair and palatable to recreational fishermen than just MPA's! We have NOT created the situation that currently exists.

Don Heichel  
831 239 0419

*Donna Parker*

Nomination of Marine Protected Areas  
Agenda item C.3

The National Marine Protected Area (MPA) Center is currently seeking formal nominations of sites for potential inclusion into the National System of Marine Protected Areas. The Council nomination process is expected to occur over two meetings. At its first meeting (September 2009) the Pacific Council is scheduled to consider the proposed list developed by the MPA Center and develop its initial nomination recommendations.

The MCA Center has provided a list of 52 sites. However, very little information is provided about these sites. Information is also provided on the nomination process, the removal process and the GAP identification process but many jurisdictional questions remain regarding these processes. Finally, the management implications of the requirement that MPAs must be managed to "avoid harm" to the natural and cultural resources of the MPA "to the maximum extent practicable" remains unclear.

Most area closures were adopted by the PFMC for specific management purposes such as the temporary protection of an overfished species or protection of rare or sensitive habitat important to the productivity of the managed species. In designating these areas as MPAs, unintended permanence or further restriction may be given to these areas and their boundaries in so far as they cannot be changed without going through the MPA process. The GAP analysis might determine that instead of seasonal closures or bottom trawl closures, the area should be a no fishing zone. It is unclear whether GAP modifications to the MPA system would go through the MPA process rather than the Council EFH, HAPC FMP or regulatory process. In the MPA process, the agency has determined it will consult with the Councils rather than approving, disapproving or partially approving Council recommendations. As such, the modification or removal of existing or GAP area closures from the MPA System may no longer be within the jurisdiction of the Council.

These are difficult issues. In order for the Council to better inform the public on these issues, it may be useful to direct staff to complete a White Paper which would attempt to provide the following information and analysis:

- 1) A list of all sites the Council wishes to further consider for nomination to the MPA system at this time. The list should include a detailed description of the site, its location, area, current restrictions and intended purpose of the restrictions. A map of the west coast, identifying the site locations would assist in this process.
- 2) Discussion of the potential impact to future management of these areas including the ability to remove or modify existing sites. Specific focus should be on the jurisdictional issues in the identification, modification and removal of MPA sites as well as GAP identification and designation of existing and new sites.
- 3) Discussion of the "Avoid Harm," provisions and its potential impact to management of the fisheries within these sites.
- 4) Identify the costs and benefits of a restricted area site in the MPA system including redundancy and conflict with Magnuson Stevens Act management, Marine Sanctuary management, Federal Ecosystem management, coastal zoning management and other potential, overlapping jurisdictions as appropriate.