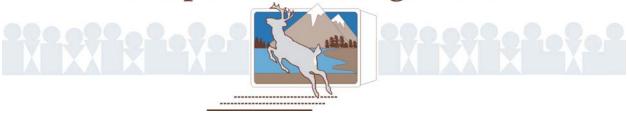
Responsive Management



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

COMPENDIUM OF THREE REPORTS REGARDING THE MONTEREY BAY AREA FISHERIES

OVERVIEW OF FIVE SURVEYS CONDUCTED FROM 2007 TO 2009

2009

Responsive Management National Office

Mark Damian Duda, Executive Director
Martin Jones, Senior Research Associate
Tom Beppler, Research Associate
Steven J. Bissell, Ph.D., Qualitative Research Associate
Andrea Criscione, Research Associate
James B. Herrick, Ph.D., Research Associate
Joanne Nobile, Research Associate
Amanda Ritchie, Research Associate
Carol L. Schilli, Research Associate
Megan Wilkes, Research Associate
Tim Winegord, Survey Center Manager
Alison Lanier, Business Manager

130 Franklin Street
Harrisonburg, VA 22801
Phone: 540/432-1888 Fax: 540/432-1892
E-mail: mark@responsivemanagement.com
www.responsivemanagement.com

Acknowledgments

Responsive Management would like to thank the following for their assistance and support on these projects:

Steve Scheiblauer, Carl Anderson, John McMahon, the Monterey County Convention and Visitors Bureau, Rick Algert, John Sorgenfrei, the Morro Bay Community Promotions Committee; Ed Biaggini, the Morro Bay Business Forum, Richard Young, Judy Baker, and the Crescent City/Del Norte County Chamber of Commerce.

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:

- o A telephone survey of California residents 18 years old and older
- o 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
- o 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.

TABLE OF CONTENTS

Introduction	1
1. Attitudes Toward California's Coastal Wildlife and Fisheries	3
2. Attitudes Toward Management of Coastal Areas, Wildlife, and Fisheries	9
General Attitudes Toward Management of Coastal Resources	9
California Residents' Opinions Regarding Marine Sanctuaries and Management	
of Ocean Waters	18
3. Attitudes Toward California's Fishing Industry	22
4. Attitudes Toward the Tourism Industry in California	
5. Methodology	
Telephone Survey Methodology	
Multi-Modal Survey Methodology	
Sample Selection	
Data Analysis	
About Responsive Management	
List of Figures	
Figure 1.1. California Residents' Ratings of Ecological Health of Six Natural Resources	
Figure 1.2. California Residents' Concern About Issues California Faces	
Figure 1.3. California Residents' Ratings of Threats to State's Marine Waters, Habitat, and	
Fisheries	
Figure 1.4. U.S. Residents' Support/Opposition to Legal, Recreational Fishing	7
Figure 2.1 Agreement That Various Activities Harm Ocean Resources (Among	
California Residents)	10
Figure 2.2 Disagreement That Various Activities Harm Ocean Resources (Among	
California Residents)	
Figure 2.3. U.S. Residents' Opinions on Uses and Management of U.S. Ocean Waters	12
Figure 2.4. U.S. Residents' Opinions on Restrictions Versus No Restrictions in	
Management of U.S. Ocean Waters	13
Figure 2.5. U.S. Residents' Support for or Opposition to Management Options That	
Allow for Recreational or Commercial Fishing.	14
Figure 2.6. California Residents' Opinions Regarding Harvest of Seafood	16
Figure 2.7. California Residents' Utilization Versus Protection of California's	
Coastal Fisheries	17
Figure 2.8. Opinions on the Importance of Accommodating the Needs of Ocean Resource	
Users in Management Decisions (Among Monterey Bay Area Residents)	20
Figure 2.9. Opinion Regarding the Role of Local Fishing Groups in Regulatory and	
Management Decisions (Among Monterey Bay Area Residents)	21
Figure 3.1. California Residents' Perceptions of the Importance of Various Industries	
to California's Economy	22
Figure 3.2. Importance of Various Factors on Economies of Crescent City, Monterey,	
and Morro Bay (Asked of Tourism Professionals and Community Leaders)	23

TABLE OF CONTENTS (continued)

List of Figures (continued)	
Figure 3.3. Importance of Jobs Directly Created by Fishing Activities on the Economic	
of Crescent City, Monterey, and Morro Bay (Asked of Tourism Professionals	
and Community Leaders)	24
Figure 3.4. California Residents' Perceptions Regarding Effects on the Ecosystem of	
Fishing and Large Corporate Fishing Companies	26
Figure 3.5. California Residents' Perceptions of Threat Posed by Commercial Fishing	
Figure 3.6. California Residents' Concerns for Health of Family-Run and Large	
Corporate Business (in 2007)	28
Figure 4.1. Importance of Tourism on the Economies of Crescent City, Monterey,	
and Morro Bay (Asked of Tourism Professionals and Community Leaders)	30
Figure 4.2. Government's Appreciation of Cultural Resources (Asked of Tourism	
Professionals and Community Leaders)	31
Figure 4.3. Things That Make Crescent City, Monterey, and Morro Bay Unique to	
Tourists (Asked of Tourism Professionals and Community Leaders)	32
Figure 4.4. Factors in Tourists' Decisions on Whether To Visit Crescent City, Monterey,	
and Morro Bay	33
Figure 4.5. Motivations for Making Day Trips To Crescent City, Monterey, and	
Morro Bay	35
Figure 4.6. Tourists' Restaurant Patronage in Crescent City, Monterey, and Morro Bay	
Figure 4.7. Tourists' Opinions on Commercial Fishing, Seafood, and Eating in	
Restaurants	38
Figure 4.8. Importance to Tourists of Being Able To Get Fresh Local Seafood in	
Crescent City, Monterey, and Morro Bay	30
Figure 4.9. Importance to Tourists of Being Able To Get Fresh Local Seafood in a	ر ک
Restaurant in Crescent City, Monterey, and Morro Bay	40
Figure 4.10. Tourists' Visits to Waterfronts in Crescent City, Monterey, and Morro Bay	
Figure 4.10. Tourists Visits to Watermonts in Crescent City, Monterey, and Morro Day	4
List of Tables	
Table 5.1. Sampling Errors	47

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.
- o 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:

o Attitudes Toward California's Coastal Wildlife and Fisheries

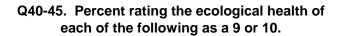
- o Attitudes Toward Management of Coastal Areas, Wildlife, and Fisheries
- Attitudes Toward California's Fishing Industry
- o Attitudes Toward the Tourism Industry in California

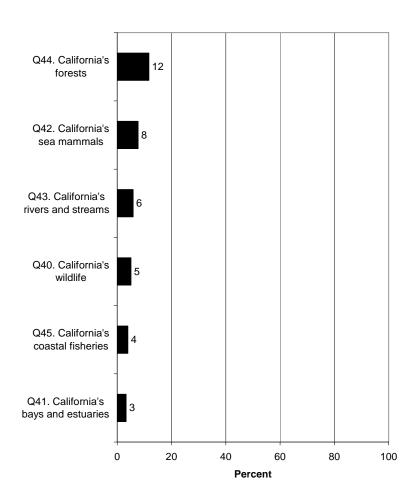
The final section of this report provides a detailed description of the methodology.

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).

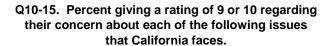
Figure 1.1. California Residents' Ratings of Ecological Health of Six Natural Resources

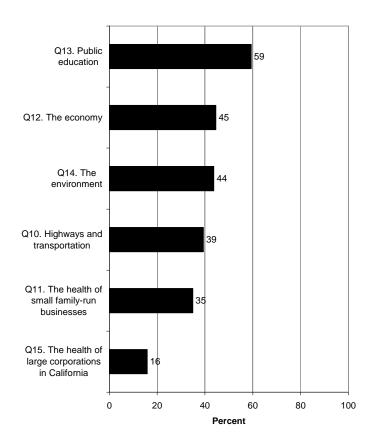




Another line of questioning found that overall concern for the environment can be considered in the middle of the pack among broad concerns of California residents—lower than some other social concerns (e.g., public education), but slightly higher than concern for the health of business interests in 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.

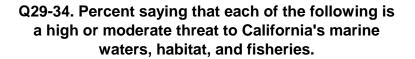
Figure 1.2. California Residents' Concern About Issues California Faces

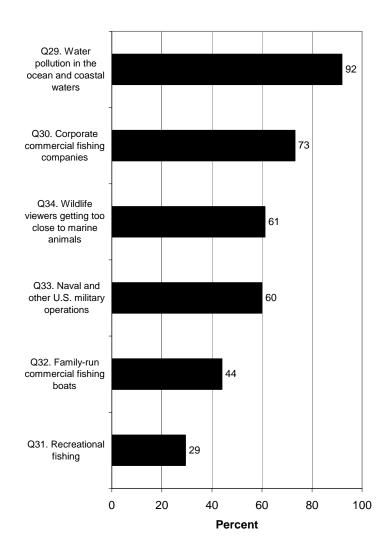




Regarding water-related resources directly, the public perception in the state is that water pollution is the greatest threat to California's marine waters, habitat, and fisheries (Figure 1.3). Nonetheless, corporate commercial fishing companies also are seen by many California residents as threatening 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





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.

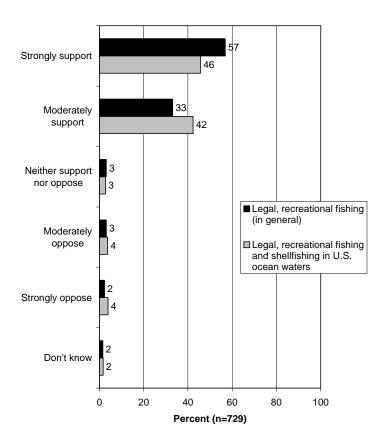
Also, recreational fishing is not perceived as a great threat to California's marine waters, habitat, and fisheries. In 2007, only 5% of California residents rated recreational fishing as a high threat, while 66% said it is a low threat or not a threat at all.

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

Q13. In general, do you support or oppose legal recreational fishing?

Q25. Do you support or oppose legal recreational fishing and shellfishing in U.S. ocean waters?

(National Survey)



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

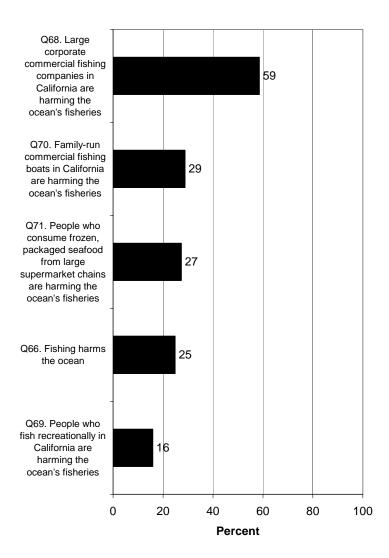
In a most basic finding, U.S. residents overwhelmingly support protecting U.S. ocean waters and ocean life: 78% *strongly* support doing so, and another 17% *moderately* support it, for a sum of 95% in support; only 3% indicated that they oppose.

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)

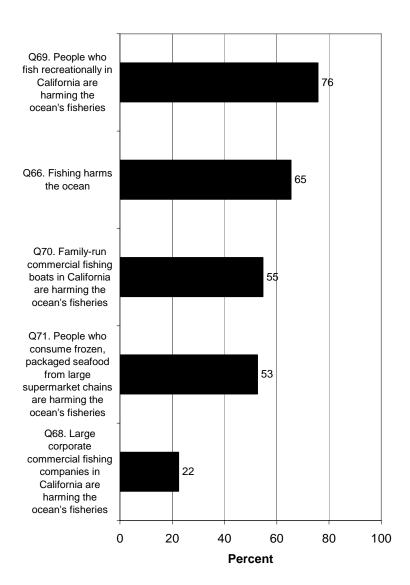
Q66, 68-71. Percent who strongly or moderately agree with the following.



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.



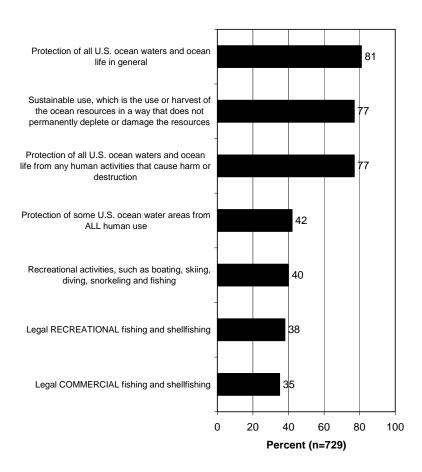
family-run boats are harming the ocean's fisheries, while 29% agreed that they are doing harm. The results flip-flop for commercial boats: a majority (59%) *agreed* that large corporate commercial fishing companies in California are harming the ocean's fisheries, while 22% disagreed.

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:

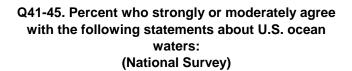
(National Survey)

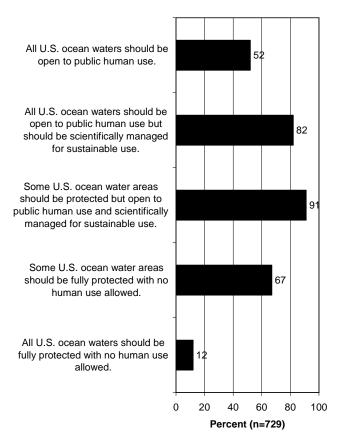


This support of protecting ocean waters is tempered by moderation. When U.S. residents were read five statements that are in a scale from virtually no restrictions to complete restrictions on using the ocean, agreement was highest for the statements in the middle of the scale: 91%

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





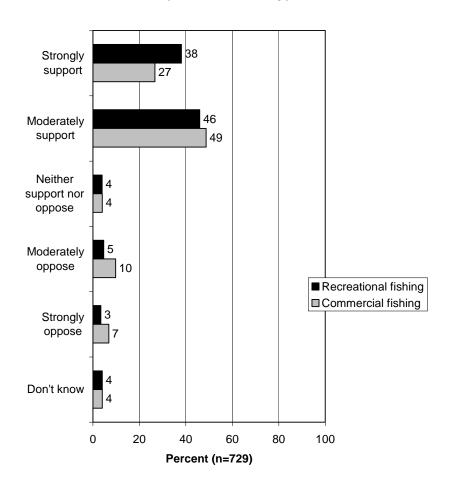
As is shown in Figure 2.4, U.S. residents favor moderate restrictions. The national survey also found that U.S. residents value recreational and commercial fishing and shellfishing. They support options for managing ocean waters and fisheries that allow for both recreational and

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.

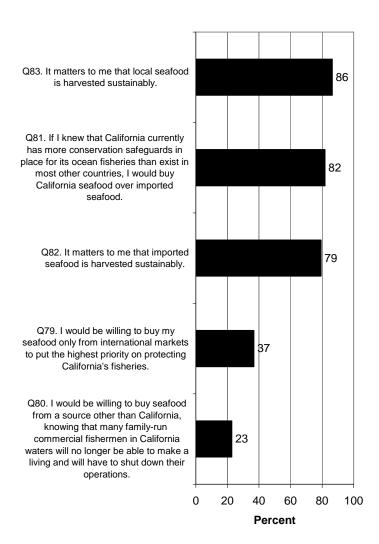
National results mirror the California results regarding sustainable harvest. The national survey asked U.S. residents to indicate how important it is to them that seafood be harvested in a sustainable manner, and 96% say it is important, with 80% saying it is *very* important, that *domestic or U.S.-harvested*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

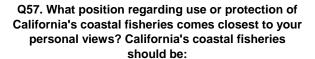


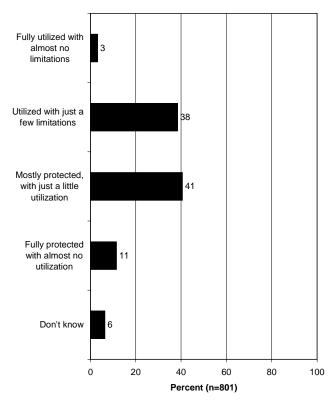
way (87%) rather than not used at all (8%). This is an important consideration when examining statements and statistics about whether Californians want to protect the ocean.

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."

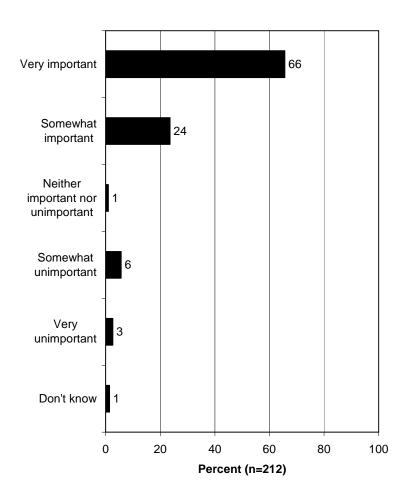
Other findings show the prevalent desire for sustainable use of ocean resources, even in marine sanctuaries. The survey of Monterey Bay area residents found that a large majority of them rate the importance of accommodating the needs of communities/people who use the ocean when making management decisions 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)



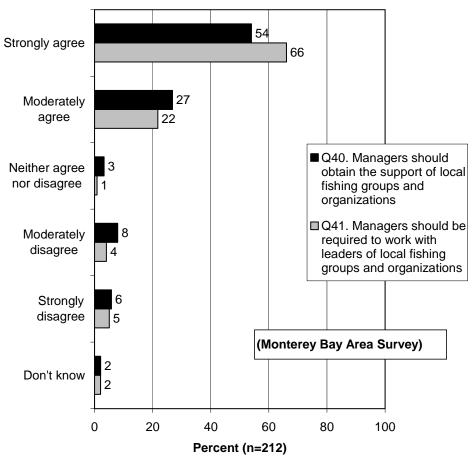
that their County Board of Supervisors should select a representative of the general public for the Advisory Council, while only 27% agree that the Sanctuary superintendent should be able to select whomever he or she wants to represent the general public.

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?

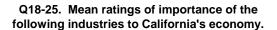


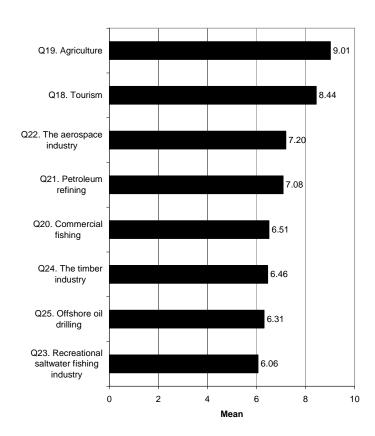
Finally, one question discussed the funding for the creation and management of Marine Protected Areas. Among Monterey Bay area residents, there was more opposition to (49%) than support for (45%) a tax increase to fund the creation and management of Marine Protected Areas.

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

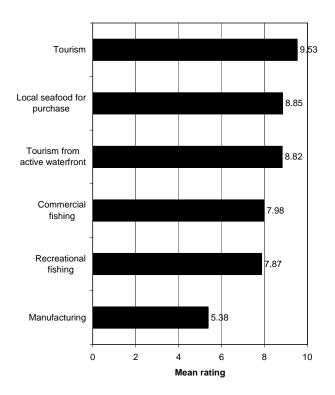




In a similar line of questioning but more focused on Monterey Bay, the professional/leader survey asked tourism professionals and community leaders from the three coastal communities (Crescent City, Monterey, and Morro Bay) to rate the importance six factors influencing their community's economy, using 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.

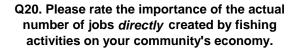
Figure 3.2. Importance of Various Factors on Economies of Crescent City, Monterey, and Morro Bay (Asked of Tourism Professionals and Community Leaders)

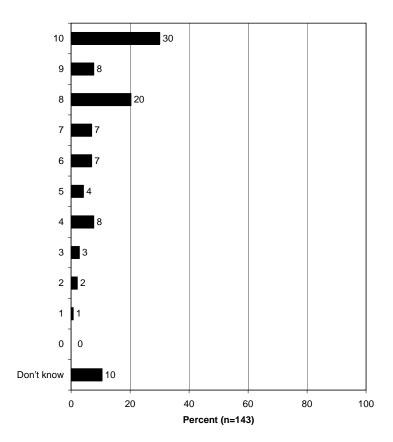
Q14-19. On a scale of 0 - 10, where 0 is "not at all important" and 10 is "extremely important," the mean rating of importance for the following factors on the coastal community's economy.



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).

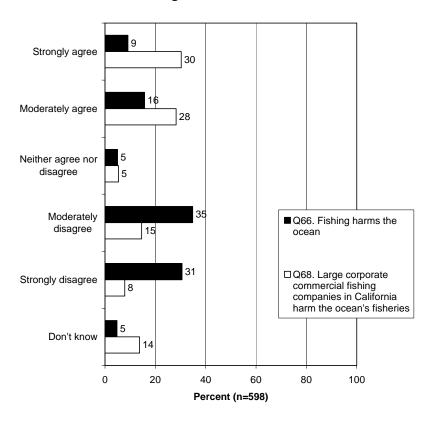
The above findings show opinions on the economic importance of commercial and recreational fishing. It is also important to examine attitudes specific to commercial fishing in California, particularly to have an idea of how Californians perceive commercial fishing. The California resident survey asked 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

Q66. Do you agree or disagree that fishing harms the ocean?

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

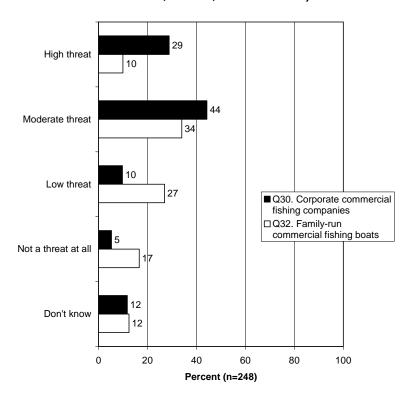


Another line of questioning in the California resident survey asked residents to indicate how much of a threat corporate commercial fishing companies and family-run commercial fishing boats are to California's marine waters. A large majority of Californians (73%) perceive corporate commercial fishing 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?)



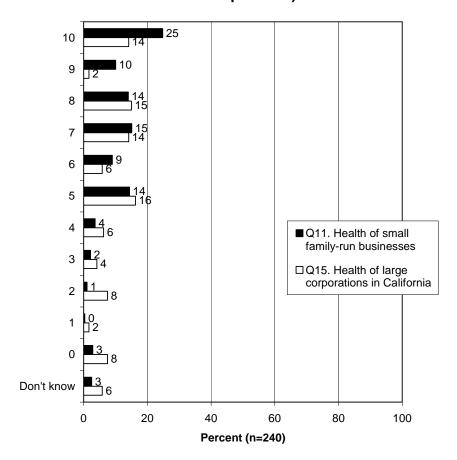
The California resident survey also examined opinion on the health of small family-run businesses and of large corporations. That survey found that there was more concern (in 2007) for the health of small family-run businesses than for the health of large corporations in California, with the former having 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?)



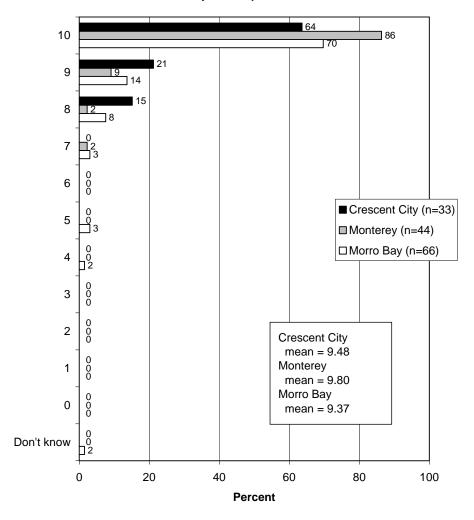
4. ATTITUDES TOWARD THE TOURISM INDUSTRY IN CALIFORNIA

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)

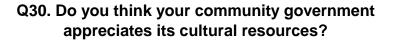
Q17. What about tourism?
(Please rate the importance of tourism on your community's economy using a scale of 0 to 10, with 0 being not at all important and 10 being extremely important.)

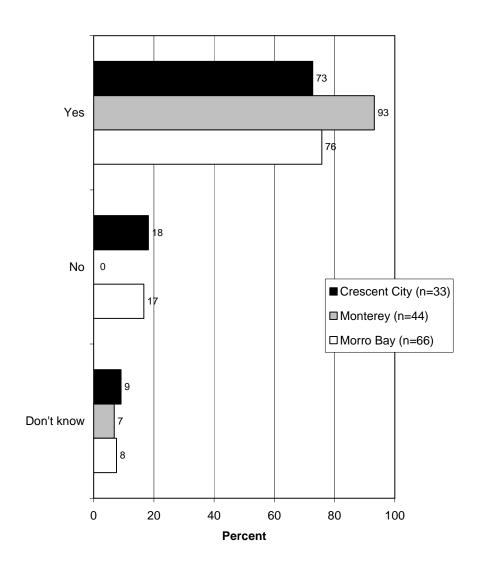


The above demonstrates the importance of tourism in general. The surveys also examined the factors that make a community a tourist destination. The surveys found that a community's culture and identity are important to its tourists. Visitors to the three coastal communities in the visitor survey were 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)

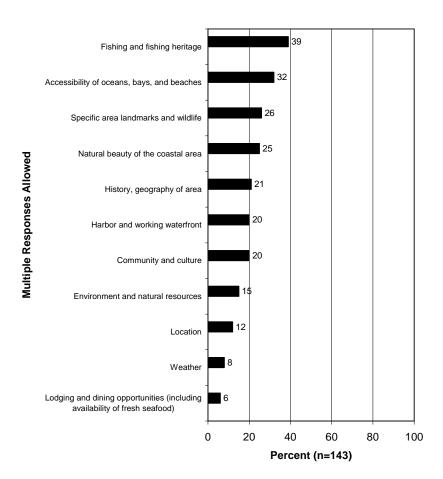




Tourism overall is perceived to be important, as demonstrated above. The research team further refined its knowledge of tourism by asking tourism professionals and community leaders to identify the things that make their community unique to tourists (Figure 4.3). The things cited include fishing and 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%).

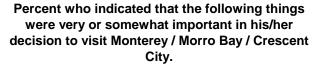
Figure 4.3. Things That Make Crescent City, Monterey, and Morro Bay Unique to Tourists (Asked of Tourism Professionals and Community Leaders)

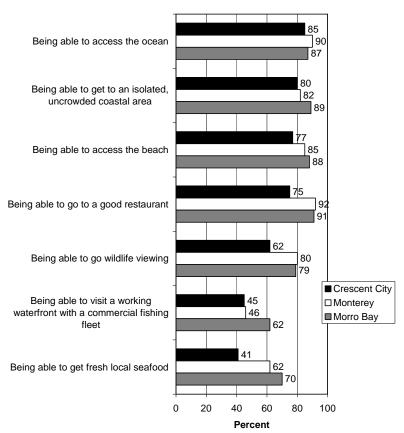




Another aspect of tourism is what factors tourists consider when deciding whether to visit a community, and this examination looked at them relative to one another. The visitor survey asked about the importance of seven factors when tourists had decided to visit Crescent City, Monterey, or Morro Bay,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

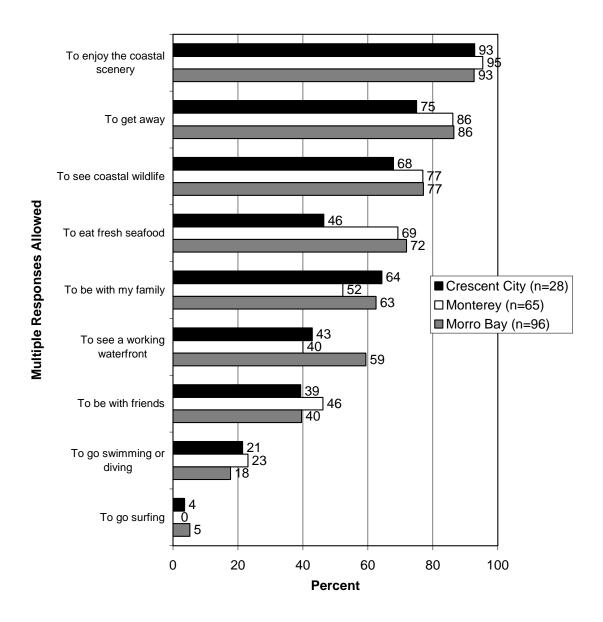
Motivations for visiting the coast for day trips were also explored. The visitor survey asked respondents who indicated that they often go on day trips to the coast for their motivations for going on day trips to the coast. Among visitors to each of the communities, enjoying the coastal scenery is an 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

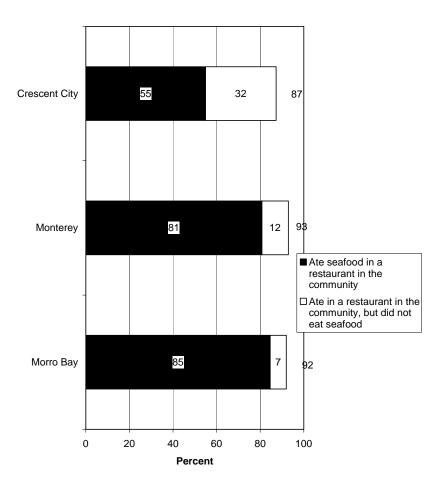
Q79. You indicated that you often go on day trips to the coast. Please indicate if each is a reason that you visit the coast for a day. (Asked of those who often go on day trips to the coast.)



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.

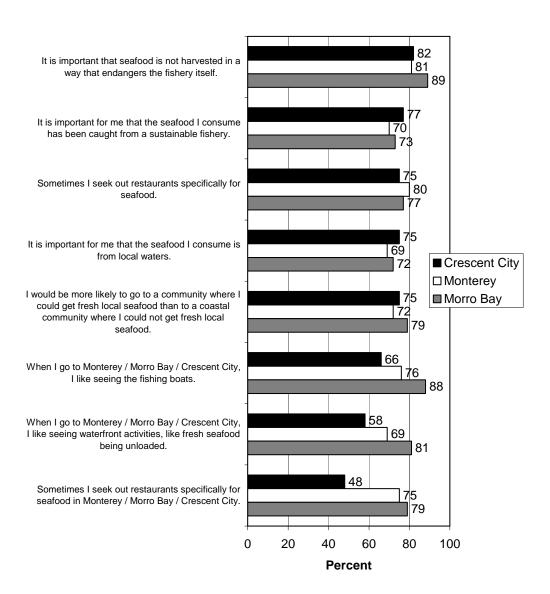
Along with restaurant visits, the visitor survey asked about overnight visits to Crescent City, Monterey, and Morro Bay. Large majorities of visitors to each community had stayed overnight in the respective community: 77% of Crescent City visitors, 81% of Monterey visitors, and 62% of Morro Bay visitors. 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.

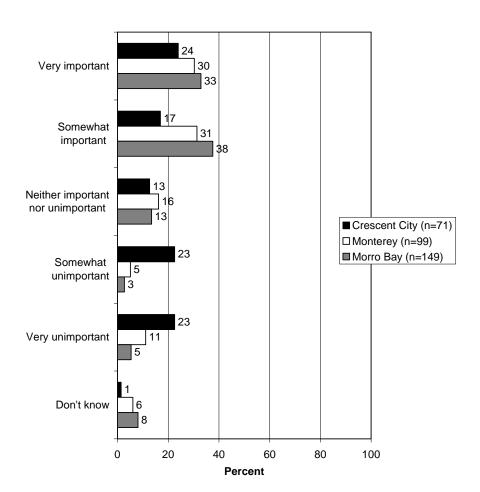


The visitor survey asked Crescent City, Monterey, or Morro Bay tourists to rate the importance of being able to get fresh local seafood when they had decided to go to those places. Being able to get fresh local seafood had been important to a majority of Monterey and Morro Bay visitors when they had 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?)

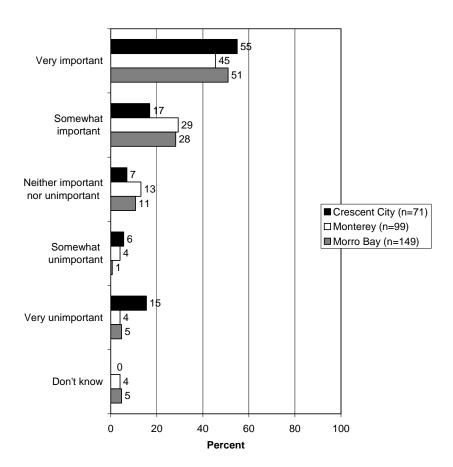


The survey also asked visitors about the importance of being able to get fresh local seafood when deciding to visit a restaurant in one of the three cities in the study. For each community, those who say being able to get fresh local seafood is important (72% of Crescent City visitors, 74% of Monterey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

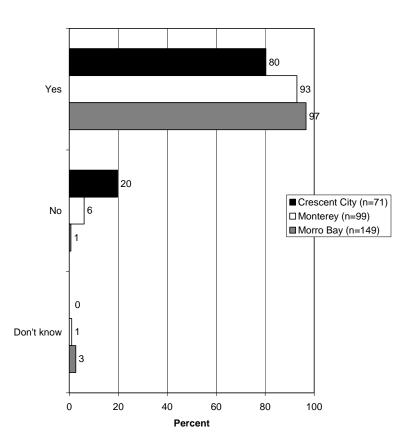
The survey also asked visitors to Crescent City, Monterey, and Morro Bay specifically about visiting the waterfronts of those communities. Overwhelming majorities of visitors to the communities visited the waterfronts of those communities: 80% of Crescent City visitors, 93% of Monterey visitors, and 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

vears?



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	143	could not	NA
leaders		determine	
2008 survey of visitors to the three California coastal	319	could not	NA
communities		determine	
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

$$B = \left(\sqrt{\frac{N_p(.25)}{N_s} - .25} \right) (1.96)$$
Where: B = maximum sampling error (as decimal)
$$N_P = \text{population size (i.e., total number who could be surveyed)}$$

$$N_S = \text{sample size (i.e., total number of respondents surveyed)}$$

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 <u>maximum</u> 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