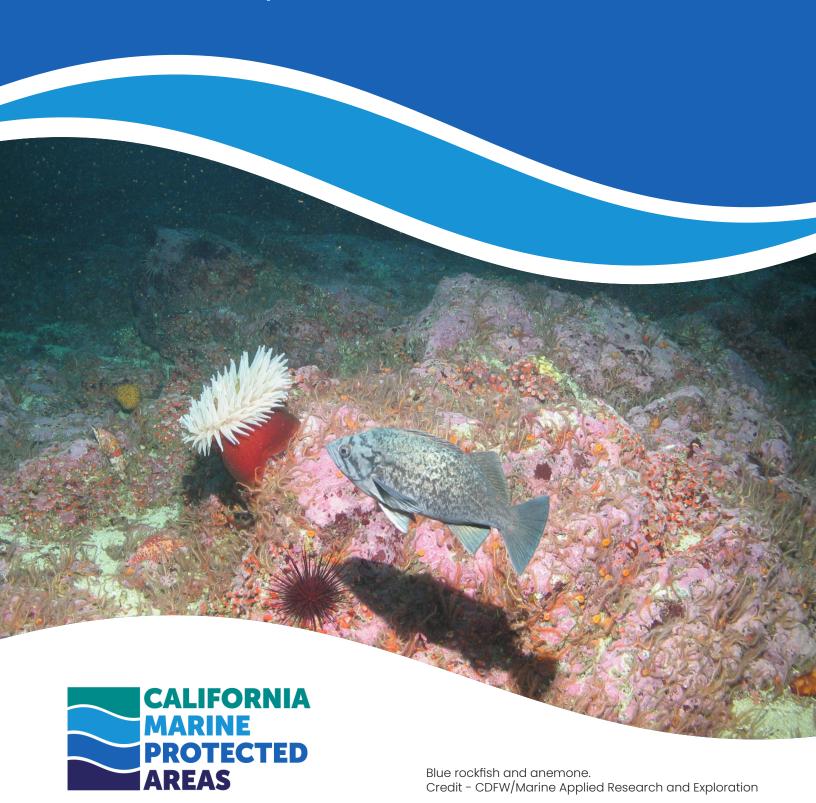
Decadal Management Review: Appendix E CDFW Reports





About this Document

The Decadal Management Review includes available sources of information about the Marine Protected Area (MPA) Network. This Appendix contains additional reports and sources of information produced by the California Department of Fish and Wildlife (CDFW) to inform human dimensions and enforcement aspects of the Review.

Appendix E Contents

1. MPA Surveys – Human Dimensions

CDFW's MPA Management Team recognized a lack of knowledge regarding human uses
within MPAs while preparing for the Review. To help aid in understanding the public's
perception and awareness of California's MPA Network, CDFW created two surveys, one
targeting recreational ocean businesses and the other targeting the public at large. This
report highlights the outcomes of these pilot surveys and recommendations on
continuing these surveys into the future

2. Enforcement Stories – Law Enforcement Division

The included stories were previously published by CDFW or via an official press release.
 Each story includes all information and photos originally published.

3. Del Norte County Disposition Case Study – Law Enforcement Division

The goal of this project was to determine trends in citation disposition by accessing
historical CDFW marine citation and corresponding violation data filed with the Del
Norte County Superior Court (DNCSC). Del Norte County was selected as a case study
because its records are publicly available online.



1. MPA Surveys – Human Dimensions

I. Introduction

In preparation for the Decadal Management Review, the California Department of Fish and Wildlife's (CDFW's) Marine Protected Area (MPA) Management team recognized a lack of knowledge regarding human uses within MPAs. To help aid in understanding the public's perception and awareness of California's MPA Network, CDFW created two surveys, one targeting recreational ocean businesses and the other targeting the public at large. This report highlights the outcomes of these pilot surveys and recommendations on continuing these surveys into the future.

II. Methods

Both surveys were developed by CDFW's MPA Management Project in collaboration with CDFW's Science Institute Human Dimensions staff. Responses were converted to ordinal data and then analyzed using a Spearman (r_s) correlation matrix. For a full list of questions and responses posed for each survey, refer to Section 5 - Survey Questions.

a. Business Survey

This survey was sent by email to consumptive and non-consumptive California coastal recreation businesses at the end of April 2022 (Figure 1) to learn how they have been affected by MPAs. The survey was sent to 314 businesses identified through 1) a 2019 contract with the California Marine Sanctuary Foundation for distribution of MPA materials, 2) an internal spreadsheet of locations requesting MPA guidebook resources, and 3) locations that sell fishing licenses.

Ocean Businesses Survey regarding California Marine Protected Areas

Dear Ocean Business Owner,

The California Department of Fish and Wildlife is preparing for the first 10-year review of California's Marine Protected Area (MPA) Network, and appreciates your participation in this survey. You were identified as a California ocean business, either through the sale of California sport fishing licenses or as the recipient of MPA outreach materials. This survey is voluntary, should take approximately 15 minutes to complete, and will help inform the 10-year MPA Network review. Please complete the survey by April 29, 2022 regarding your ocean business and how it has been affected — either positively or negatively — by MPAs.

This is a unique survey link, if you would like to forward this survey to another ocean business, please contact us at MPAManagementReview@wildlife.ca.gov by April 28, 2022.

Figure 1 – Screenshot of the email sent to coastal recreation businesses.

b. General Survey

This survey was created with the intention of gauging the level of public awareness about California's MPA Network. Unlike the business survey, this survey is being administered in two phases. Phase 1 was a non-random beta survey made available on CDFW's homepage and its Marine Region webpages. It was announced through social media and MPA Management partners' respective communication channels to invite participants to take the survey. This phase is intended to help CDFW determine if the survey questions are clear to users who may already have more familiarity with the MPA Network. Phase 2, anticipated in 2023, will recruit a



professional polling service to distribute the survey more broadly to a random sample of California residents.

III. Results

a. Business Survey

Of the 314 businesses contacted, 178 emails were opened, and 44 responses were recorded during the three weeks the survey was available. Most businesses (28 of 44) provided more than one type of service, with the three most common being recreational fishing charters, outdoor and nature education, and whale watching (Figure 2). Almost all respondents (98%) were at least somewhat familiar with California's MPAs, with about half indicating that they were extremely familiar with them (Figure 3). Fishing charters and whale watching were the only two business service types that showed a positive correlation with familiarity of California's MPAs (fishing charters, r_s =0.47, p<0.01 and whale watching r_s =0.64, p<0.01).

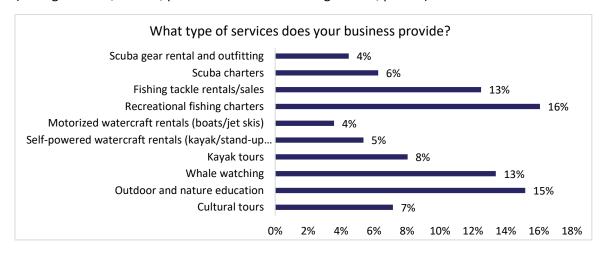


Figure 2 – Type of services provided by participants in the business survey.

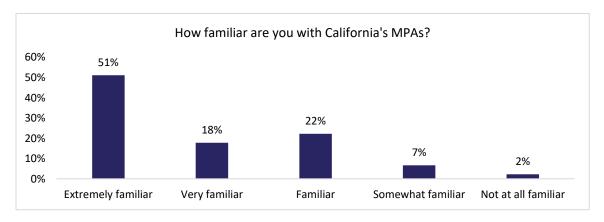


Figure 3 – Familiarity of business survey respondents with California's MPAs.

Most respondents (60%) indicated yes, they do display some type of MPA outreach materials. For those that responded yes, the most displayed materials were maps and brochures about MPAs (Figure 4), with most of these materials provided by CDFW (Figure 5). There was no significant correlation between business service types and the type of resources they provided.





For the businesses that chose to not display materials, most indicated it was because they did not have anything available to display (Figure 6). There was no significant correlation between business service types and their decision to not display MPA information.

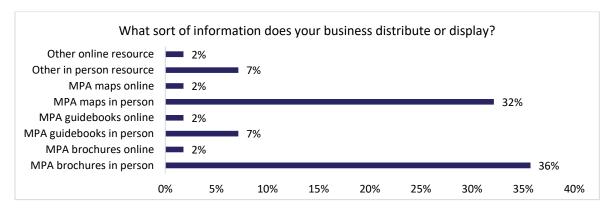


Figure 4 – Types of MPA outreach materials businesses displayed.

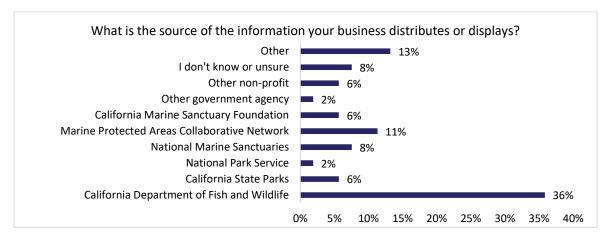


Figure 5 – Source of outreach materials businesses display regarding California's MPAs.

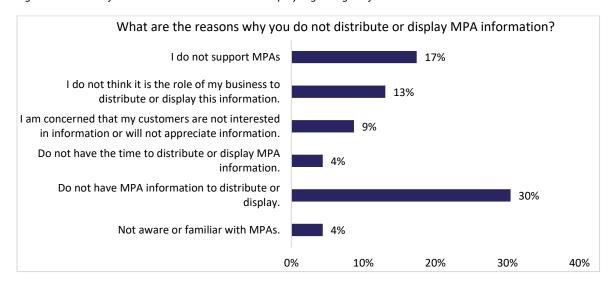


Figure 6 – Reasons why businesses do not display information regarding California's MPAs.



A slight majority of respondents (36%) expressed that they believed MPAs have negatively affected their business (Figure 7), while the second most frequent response (29%) expressed that they believed MPAs have positively affected the business.

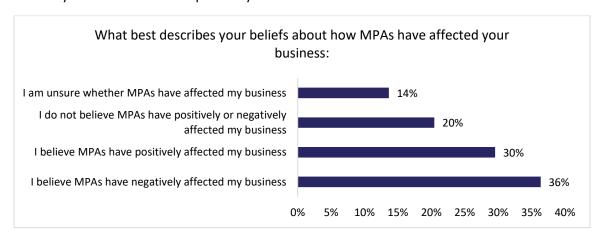


Figure 7 – How respondents believe MPAs may have affected their business.

Most respondents (70%) indicated that they know where to look if they need more information about MPAs, but over half of the respondents (58%) also identified that the public should be more aware about the California MPA Network (Figure 8). While almost half of the respondents (49%) agreed that MPAs improve visitors' wildlife experience, businesses that provide services for fishing tackle rental/sales and recreational fishing charters, which comprise approximately 23% of survey respondents, had a significant negative correlation with that statement indicating their customers do not have an improved wildlife experience from MPAs (fishing tackle rental/sales, r_s = -0.74, p<0.01 and fishing charters r_s =-0.43, p<0.01).

About half of businesses (52%) disagreed that their customers seek to experience MPAs, which corresponded closely with half of the respondents (50%) also indicating that their customers do not ask about MPAs or have displayed an increase in interest about MPAs over time (Figure 8). While the majority of responses leaned towards having a clear "agree" or "disagree" stance by businesses, two of the statements, "California does a good job communicating about the MPA Management Program" and "MPA rules are hard to understand," had most respondents indicating a neutral stance by neither agreeing nor disagreeing with the statements (Figure 8).

Regarding the importance of learning different aspects about MPAs and the MPA Network, respondents overwhelmingly indicated that the three most important topics to know as a business were "General MPA rules and regulations", "Where different MPAs are located", and "Rules and regulations for specific MPAs" (Figure 9). Additionally, "How MPAs work", "How individuals can learn more about the MPA Network", and "What MPAs are" were all identified most often as moderately important. No category was primarily identified as not at all important, and "How individuals can learn more about how to get involved in the MPA Network" was the only statement identified most often as only slightly important (Figure 9).



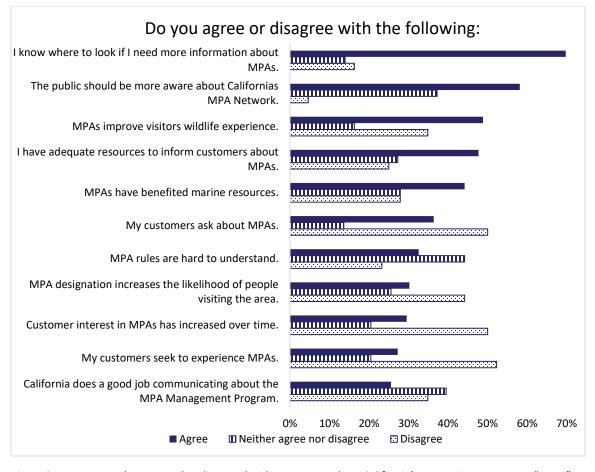


Figure 8 – How respondents agreed or disagreed with statements about California's MPAs. Figure category "agree" combines survey responses "strongly agree" and "agree", and figure category "disagree" combines survey responses "strongly disagree" and "disagree".

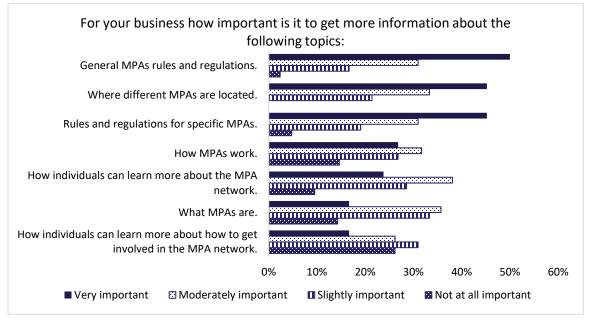


Figure 9 – Importance of different types of MPA information to respondents.



Nearly half of the business respondents (47%) participated in the MPA regional planning process (Figure 10), and many respondents (40%) indicated their support for the Network has not changed positively or negatively since first learning about MPAs (Figure 11).

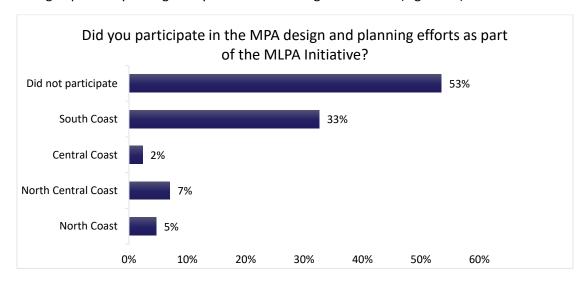


Figure 10 – Percentage of respondents who participated in any of the regional MPA planning processes.

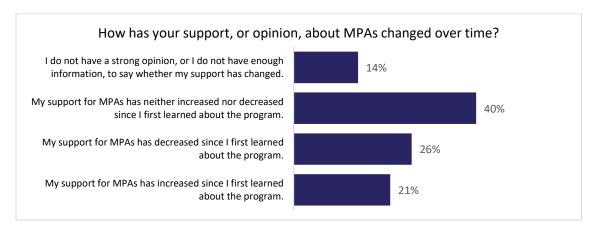


Figure 11 – Percentage of respondents who indicated if their support for the MPA Network has or has not changed since first learning about it.

b. General Survey

During the three weeks that the survey was available, 94 responses were recorded, with most respondents learning about the survey via email (Figure 12). Nearly half of respondents (42%) also indicated they were extremely familiar with California's MPAs (Figure 13). Most respondents (85%) indicated they typically go to the coast more than 12 times a year (Figure 14) with this number staying the same even through the coronavirus pandemic (Figure 15). The south coast has had the highest visitation by respondents, while the north central coast has had the lowest visitation. (Figure 16).





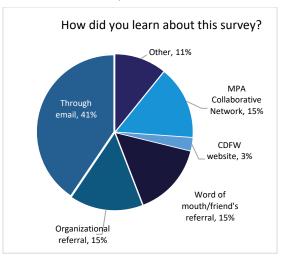


Figure 12 – How respondents to the general MPA survey learned about survey availability. Responses not identified fall into "Other" category.

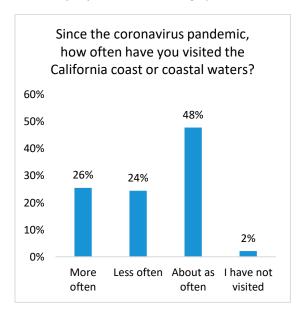


Figure 14 – How often general survey respondents go to the California coast in a typical year.

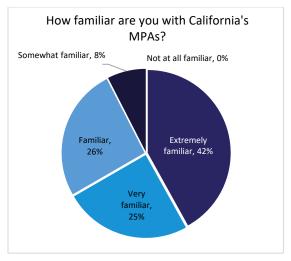


Figure 13 – Familiarity of respondents with California's MPAs.

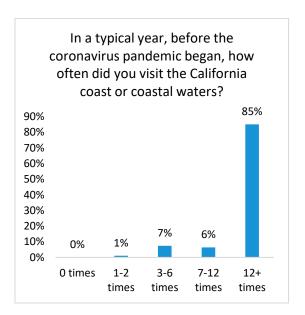


Figure 15 – How respondents changed their coastal visits following the start of the coronavirus pandemic.



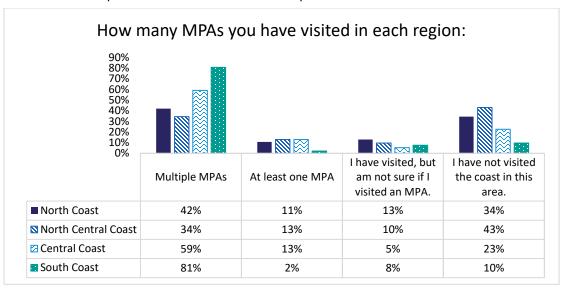


Figure 16 – How many MPAs, if any, respondents have visited within each of the four planning regions.

Respondents were then asked to indicate how often they partake in certain activities when visiting California's coast. The most popular activity was "spending time on the beach" with 47% of respondents partaking in this activity more than 12 times each year, while the least popular activity, "fishing or taking marine resources," had half of the respondents indicating they never participate (Figure 17). Most activity preference varied, with no clear pattern in responses.

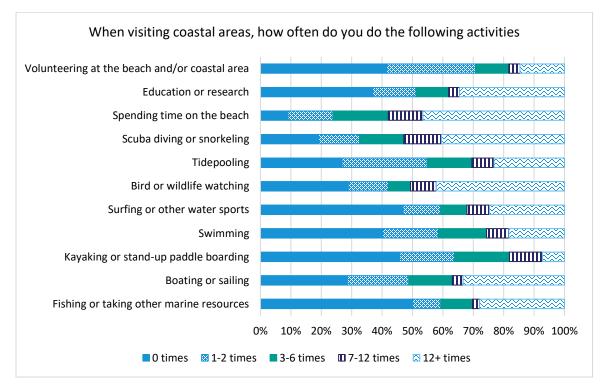
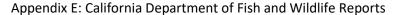


Figure 17 – How often respondents participate in an activity in a typical year.

When asked to self identify what the two most important outcomes of California's MPAs are in their opinion, respondents answered conservation and fisheries management (Figure 18). The





more frequently an individual participated in fishing/taking other marine resources or boating/sailing activities, the less likely they were to identify conservation as a primary outcome of California's MPAs (fishing/taking other marine resources, r_s = -0.65, p<0.001; boating/sailing r_s =-0.43, p<0.001).

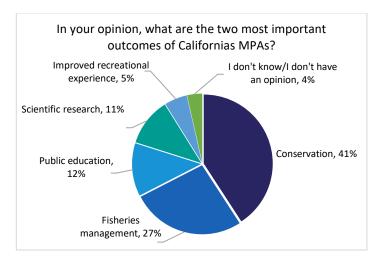


Figure 18 – What respondents think are the most important outcomes of California's MPAs.

Respondents were also asked to agree or disagree with a set of statements about California's MPAs (Figure 19). Most respondents indicated they neither agreed nor disagreed, with these three statements:

- "MPA designation increases the likelihood of people visiting the area."
- "California is doing a good job enforcing MPA rules."
- "There are too few MPAs in California."

There were three statements that most people agreed with:

- "I know where to look if I need more information about MPAs."
- "Most of the other people I observe follow MPA rules."
- "MPAs improve visitors wildlife experience."

There were four responses that most people disagreed with:

- "Public awareness about California's MPAs is high."
- "MPA rules are too strict."
- "There are too many MPAs in California."
- "MPA education and outreach is adequate."

Finally, there were two statements that were seemingly divided between respondents agreeing or disagreeing with the statement:

- "MPA rules are hard to understand."
- "California does a good job communicating about the MPA program."



When respondents were asked how they learned about California's MPAs, CDFW's website was the most common source of information (Figure 20). Then, when asked about how useful certain resources or locations would be for learning about MPAs, the most popular response was signage, followed by K-12 schools and universities, as well as visitor centers and the CDFW website (Figure 21). While most resources were identified as being very useful, the category of "other governmental websites" was the only response that most respondents thought would only be moderately useful.

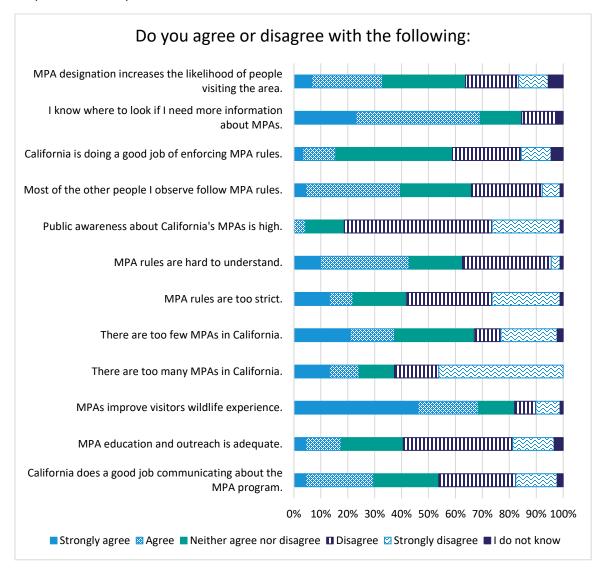


Figure 19 – Statements about MPAs respondents agree or disagree with.



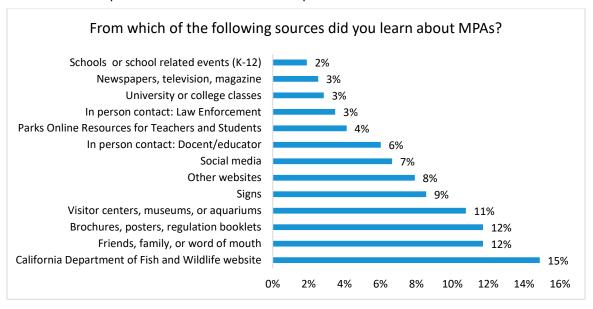


Figure 20 – How respondents indicated they learned about California's MPAs.

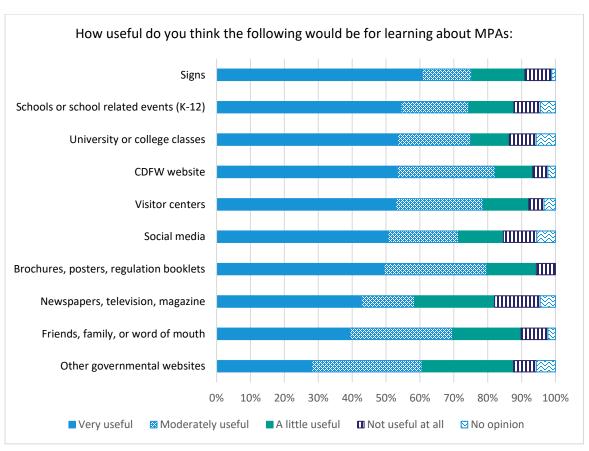


Figure 21 – How respondents indicated they believed others would best learn about California's MPAs.



IV. Recommendations

These surveys are the first attempt by CDFW to formally assess how the public perceives and interacts with California's MPA Network. CDFW can use these results to better serve both ocean-related businesses and California's public regarding MPAs. In 2023, CDFW will launch Phase 2 of the general survey to get an understanding of how people outside of its immediate network perceive or understand MPAs. CDFW recommends conducting both the business survey and "Phase 2" general survey regularly for at least five years to begin to understand if public awareness and understanding of California's MPA Network is changing.

In the interim, CDFW will use the insights gleaned from these surveys to help better communicate about California's MPA Network. CDFW can work with ocean businesses to determine what tools or resources could better serve their business. Additionally, CDFW can invest in materials or work with partners to create materials identified by Phase 1 of the survey to help communicate messages about California's MPAs and MPA Network with the public more effectively.

These surveys are a steppingstone to better understanding how California residents and business owners interact with and use California's MPA Network over time. While survey questions may be modified to better meet the needs of future management concerns, CDFW will work to maintain these questions to ensure consistent data collection in subsequent years.

V. Survey Questions

Business Survey Questions

- 1. What type of services does your business provide? Please select all that apply.
 - a. Cultural tours
 - b. Outdoor and nature education
 - c. Whale watching
 - d. Kayak tours
 - e. Self-powered watercraft rentals (kayak/stand-up paddle boards)
 - f. Motorized watercraft rentals (boats/jet skis)
 - g. Recreational fishing charters
 - h. Fishing tackle rentals/sales
 - i. Scuba charters
 - j. Scuba gear rental and outfitting
 - k. Other (please specify)
- 2. How familiar are you with California's Marine Protected Areas (MPAs)?
 - a. Extremely familiar (you have knowledge of the Marine Life Protection Act, history of MPA adoption in California, MPA names, locations, and regulations, difference between state marine reserves and state marine conservation areas, etc.)
 - b. Very familiar (you have knowledge of MPA names, locations, and regulations, difference between state marine reserves and state marine conservations, but not as familiar with California's MPA planning process and/or the Marine Life Protection Act)
 - c. Familiar (you know California has MPAs, and have general knowledge of MPA names, general locations, and regulations)



- d. Somewhat familiar (you have knowledge about the existence of MPAs in California but not specific names, locations, or regulations)
- e. Not at all familiar (you never knew California had MPAs or what MPAs really are)
- 3. Does your business distribute or display information about MPAs to customers (either in stores or online)?
 - a. Yes
 - b. No
- 4. IF Q3 YES: What sort of information does your business distribute or display? Please check all that apply.
 - a. MPA brochures- in person
 - b. MPA brochures- online
 - c. MPA guidebooks in person
 - d. MPA guidebooks online
 - e. MPA maps in person
 - f. MPA maps online
 - g. Other in person resource (please specify in the box below)
 - h. Other online resource (please specify in the box below)
 - i. Other (please specify)
- 5. IF Q3 YES: What is the source of the information your business distributes or displays? Please check all that apply.
 - a. California Department of Fish and Wildlife
 - b. California State Parks
 - c. National Park Service
 - d. National Marine Sanctuaries
 - e. Marine Protected Areas Collaborative Network
 - f. California Marine Sanctuary Foundation
 - g. Other government agency (please specify in the box below)
 - h. Other non-profit (please specify in the box below)
 - i. I don't know or am unsure
 - j. Other (please specify)
- 6. IF Q3 NO: What are the reasons why you do not distribute or display MPA information? Please check all that apply.
 - a. Not aware or familiar with MPAs.
 - b. Do not have MPA information to distribute or display.
 - c. Do not have the time to distribute or display MPA information.
 - d. I am concerned that my customers are not interested in information or will not appreciate information.
 - e. I do not think it is the role of my business to distribute or display this information.
 - f. I do not currently have a way to display or distribute information due to the coronavirus pandemic restrictions.
 - g. I do not support MPAs
 - h. Other (please specify)
- 7. Please choose the option that best describes your beliefs about how MPAs have affected your business:

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- a. I believe MPAs have negatively affected my business
- b. I believe MPAs have positively affected my business
- c. I do not believe MPAs have positively or negatively affected my business
- d. I am unsure whether MPAs have affected my business
- 8. Please indicate your agreement (Strongly Disagree, Disagree, Neither Agree nor Disagree, Agree, Strongly Agree) with the following statements:
 - a. MPAs have benefited marine resources.
 - b. I have adequate resources to inform customers about MPAs.
 - c. My customers ask about MPAs.
 - d. My customers seek to experience MPAs.
 - e. Customer interest in MPAs has increased over time.
- 9. Please indicate your agreement (Strongly Disagree, Disagree, Neither Agree nor Disagree, Agree, Strongly Agree) with the following statements:
 - a. California does a good job communicating about the MPA Management Program.
 - b. MPAs improve visitors' wildlife experience.
 - c. MPA rules are hard to understand.
 - d. The public should be more aware about California's MPA Network.
 - e. I know where to look if I need more information about MPAs.
 - f. MPA designation increases the likelihood of people visiting the area.
 - g. MPAs have benefited marine resources.
- 10. For your business and customers, please indicate how important (Not at all Important, Slightly Important, Moderately Important, Very Important) it is to get more information about the following topics:
 - a. What MPAs are.
 - b. How MPAs work.
 - c. Where different MPAs are located.
 - d. General MPAs rules and regulations.
 - e. Rules and regulations for specific MPAs.
 - f. How individuals can learn more about the MPA network.
 - g. How individuals can learn more about how to get involved in the MPA network.
- 11. While the purpose of this survey is to understand how your business has been affected by MPAs, we would also like to note if and how your business was impacted by the Covid-19 pandemic to gain a broader perspective of the business environment. Please check all that apply.
 - a. My business closed for a period of time.
 - b. My business had to reduce operating capacity and is still operating at reduced capacity.
 - c. My business had to reduce operating capacity, but has since recovered to, or is exceeding, its traditional operating capacity.
 - d. My business had to increase its use of online tools to communicate with customers and clients.
 - e. I have seen an increase in business due to customers and clients wanting to participate in outdoor recreation due to the pandemic.
- 12. Since the COVID-19 pandemic how has your business fared?

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- a. Overall business is better.
- b. Overall business is worse.
- c. Overall business has not changed significantly.
- d. My business has been affected in a way not stated above
- 13. How many years have you been in business?
 - a. Open-Ended Response
- 14. Did you participate in the MPA design and planning efforts as part of the Marine Life Protection Act Initiative from 2004-2012? Please select all that apply.
 - a. North Coast (California/Oregon border to Alder Creek near Point Arena)
 - b. North Central Coast (Alder Creek near Point Arena to Pigeon Point)
 - c. Central Coast (Pigeon Point to Point Conception)
 - d. South Coast (Point Conception to the California/Mexico border, including Channel Islands)
 - e. I did not participate.
- 15. How has your support, or opinion, about MPAs changed over time?
 - a. My support for MPAs has decreased since I first learned about the program.
 - b. My support for MPAs has increased since I first learned about the program.
 - c. My support for MPAs has neither increased nor decreased since I first learned about the program.
 - d. I do not have a strong opinion, or I do not have enough information, to say whether my support has changed.
- 16. Thank you for taking the survey. Please use the comment box below to express any additional thoughts or feedback you wish to provide.
 - a. Open-Ended Response

General Survey - Phase 1 Questions

- 1. How did you learn about this survey? Please choose all that apply.
 - a. California Department of Fish and Wildlife website
 - b. Other websites
 - c. Through email
 - d. Word of mouth/friend's referral
 - e. Organizational referral
 - f. MPA Collaborative Network
 - g. Facebook
 - h. Twitter
 - i. Instagram
 - j. Other social media platform
 - k. Other (please specify)
- 2. In a typical year, before the coronavirus pandemic began, how often did you visit the California coast or coastal waters?
 - a. 0 times
 - b. 1-2 times
 - c. 3-6 times
 - d. 7-12 times
 - e. More than 12 times



- 3. Since the coronavirus pandemic, how often have you visited the California coast or coastal waters?
 - a. I have visited the California coast or coastal waters less often since the coronavirus pandemic began.
 - b. I have visited the California coast or coastal waters about as often as I did before the coronavirus pandemic began.
 - c. I have visited the California coast or coastal waters more often since the coronavirus pandemic began.
 - d. I have not visited the California coast or coastal waters since the coronavirus pandemic began.
- 4. When visiting coastal areas, how often (0 times, 1-2 times, 3-6 times, 7-12 times, More than 12 times) do you do the following activities in a typical year?
 - a. Fishing or taking other marine resources
 - b. Boating or sailing
 - c. Kayaking or stand-up paddle boarding
 - d. Swimming
 - e. Surfing or other water sports
 - f. Bird or wildlife watching
 - g. Tidepooling
 - h. Scuba diving or snorkeling
 - i. Spending time on the beach
 - i. Education or research
 - k. Volunteering at the beach and/or coastal area
- 5. How familiar are you with MPAs?
 - Extremely familiar (you have knowledge of the Marine Life Protection Act, history of MPA adoption in California, MPA names, locations, and regulations, difference between state marine reserves and state marine conservation areas, etc.)
 - Very familiar (you have knowledge of MPA names, locations, and regulations, difference between state marine reserves and state marine conservations, but not as familiar with California's MPA planning process and/or the Marine Life Protection Act)
 - c. Familiar (you know California has MPAs, and have general knowledge of MPA names, general locations, and regulations)
 - d. Somewhat familiar (you have knowledge about the existence of MPAs in California but not specific names, locations, or regulations)
 - e. Not at all familiar (you never knew California had MPAs or what MPAs really are)
- 6. In your opinion, what are the two most important outcomes of California's MPAs? (Select two)
 - a. Conservation
 - b. Fisheries management
 - c. Public education
 - d. Scientific research
 - e. Improved recreational experience
 - f. I don't know/I don't have an opinion

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- 7. Using the <u>map</u> below as a general reference, please indicate how many MPAs you have visited between the California/Oregon border and Point Arena in Mendocino County.
 - a. I have visited multiple MPAs in this area.
 - b. I have visited one MPA in this area.
 - c. I have visited the coast in this area, but am not sure if I visited an MPA.
 - d. I have not visited the coast in this area.
- 8. Using the <u>map</u> below as a general reference, please indicate how many MPAs you have visited between Point Arena in Mendocino County and Pigeon Point in San Mateo County, not including those in San Francisco Bay.
 - a. I have visited multiple MPAs in this area.
 - b. I have visited one MPA in this area.
 - c. I have visited the coast in this area, but am not sure if I visited an MPA.
 - d. I have not visited the coast in this area.
- 9. Using the <u>map</u> below as a general reference, please indicate how many MPAs you have visited between Pigeon Point in San Mateo County and Point Conception in Santa Barbara County.
 - a. I have visited multiple MPAs in this area.
 - b. I have visited one MPA in this area.
 - c. I have visited the coast in this area, but am not sure if I visited an MPA.
 - d. I have not visited the coast in this area.
- Using the <u>map</u> below as a general reference, please indicate how many MPAs you have visited between Point Conception in Santa Barbara County and the United States/Mexico border.
 - a. I have visited multiple MPAs in this area.
 - b. I have visited one MPA in this area.
 - c. I have visited the coast in this area, but am not sure if I visited an MPA.
 - d. I have not visited the coast in this area.
- 11. Please indicate your agreement (Strongly Disagree, Disagree, Neither Agree nor Disagree, Agree, Strongly Agree) with the following statements:
 - a. California does a good job communicating about the MPA program.
 - b. MPA education and outreach is adequate.
 - c. MPAs improve visitors wildlife experience.
 - d. There are too many MPAs in California.
 - e. There are too few MPAs in California.
 - f. MPA rules are too strict.
- 12. Please indicate your agreement (Strongly Disagree, Disagree, Neither Agree nor Disagree, Agree, Strongly Agree) with the following statements:
 - a. MPA rules are hard to understand.
 - b. Public awareness about California's MPAs is high.
 - c. Most of the other people I observe follow MPA rules.
 - d. California is doing a good job of enforcing MPA rules.
 - e. I know where to look if I need more information about MPAs.
 - f. MPA designation increases the likelihood of people visiting the area.
- 13. From which of the following sources did you learn about MPAs? Please select all that apply.

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- a. Friends, family, or word of mouth
- b. California Department of Fish and Wildlife website
- c. Other websites
- d. Signs
- e. Brochures, posters, regulation booklets
- f. Social media
- g. Newspapers, television, magazine
- h. Visitor centers, museums, or aquariums
- i. Schools or school related events (K-12)
- j. University or college classes
- k. Parks Online Resources for Teachers and Students (PORTs)
- I. In person contact: Law Enforcement
- m. In person contact: Docent/educator
- n. I did not know about MPAs before this survey
- o. Other (please specify)
- 14. In the future, how useful do you think the following would be for learning about MPAs?
 - a. Friends, family, or word of mouth
 - b. California Department of Fish and Wildlife website
 - c. Other governmental websites
 - d. Signs
 - e. Brochures, posters, regulation booklets
 - f. Social media
 - g. Newspapers, television, magazine
 - h. Visitor centers
 - i. Schools or school related events (K-12)
 - j. University or college classes
 - k. Other (please specify)
- 15. What is your age?
 - a. Younger than 18
 - b. 18-24
 - c. 25-34
 - d. 35-44
 - e. 45-54
 - f. 55-64
 - g. 65 and older
- 16. Do you identify as
 - a. Male
 - b. Female
 - c. Other
 - d. Prefer not to answer
- 17. What best describes the highest level of education that you have attained?
 - a. Less than a high school diploma
 - b. A high school diploma or equivalent
 - c. Some college



- d. An associate degree or equivalent
- e. A bachelor's degree
- f. A master's degree or higher
- g. Prefer not to answer
- 18. What is your zip code
 - a. Open-Ended Response
- 19. Do you speak a language other than English at home? If so, please write in the name of the language(s).
 - a. Open-Ended Response
- 20. Thank you for completing the survey. If you have any other comments or feedback, please provide it in the comment box below.
 - a. Open-Ended Response



2. Enforcement Stories

The included stories were previously published by CDFW or via an official press release. Each story includes all information previously published.

Department of Fish and Wildlife (née Fish and Game) and Orange County Successfully Prosecute First MPA Violation

Release date: May 8, 2012

Release method: CDFW WordPress News Story (link to story unavailable)

A Riverside County man was fined more than \$20,000 and sentenced to a week in jail for poaching lobsters inside a marine protected area (MPA). This is the first resource crime conviction since the MPAs off the Southern California coast went into effect on Jan. 1, 2012.

Marbel A. Para, 30, of Romoland pled guilty in Orange County Court on May 4 for violating Fish and Game Code 12013, which stipulates a minimum \$5,000 fine for anyone who takes or posses more than three times the daily bag limit of lobsters.

"This diver intentionally took a huge overlimit of lobster with no regard for the current laws," said Department of Fish and Game (DFG) Assistant Chief Paul Hamdorf. "He didn't follow any fish and game laws, including the take restrictions within an MPA."

After midnight on Jan. 15, DFG wildlife officers found Para and a companion with 47 California spiny lobsters in their possession. In addition to illegally taking the lobsters from an MPA, the divers were well over the legal possession limit of seven lobsters per diver, and all but five of the lobsters were undersize. Para claimed that all the lobsters were his and his companion was not cited.

"This was a big case, but unfortunately it wasn't the biggest even in the last 12 months. Any time you have something that has significant monetary value, there will be a small group that will exploit it, regardless of what the law says," said Hamdorf.

DFG has been working closely with the Orange County District Attorney's Office to combat resource crimes in the county. Para was ultimately sentenced to three years probation, seven days in Orange County jail and a \$5,000 fine for the DFG violation. Additional fees and penalties pushed the total fines to more than \$20,000. He also had to forfeit all his SCUBA equipment and was given a "stay away" order from the Laguna Beach State Marine Reserve.

The MPAs were created through the Marine Life Protection Act in order to simplify and strengthen existing marine reserves and fishing regulations to allow recovery of fish populations that have been in severe decline.





Patrol Boat Swordfish Issues Citations for Illegal Fishing Near Channel Island MPAs

Release date: March 7, 2014

Release method: Facebook timeline post

Wildlife officers from the Patrol Boat Swordfish wrote four citations for unlawfully fishing in the Footprint Marine Protected Area between Anacapa Island and Santa Cruz Island just off the Channel Islands National Park last weekend. The men had illegally caught several species of rockfish, including vermilion, starry, copper, and blue. Fishing is not allowed inside the MPA and wildlife officers report that the anglers had updated electronics outlining the MPA but failed to use them. The MPAs were created to protect the state's marine life, habitats, and ecosystems. Anglers are responsible for knowing their location when fishing.



Photo 1 Inside look at a cooler containing more than 20 rockfish. Photo credit: CDFW





Abalone Poacher Barred from Coastline as City Attorney Protects Our Marine Resources

Release date: March 30, 2017

Release method: San Diego City District Attorney Press Release (PDF)

A poacher has been fined \$30,000 and is barred from San Diego's coastline in an environmental-protection case that began when concerned citizens reported the poacher taking abalone from waters in the South La Jolla State Marine Reserve.

Jeff Anthony Zeien, of Scottsdale, Arizona, pled guilty to taking and possessing the protected shellfish in two separate instances.

Under a plea agreement reached with the City Attorney's Office, Zeien will pay a \$30,000 fine and was placed on three years of probation, barred from obtaining a fishing license in the State of California, and ordered to forfeit the fishing gear seized from him.

In addition, Zeien must stay away from the Pacific Ocean within the jurisdictional boundaries of the City of San Diego for three years. The stay-away order covers an area from Black's Beach North of La Jolla to the Zuniga Jetty off of Coronado, extending three miles out to sea.

Since 1998, it has been illegal to take or possess abalone in California waters south of San Francisco Bay due to dwindling populations.

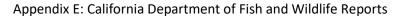
Additionally, the area where Zeien was caught, the South La Jolla State Marine Reserve, is considered a "no take" area where the commercial or recreational taking of any living marine resource is prohibited. This area, and others across the State, were created to protect habitat and ecosystems as well as conserve biological diversity by providing a sanctuary for fish and other sea life.

"Protecting our marine resources is a priority for the City Attorney's Office, whether the threat comes from polluters or poachers," San Diego City Attorney Mara Elliott said. "I applaud the concerned citizens who reported this illegal activity, and I encourage all San Diegans to be just as vigilant while they are enjoying our city's natural treasures."

The case was prosecuted for the People of the State of California by Deputy City Attorney Cheryl Shitabata of the City Attorney's Consumer and Environmental Protection Unit.

Anyone who believes they are witness to unlawful hunting, fishing or pollution is encouraged to call CalTIP, California Department of Fish and Wildlife's confidential secret witness program, at (888) 334-2258 or send a text message to tip411. Both methods allow the public to provide wildlife officers with factual information to assist with investigations. Callers may remain anonymous, if desired, and a reward can result from successful capture and prosecution.

The City Attorney's Consumer & Environmental Protection Unit (CEPU) maintains a Consumer Hotline at (619) 533-5600, which consumers can call to report fraud, waste or abuse. The duties of the CEPU include investigating and prosecuting false advertising, unfair business practice, theft, environmental and unlicensed activity cases.





Commission Suspends License of Sportfishing Charter Boat Operator for Poaching in Southern California Marine Protected Areas

Release date: February 7, 2018

Release method: CDFW WordPress News Story

The California Fish and Game Commission (Commission) today ordered a five-year suspension of the license of Pacific Star Sportfishing, Inc., a recreational sportfishing vessel operator. The decision was made following oral arguments heard at the Commission meeting today in Sacramento.

In an undercover operation and subsequent boarding by officers in 2013, California Department of Fish and Wildlife (CDFW) wildlife officers observed 18 violations including poaching within California's marine protected area (MPA) network, exceeding the possession limits of several fish species, using illegal methods to take fish and failing to report accurate counts on logbooks. Based on these violations, CDFW filed an accusation with the Commission against Pacific Star requesting that the Commission suspend this commercial passenger fishing vessel license.

"Illegal take of our marine resources, especially in MPAs, undermines the tireless work of law enforcement, scientists, the public and fishermen in California," said Commission President Eric Sklar. "The Commission took ample time to review the department's accusation and we hope this serves as a message that we do not take lightly these sorts of violations and will ensure those who are responsible receive the appropriate penalty."

The Commission's decision today follows a two-day hearing in 2017 conducted by an administrative law judge on behalf of the Commission with CDFW and Pacific Star both participating. The judge ultimately proposed that the Commission suspend the license for two years, with only the first 90 days of the suspension taking effect so long as Pacific Star complied with certain terms of probation. The Commission rejected that proposal as inadequate and gave CDFW and Pacific Star each 15 minutes today to argue their positions, resulting in today's suspension.



Patrol Vessel Thresher Wildlife Officers Investigation of Poaching Marine Crimes

Release date: November 5, 2020

Release method: Facebook timeline post

Wildlife officers from the patrol vessel Thresher are tenacious in their investigation of poaching marine crimes.

While checking SCUBA divers inside the Blue Caverns State Marine Conservation Area (SMCA) near Catalina Island recently, wildlife officer Justin Sandvig quickly shed his uniform and gunbelt and -- wearing only a swimsuit, mask, snorkel and fins -- hopped off the boat to check the divers in the water. Blue Caverns is a no-take SMCA. Wildlife officer Sandvig observed a diver drop what appeared to be lobster evidence to the bottom, in an apparent effort to keep it from being discovered.

Wildlife officer Sandvig, a former competitive swimmer at UC Berkeley who is also an accomplished SCUBA and breath-hold diver, quickly dove into action. He held his breath and dove down to retrieve a "tailed" lobster, which became evidence that he handed off to his partner in the patrol skiff.

Potential violations include, but are not limited to, fishing inside a no-take SMCA, failure to maintain a lobster in a whole, measurable condition (the diver broke the tail apart from the carapace) and failure to show catch to a wildlife officer on demand.

Fishing regulations for legal take of lobster and other ocean species can be found at https://wildlife.ca.gov/.../Sport-F.../Invertebrate-Fishing-Regs



Photo 2 Wildlife officer Justin Sandvig, in the water with no wetsuit, handed off a "tailed" lobster as evidence to his partner, wildlife officer Rob Rojas, in a patrol skiff before returning to search the bottom for more. Photo credit: CDFW



District Attorney Settles Marine Protected Area Case

Release date: July 9, 2021

Release method: Monterey County District Attorney Press Release

Monterey County District Attorney Jeannine M. Pacioni announced today that her office has reached a settlement totaling \$42,747 in a civil law enforcement action filed in Monterey County Superior Court against Sophia Fisheries, Inc., and its principals for violations of Marine Protected Area-related laws and regulations.

In 1999, the California Legislature enacted the Marine Life Protection Act ("MLPA") to protect the natural diversity and abundance of marine life in California coastal waters, along with the structure, function, and integrity of marine ecosystems. The ultimate goal of the MLPA is to sustain, conserve, and protect marine life populations. To implement the MLPA's requirements, the California Department of Fish and Wildlife worked with a group of stakeholders, including recreational and commercial fishing interests, to redesign California's system of Marine Protected Areas ("MPAs") to function as a coherent, effective network. To this end, a coastal network of 124 MPAs were established between 2004 and 2012, covering 852 square miles and 16% of all California coastal state waters.

Monterey County has 17 MPAs, the most of any California county, the last of which was established in 2007. These 17 MPAs comprise eight Marine State Marine Reserves ("SMRs") and nine State Marine Conservation Areas ("SMCAs"). California regulations prohibit injuring, damaging, taking, or possessing any living, geological, or cultural marine resource for any purpose in an SMR; in an SMCA, these activities are prohibited for commercial and recreational purposes, with certain exceptions. The Department of Fish and Wildlife has primary enforcement authority to ensure compliance with these regulations and its personnel have authority to board vessels and inspect catch.

Using GPS technology, Department of Fish and Wildlife's marine patrol personnel determined that Sophia Fisheries Inc.'s vessel, the Navigator, was fishing for spot prawn with traps in Portuguese Ledge SMCA on separate occasions in 2019 and 2020. Portuguese Ledge SMCA, located four miles off the coast of Pacific Grove, is one of only 14 California MPAs that protect deepwater, submarine canyon habitat. Portuguese Ledge SMCA spans 10.64 square miles and encompasses a portion of the Monterey Canyon, an important foraging site for many seabird and marine mammals. Portuguese Ledge SMCA also protects vital habitats for overfished deepwater rockfish and groundfish species. The only commercial or recreational fishing allowed in this SMCA is for pelagic finfish.

During their investigation, the Department of Fish and Wildlife also determined that Sophia Fisheries, Inc., and its principals did not hold a general trap permit, which is required for commercial spot prawn fishing using traps. Without admitting they were fishing in the Portuguese Ledge SMCA, Sophia Fisheries, Inc., its principals, and their counsel worked cooperatively to resolve this matter with the District Attorney's office without litigation. They also immediately obtained a general trap permit.

Under the Final Judgment, Sophia Fisheries, Inc., President Pete Guglielmo, Sr., and Pete Guglielmo, Jr. will pay \$25,000 in civil penalties in addition to reimbursement of investigation costs. They will also be bound under the terms of an injunction prohibiting similar violations of law in the future. Department of Fish and Wildlife, wildlife officer Jeremiah Preffer, Lieutenant Brian Bailie, and Lieutenant Joseph Ames investigated this case and provided expert assistance to the District Attorney's Office. According to



District Attorney Jeannine Pacioni, "Enforcement of MLPA regulations is crucial, both for preserving the unique ecosystem in Monterey County coastal waters and also for ensuring a level playing field for businesses operating in these coastal waters."

ROV (underwater) footage of the landscape and wildlife in Portuguese SMCA can be seen in this Department of Fish and Wildlife video: https://www.youtube.com/watch?v=ydCfDmirQ8s



CALIFORNIA

Appendix E: California Department of Fish and Wildlife Reports

Commercial Lobster Fisherman Convicted of Poaching in Marine Protected Area

Release date: December 8, 2021

Release method: CDFW WordPress News Story

A five-month-long investigation on a commercial lobster poaching suspect concluded with a conviction in Los Angeles County Superior Court, the California Department of Fish and Wildlife (CDFW) announced. The conviction is on top of prior commercial lobster poaching convictions and occurred while the suspect was on probation for the prior convictions.

After a series of complaints from legitimate commercial lobster harvesters operating offshore of San Pedro and Palos Verdes, Los Angeles County, CDFW launched an investigation of illegal commercial poaching activity. Using a combination of multiple contacts and inspections at sea and at the dock, home visits, analysis of marine navigation equipment seized during the investigation and various surveillance techniques, wildlife officers concluded that Rustin Craig Wilson, 37, of Lawndale, had been engaged in several commercial fishing behaviors that resulted in potential violations of commercial fishing laws and regulations. Wilson is known to wildlife officers for prior commercial lobster fishing convictions and was in the middle of a 36-month probation for those convictions by a February 13, 2020, court order.

Strict regulation provides for a remarkably successful California spiny lobster fishery for both recreational and commercial harvesters. The stringent rules are designed to allow for a limited amount of take of lobster both recreationally and by commercial harvesters while ensuring the long-term sustainability of the lobster fishery, such as:

- All harvested lobsters have a size limit to ensure they have one or more opportunities to reproduce before growing to legal size for harvest;
- Any harvest must be during an established lobster fishing season, which is outside of the lobster reproductive season;
- Commercial lobster harvesters must employ trap "destruct devices" to automatically open the
 trap if it is lost to the sea and cannot be recovered because traps without destruct devices can
 keep fishing and ultimately keep killing lobsters; and
- Traps must be checked at least every seven days. Lobsters left in a trap for longer than that timeframe increase their chances of limb breakage and mortality.

The investigation revealed evidence of unlawful commercial take of lobsters within the Blue Cavern Onshore State Marine Conservation Area (SMCA) at Santa Catalina Island and failure to service lobster traps within the seven-day mandatory trap check requirement.

"Several legitimate commercial lobster harvesters were frustrated with the unlawful practices of a rogue colleague who was trapping lobsters in a marine protected area and who also failed to responsibly fish with lobster traps he placed in other areas," said David Bess, CDFW Deputy Director and Chief of the Law Enforcement Division. "The majority of California's commercial lobster fleet care very much about the long-term viability of the fishery and our wildlife officers appreciate their continued compliance and their assistance with this investigation."

Wilson pleaded no contest to one count of fishing in the Blue Cavern SMCA and another count of failure to check his traps within the seven-day required period. He was ordered to pay \$885 in fines and



penalties, ordered to perform 30 days of community labor, must forfeit all seized evidence including traps and his GPS plotter and was placed on probation for 12 months. During his probation, he is prohibited from fishing either commercially or recreationally anywhere in Los Angeles County, including Catalina and San Clemente islands, nor can his vessel be used to fish. He remains restricted by court order from handling the lobster traps of fellow lobster harvesters, commercial or recreational.

CDFW also thanks Los Angeles City Attorney Mike Feuer and prosecutors at the Environmental Justice Unit for their steadfast effort to prosecute this and many other environmental cases.



Photo 3 Wildlife officers pulling lobster trap from a poacher's boat. Photo credit: CDFW



Commercial Poachers Convicted for Illegal Fishing in Marine Protected Areas

Release date: January 12, 2022

Release method: <u>CDFW WordPress News Story</u>

A San Diego County judge recently imposed a \$5,000 fine on a Commercial Passenger Fishing Vessel (CPFV) operating in a Marine Protected Area (MPA), the California Department of Fish and Wildlife (CDFW) announced. It was the first implementation of increased commercial poaching fines and penalties under Assembly Bill 2369, authored by San Diego Assemblywoman Lorena Gonzalez Fletcher. AB 2369, which is specific to illegal activity in California's MPAs, went into effect in Jan. 2019.

The case was tried in San Diego County Superior Court and prosecuted by San Diego County Deputy District Attorney, Landy Spencer-Daly.

The case was initiated in December 2020 by wildlife officers aboard the CDFW patrol boat Thresher as they patrolled the Swami's State Marine Conservation Area (SMCA), one of many regions of California's coast protected by designation as an MPA. Swami's SMCA is located midway along the coast of San Diego County. Acting on a tip regarding illegal fishing in the SMCA, the officers noticed the CPFV Electra on their radar and their Automatic Identification System inside the northwest corner of the SMCA. As the Thresher approached the Electra, wildlife officers noticed passengers on the boat reeling in lines and keeping fish. After boarding the vessel for inspection, the officers clearly documented commercial passenger fishing vessel activity and cited the vessel's captain for fishing in the Swami's SMCA. The case was solidified with further documentation of the vessel's presence in the MPA via the shore-based radar Marine Monitor vessel tracking system. The Electra is owned by Helgren's Sportfishing, based out of Oceanside Harbor.

In November, Helgren's Sportfishing, through owner Joseph Helgren, pleaded guilty to a violation of Fish and Game Code, section 12012.5, resulting in a fine of \$5,000 and an order to stay out of Swami's SMCA for one year.

"The \$5,000 minimum fine imposed in the Electra case is the first of its kind since the law was passed," stated David Bess, CDFW Deputy Director and Chief of the Law Enforcement Division. "We hope the Electra case disposition will send a message that commercial fishing in an MPA will be stopped by wildlife officers and will result in substantial fines."

The <u>law</u> specifically states that if a CPFV operator fishes or facilitates fishing in an MPA, that operator is guilty of a misdemeanor punishable by a fine of not less than \$5,000 nor more than \$40,000, imprisonment in the county jail for not more than one year, or by both a fine and imprisonment. If a person is convicted of a subsequent violation occurring within 10 years of a prior violation that resulted in a conviction, CDFW may suspend that person's commercial fishing license. Subsequent violations are also subject to fines of not less than \$10,000 nor more than \$50,000, imprisonment in the county jail for not more than one year, or by both a fine and imprisonment.



Appendix E: California Department of Fish and Wildlife Reports



Photo 4 Image of CDFW law enforcement vessel Thresher. Photo credit: CDFW



Photo 5 Marine monitor radar images





Civil Prosecution Against Commercial Fisherman in North Farallon Islands State Marine Reserve

Release date: May 27, 2022

Release method: San Francisco County District Attorney Press Release

Today, San Francisco District Attorney Chesa Boudin announced that the District Attorney's Office, working with California's Department of Fish and Wildlife (CDFW), filed a civil prosecution against a commercial fisherman for unlawfully fishing in the North Farallon Islands State Marine Reserve, a highly protected Marine Protected Area where taking any fish is unlawful. Marine Protected Areas are discrete geographic marine or estuarine areas designed to protect or conserve marine life and habitat.

"Protecting the environment is a key part of promoting public safety for our community," said District Attorney Boudin. "The State Marine Reserves near the Farallon Islands safeguard a wide variety of significant marine life important to the people of California. Crabbing and fishing in these waters is illegal, and my office will hold violators accountable for the harm they cause to this cherished part of San Francisco for their own financial gain."

"What's remarkable about this incident is how we learned about it," said Eric Kord, Assistant Chief for the Marine Enforcement District with the California Department of Fish & Wildlife. "Our officers received an anonymous tip from a commercial fisherman who said he saw another fisherman's crab traps in the Marine Protected Area. He was concerned that this fisherman's illegal activities would put other law-abiding fisherman in a bad light. This is a large-scale incident of unlawful take from a Marine Protected Area, and we might not have known about it had another commercial fisherman not reported the illegal activity."

Responding to that anonymous tip, CDFW observed 92 crab traps in the North Farallon Islands State Marine Reserve. The traps were marked with tags and buoys belonging to Tam Tran, a resident of Vallejo, CA, and his fishing vessel, *Pacific Mist*. Over multiple trips in the following days, while battling difficult sea and weather conditions, CDFW seized and photographed the traps, and returned over 250 Dungeness crabs that had been trapped back to the Reserve.

Traps have been known to entangle whales and sea turtles, and CDFW has been working actively with industry partners to reduce the risk of entanglements. The Marine Protected Areas around the Farallon Islands are the farthest offshore in North California, a location where whales migrate.

California's Marine Protected Areas

California's network of Marine Protected Areas (MPAs) protects the diversity and abundance of marine life, the habitats they depend on, and the integrity of the marine ecosystems. The Marine Life Protection Act of 1999 directs the state to redesign California's system of MPAs to function as network to increase coherence and effectiveness in protecting the state's marine life, habitats, and ecosystems.

The five MPAs in San Francisco County are all near the Farallon Islands. The Farallon Islands archipelago, which lies 30 miles outside the Golden Gate, is home to thousands of diverse species. The North Farallon Islands State Marine Reserve and the Southeast Farallon Island State Marine Reserve are the two most protected MPAs in this region. With limited exceptions, it is unlawful to take any marine resource from a State Marine Reserve.



The District Attorney's Lawsuit

The lawsuit is brought under California's unfair competition law, Business & Professions Code section 17200, on the ground that Defendant Tam Tran engaged in unfair competition through unlawful conduct by violating California Fish & Game Code section 12012.5, which prohibits commercial fisherman from taking any fish from a Marine Protected Area. Section 12012.5 makes it a misdemeanor to fish in a Marine Protected Area and imposes fines ranging from \$5,000 to \$40,000 for the first offense.



3. Del Norte County MPA Disposition Case Study

ABSTRACT

Public records accessed from the Del Norte County Superior Court (DNCSC) online website were searched to obtain violation data from California Department of Fish and Wildlife (CDFW) marine citations. Citations from January 2013 to December 2020 were recorded. Trends in number of violations, types of violations, and dispositions were documented. Marine protected area (MPA) violations accounted for fifteen percent of all CDFW reported violations in marine waters in Del Norte County. Of the fifteen percent of MPA violations, seventy-five percent resulted in a conviction. This indicates that while MPA violations occur with less frequency than other marine violations, the courts are prepared to process them. There were some limitations to this method including lack of location and evidence data, and ambiguity with classifying regulated waters. However, this methodology allowed for a convenient and accessible way to navigate the online DNCSC system and sift through years of citations. Del Norte County was used as a case study because of its relatively small population, which allowed for a more feasible search of records, and the user-friendly nature of its online database. Other coastal counties do not have online databases that are as accessible for broad searches and will likely require additional cooperation from county clerks' and District Attorneys' offices to obtain records.

INTRODUCTION

The goal of this project was to determine trends in citation disposition by accessing historical CDFW marine citation and corresponding violation data filed with the DNCSC. Citation data was obtained through the <u>DNCSC public online records website</u>. Del Norte County was selected as a case-study to determine if obtaining marine citation data through the county courts is a reliable method to learn of CDFW citation disposition status, prior to delving into citation dispositions for more populous counties.

METHODS

All marine citations were gathered from the DNCSC public online website. Using the "Search by date" function, CDFW marine citations were accessed by filing date one month at a time, from January 2013 to December 2020. Using the Ctrl+F search function, cases were then searched for citation numbers containing "INNT" for "Non-Traffic Infractions" and "CRM" for "Criminal Misdemeanors". From there, each case was opened and read to find descriptions matching fishing violations in marine waters. All locations were listed as "Del Norte Limited Jurisdiction", so determining if a violation occurred in marine waters required a Fish and Game Code (FGC) and California Code of Regulations Title 14 (CCR) code number and description.

Information recorded from each citation included: citation number, date and time of the violation(s), name of the offender, violation description, if the violation occurred in an MPA, code section, case file number, date final, and the disposition (Table 1). If more than one



violation occurred on the same ticket, an additional entry was made with the same citation number, but a unique code section and description for each entry.

Table 1. Categories and descriptions of data collected from the DNCSC website.

Categories	Data Collected
Citation Number	Serial number from physical citation
Violation Date/Time	Date and time the violation occurred
Name	Name of the offender
Violation Description	Short description of the violation
MPA Designation	If the violation occurred in an MPA or general marine habitat
Code Section	CCR or FGC code sited
Case File Number	Serial number assigned to the case by the county court
Date Final	The date a final disposition was determined
Disposition	The outcome of the case
Disposition Description	If the outcome resulted in a conviction or no conviction

Citations with reported marine violations were grouped into two categories: MPA or General Marine Violation. "MPA" was only recorded if it was explicitly stated in the description as an MPA violation or if the code section was "CCR 632". "General Marine Violation" was applied to any other violation that did not provide information on MPA status and is assumed to not be MPA related. Additionally, "sportfishing without a license" was not recorded as these entries often appear as the sole violation without any additional description to determine if these violations occurred in marine waters.

Citation dispositions were categorized into three groups: Convicted, Not Convicted, and No Data. Dispositions categorized as "Convicted" include any disposition that resulted in a fine, guilty verdict, or were tried in abstentia. "Not Convicted" include any violation that resulted in a dismissal. Some violations did not have disposition information and were labelled as "No Data".

RESULTS

The MPA Network was finalized in 2012, with the implementation of north coast MPAs, so 2013 was the first year that MPAs were enforced in Del Norte County. However, in 2013 all coastal wildlife officer positions were vacated in Del Norte County, due to retirement or transfer to other regions. Following this vacancy, wildlife officers from Eureka County were responsible for both Eureka and Del Norte County enforcement. During this transition period there were five MPA violations in 2013, followed by a three-year gap of no recorded MPA violations from 2014 to 2016 (Figure 1).

During this time (2014-2016), there was also a new District Attorney and a high turnover of deputy District Attorneys. It is possible that instability in the District Attorney office could have



contributed to discrepancies in how records were entered into the online public website. These limitations to CDFW wildlife officers and court resources might have interfered with enforcement efforts and precise record keeping.

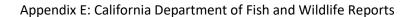


Figure 1. Number of violations per year for General Marine and MPA, 2013-2020.

Following 2016, three more wildlife officers were assigned to the county, and during that time MPA and General Marine violations increased from 2017 to 2019. MPA specific violations displayed a sharp decrease in 2020, possibly due to complications from the COVID-19 pandemic, as well as wildlife officer reassignment/retirement, which resulted in Del Norte County retaining only one wildlife officer specifically assigned to the county's marine region as of June 2021.

Most violations recorded with the DNCSC did not have descriptions or codes that clearly placed them in an MPA and were therefore assumed to have not occurred within one; these violations are listed as General Marine Violations (Figure 2). However, MPA violations might occur more frequently than is represented in this study. If more precise location data were available, it is possible that we could see some General Marine Violations occurred in an MPA.

There are more code violations than citations in MPAs indicating that there were several instances where more than one violation occurred on the same citation (Figure 3). This trend is reflected in in years 2016, 2017, and 2018 (Figure 4), and is consistent with the methods used to determine MPA status. Violations were only classified as MPA if explicitly stated in the description or if the code section classified it as an MPA. So, the violations that list a specific species violation, such as overlimit of black rockfish and undersize crab (Figure 5), would have been accompanied by a violation describing take in an MPA.



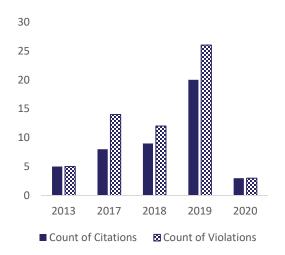




Count of Count of Violations Citations Total

Figure 2. Percentage of all violations that occurred in a MPA or were a general marine violation, 2013-2020.

Figure 3. Total number of citations versus total number of violations in an MPA, 2013-2020.



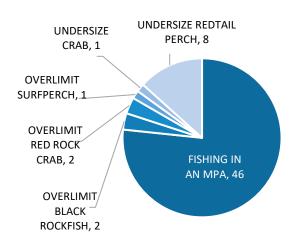


Figure 4. Number of citations versus number of violations in an MPA, by year from 2013 to 2020. There were no MPA violations recorded from 2014 to 2016 (Figure 1).

Figure 5. Descriptions of code violations that occurred in MPAs by count, 2013-2020.



Issuance of citations and corresponding violations peaked in 2019, while 2013 and 2020 had considerably fewer MPA violations (Figure 4). Interestingly, both 2013 and 2020 had the same number of violations as citations, indicating only one violation was reported for each citation issued. This is consistent with the descriptions of violations where the most common violation in an MPA was "Fishing in an MPA" with no further description (Figure 5).

Most dispositions resulted in a conviction, predominantly a fine (Figure 6). Only twenty percent of dispositions did not result in a conviction and were dismissed. This result could demonstrate the willingness and ability of the courts to prosecute marine charges. Five percent of violations did not have disposition information and are listed as "NO DATA".

The number of distinct names of perpetrators and number of citations in an MPA were the same from 2013 to 2020, indicating that there were no documented repeat offenders. Because most citations resulted in a conviction (Figure 6), this suggests that penalties for violations may be adequate to deter repeat violations. In the future, assessing the fine amount could reveal trends of penalties for marine violations.

LESSONS LEARNED

Lack of specific location information allowed ambiguous descriptions to confound data. There were several violations described as "Fishing in waters with special regulations" cited with CCRT14 7.50, which describes waters with salmon fishing restrictions. Although these violations were ultimately excluded due to the high probability of occurring in a freshwater system, there is a possibility they could have occurred at the mouth of a river. These vague descriptions of locations caused challenges in categorizing marine citations. If this method of data collection continues in other counties, it is recommended county clerks' offices are contacted in advance to obtain more detailed digital files of citations (if they exist).

Another option for filling in missing location data would be to cross-reference violations with the physical copies of citations obtained directly from wildlife officers and recorded in the Record Management System (RMS). However, misdemeanors filed in the DNCSC do not display citation numbers. Because misdemeanors cannot be searched by citation number in the DNCSC, it can be difficult to match citations across the two databases. Wildlife officers also record daily logs that could be cross-referenced with the DNCSC data to provide more insights, but those are stored outside of RMS and would introduce a third database. The RMS is still in its early stages of implementation and is subject to technical errors; if data is entered incorrectly, it will produce a null value, resulting in some entries missing citation numbers. Furthermore, many entries in the RMS only list the same MPA code for each violation on a citation. They do not list corresponding violations such as take over limits and undersized takes. Maintaining consistent citation numbers across all data records will be vital to connecting data in the future.



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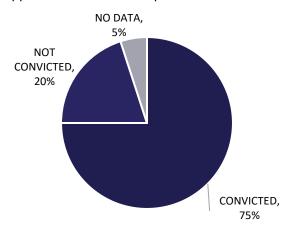


Figure 6. Dispositions for MPA violations by percentage categorized as convicted, in progress, and not convicted 2013 -2020.

SUGGESTIONS FOR OTHER COUNTIES

Accessibility and organization of records varies between counties. When attempting to find citations from other counties, no other county had an online system that allowed for broad searches by date or infraction. Most counties require search criteria such as name, date, or case number to find a citation. Copies of individual citations could be used to provide searchable criteria, but they only provide citation number, not case number which is designated by the county. Other counties will likely require a high degree of cooperation from county clerks and District Attorneys' offices.

If we can obtain additional information from the county clerks, we could also investigate the trends in fine amount and possibly compare citation stats between enforcement agencies. Fine amount was not provided in the disposition of violations that resulted in a conviction; reviewing the amount of each fine could reveal a bigger picture of maximum or minimum penalties and any changes over time. Similarly, copies of citations written by CDFW wildlife officers provide a thorough documentation for trends in violations. However, citations that are also written by local law enforcement and park enforcement agencies are not differentiated by agency in the DNCSC. Each agency has their own format for numbering citations, so if we can differentiate which citations were written by each enforcement agency, we could get a more holistic view of enforcement in the Marine Region. This would also require a high degree of cooperation between various agencies and could be further complicated by regional differences within each agency.

Additionally, the unusually small number of citations and violations in 2020 is likely a reflection of the COVID-19 pandemic altering the public's behavior, impeding enforcement efforts, or hindering processing in the courts. It would be interesting to revisit this citation data at the end of 2021 and 2022 to see if these numbers resume to rates observed prior to the pandemic.



CALIFORNIA

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RECOMMENDATIONS

- Cross-reference violations with physical copies of citations to fill in missing location information once that data is gathered
- Work with county clerks and District Attorneys' offices to establish interagency cooperation
- Look into fine amount for violations that resulted in a conviction
- Determine citation trends by agencies
- Revisit citation data at the end of 2021 or 2022 to see if normal citation numbers resume after COVID-19 pandemic.