

Long-term Marine Protected Area Socioeconomic Monitoring Program for Commercial and Commercial Passenger Fishing Vessel Fisheries in the State of California

Perspectives on the Health and Well-being of California's Commercial Passenger Fishing Vessel Fishing Communities in Relation to the MPA Network

Members of Bodega Bay Area's Commercial Passenger Fishing Vessel Community

The Marine Protected Area (MPA) Human Uses Project Team¹ anticipates hosting over 25 virtual focus group conversations with commercial fishermen and Commercial Passenger Fishing Vessel (CPFV) owner/operators throughout California from July 2020 through Spring 2021.² The information shared during these discussions is a core component of a study to gather and communicate information about the health and well-being of commercial and CPFV fishing communities in California, including impacts from MPAs. A key goal of this study is to convey commercial fishermen's and CPFV owner/operators' perspectives about the unique challenges and opportunities that fishing communities are facing to managers and decision-makers through a series of summaries and other products. The results of this study will be made available to inform discussions about MPA and fisheries management, including California's 10-year MPA network performance review.

For each focus group, a small number of CPFV owner/operators were brought together to:

- provide their perspectives on their fishing community's health and well-being, including environmental conditions, income, allocation of resources, and social and political relationships, including impacts from MPAs; and
- share feedback about their focus group experience to help improve the process for future focus groups.

The focus groups included quantitative questions where commercial fishermen and CPFV owner/operators were asked to score their port on various topics, and an open-ended qualitative discussion followed each question. This document summarizes both quantitative and qualitative findings from the focus group. More details about the methods used for each focus group discussion, including questions asked to participants and the approach to recruiting focus group participants, is available on the Project Team's website, <https://mpahumanuses.com/>. The website also hosts focus group conversation summaries and an interactive data explorer, which will be components of the final products developed upon completion of this project in 2021. For questions about this project, including focus group engagement and the content of this document, please contact us at hello@mpahumanuses.com.

Regional CPFV Port Group: Bodega Bay Area Ports

Date: Tuesday, February 10, 2021

Participants: Merlin Kolb, Bob Monckton, Aaron Orsini, Rick Powers

¹ Consisting of Humboldt State University researchers, Ecotrust, and Strategic Earth Consulting

² Previous versions of the summaries from other ports suggest there would be 30 focus groups through February 2021. The project has since evolved based on the needs of the fishing community and is reflected in all summaries moving forward.

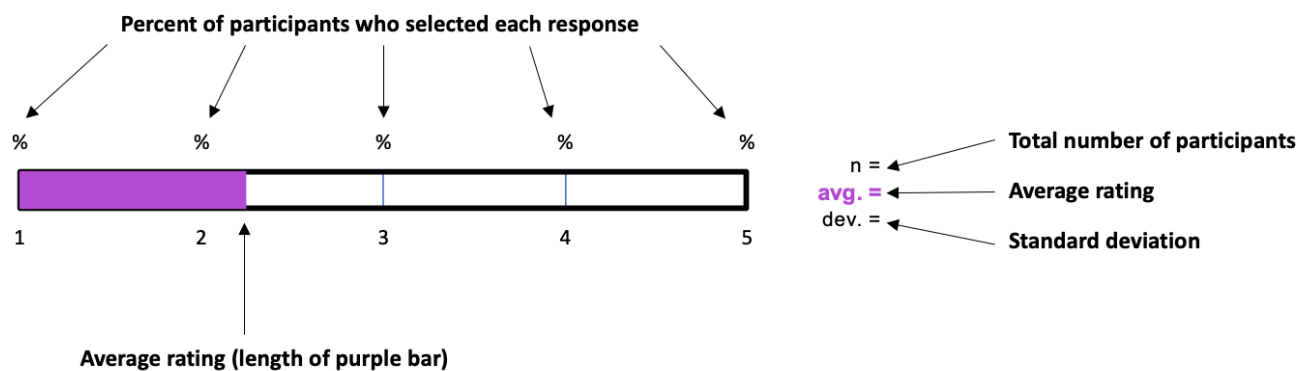
Overview

On February 10, 2021, four CPFV owner/operators out of the Bodega Bay area participated in the twentieth focus group conversation overall/fourth CPFV focus group conversation. A detailed summary of the conversation is captured below, including:

- the numerical final scores (gathered via Zoom polls) for questions asked within each theme;
- a summary of participants' perceptions, insights, and perspectives related to each question; and
- direct quotes from participants that help to illustrate sentiments in their own words.

Guidance for Interpreting Figures

There are 14 figures displaying participant responses for questions that had a numerical/quantitative component. In those figures, the percentages located directly above the bar (between 1 (low) and 5 (high)) represent the percent of participants in the focus group who selected that response. The total number of focus group participants is labeled 'n' to the right of each figure. The length of the purple bar indicates the average rating for each question, also labeled 'avg.' to the right, and 'dev.' refers to standard deviation, or the extent to which scores deviated from one another. See below for an example figure. There are also two figures on pages 13 and 22 that display the average responses for each question in the well-being and MPA sections, respectively, from highest to lowest.



In addition to providing feedback to help refine our process and approach for future focus groups, participants requested several resources be shared with them, including:

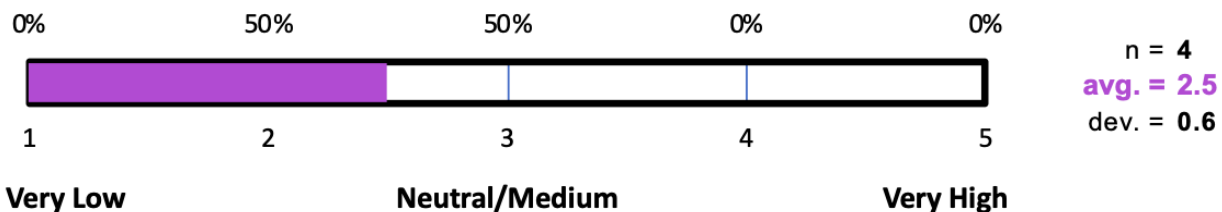
- [California Fisheries Data Explorer](#): This interactive site allows users to visualize commercial landings data (i.e., number of fishermen, pounds of fish landed, and revenue from fish landed) and CPFV logbook data (i.e., number of anglers, vessels, trips, and fish caught from specific fisheries and ports).
- [MPA Baseline Monitoring Program: North Central Coast](#)
 - [Summary of Findings from Baseline Monitoring of Marine Protected Areas \(2010–2015\), North Central Coast](#)
- [Marine Protected Area Monitoring Program, 2019–2021](#)
 - [The California Collaborative Fisheries Research Program \(CCRF\)](#)
- Details about tagging studies to monitor MPA effects, including [this lobster tagging study in Southern California](#)

Our Project Team would like to express our appreciation to the four Bodega Bay area CPFV owner/operators—Merlin Kolb, Bob Monckton, Aaron Orsini, and Rick Powers—for their time and contributions to the focus group conversation.

Perceptions of Fishing Community Well-being

Well-Being, Environmental

1. Marine Resources - Present State Overall, how would you rate the current health and sustainability of the marine resources on which CPFV owner/operators from this region rely?



Very Low

Neutral/Medium

Very High

Discussion Summary Participants reported local marine resource health as neutral to low. One participant said it was difficult to answer this question since resource health varies widely depending on the species.

- Several participants discussed how North Coast fishermen’s access to fishing grounds has declined significantly, which has resulted in increased pressure on local marine resources in the remaining open fishing grounds.
 - Several participants emphasized the importance of spreading out fishing effort to avoid overharvesting resources.
- One participant discussed changing habitats (i.e., decreasing kelp forests, decreasing salmon habitat) combined with increased fishing pressure and poor management as a primary concern for the health of some local marine resources.
- One participant expressed that it was difficult to know the current health of local marine resources and that stocks often have natural fluctuations. They stated they didn’t trust the science behind stock assessments and were frustrated with the frequent changes to rockfish bag limits.
- One participant explained the North Coast salmon fishery changes each year depending on returns and the overall health of stock, among other factors. They were unsure about the status of the upcoming salmon season.
- One participant believed local lingcod and rockfish populations were very healthy, which they attributed to the closure of deep water habitat at Cordell Bank National Marine Sanctuary that support the spawning biomass.

Participant Quotes

“Over the years, the fishery and the areas that we're able to fish has diminished so greatly on the North Coast. [...] We've been kind of forced into a narrow strip of coastline. [...] We don't have the area that we once had and all the pressure is put into a very, very slim area to be honest with you. [...] I think [the fisheries are doing well] if [fishermen] move around within the

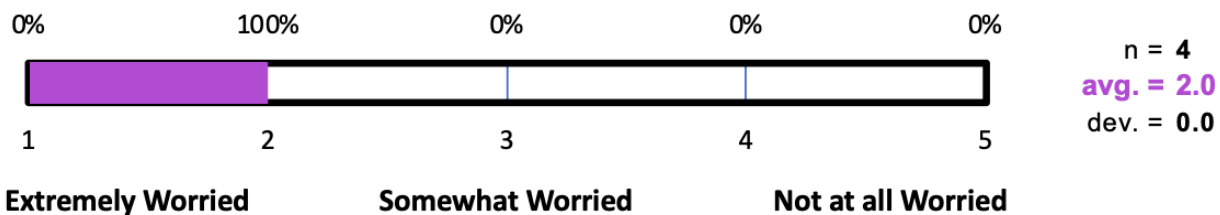
areas that we're allowed to fish and don't fish the same spots all the time. I think [local marine resources are] hanging in there."

"When you look at things like decreasing kelp forests, increasing pressure on some species [...] like, look at salmon. Salmon is somewhat doomed, it's a hard word, but they're having a really hard time in California. And we are likely, in my opinion, to have a restricted or heavily restricted season this year based on numbers of returning fish, but not necessarily reflecting what we're seeing as far as fisheries in the ocean. [...] It matters what species we're talking about. But in general, I think we're looking at decreasing and changing habitats with increasing pressure, which in my opinion, is lower sustainability and is a worry for me."

"It changes every year depending upon returns and the health of the stock. Every year is different. We don't know if we're going to fish salmon [this season] or not, depending upon a lot of different factors."

"Lingcod have probably done much, much better with the [Cordell Bank National Marine Sanctuary] closure because they are deep spawning, or not necessarily spawning deep, but they grow up and move. The biomass moves in and out from deeper water and so they have probably done the best and are maybe the most sustainable species."

2. Marine Resources - Future Concerns Overall, how worried are CPFV owner/operators from your region about the future long-term health and sustainability of the marine resource populations on which you rely?



Discussion Summary All participants were moderately worried about the future long-term health and sustainability of the marine resources on which Bodega Bay area CPFV owner/operators rely.

- Several participants expressed concerns about the future health of salmon populations due to poor water management and low river flows, which negatively affect salmon habitat.
 - One participant was hopeful that hatchery efforts could build salmon stocks to sustain a fishery, but believed natural processes would not support natural salmon populations in the future.
- One participant believed North Coast fishermen harvest more biomass than is sustainable for a particular area, though there are some exceptions (i.e., lingcod populations are healthy, and are not being harvested at unsustainable rates).
- One participant was concerned about negative effects on marine resource health from compaction of fishing effort due to area restrictions (i.e., MPAs, Rockfish Conservation Areas (RCAs)), which they worried would contribute to declining fish size and abundance.

Participant Quotes

“I have concerns, great concerns regarding our salmon and what's happening with our tributaries, mainly the water in the water management and how that ends up resulting in the total number of salmon available for us to fish for.”

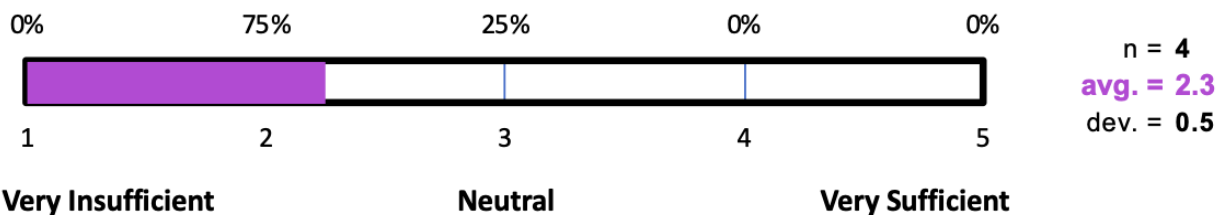
“Building on [the topic of] water management and salmon in California. I mean, not to be pessimistic about it, but I think that's really doomed. The desertification of California is already well under way. I do think that we could stock the [salmon] fishery and maintain a fishery for people in the area. I think that the hatcheries have been very successful in showing that they can really smolt in pens and have decent returns in the ocean for fishing and harvesting. But as far as having the natural process of those fish back, I think all that water is sold well above our pay grade.”

“When I was growing up on charter boats, [...] we would stop off [along the coast only] when the weather wasn't good enough to go deeper or when the conditions looked really good there. Now we fish there day-in, day-out [...] we move around some, but it's not at all the same. You know, in my childhood, we used to go to a place called the ‘football,’ and fish at 600 feet [deep]. We used to go out to Cordell Bank daily. We traveled so much more, looking for the biomass of fish. And currently, I feel that the biomass that we’re fishing for, we take a much larger percentage than I think most biologists would consider a sustainable rate. And, you know, there's exceptions to that, like lingcod, [which are doing well, following the closures].”

“We're forced into a small area. There's more and more pressure every year and that's what's got us all concerned. And if you're pounding the same area day after day, even though you can move around. [...] I've been fishing out of Bodega for 39 years and the fish have gotten smaller. And I'm not going to say there's more fish. I think the overall populations have diminished and the size has dropped significantly in the area that we're forced to fish. Now we use rock cod as our main staple, but I have to tell you, it's not the main draw from a business standpoint. Salmon is probably very important. But probably the biggest draw right now, believe it or not, is Dungeness crab. So the dynamics of our industry has changed significantly over the years.”

Well-Being, Economic

3. Income from Fishing Overall, how would you rate the income that CPFV owner/operators (including crew) from your port earn from fishing to support livelihoods?



Discussion Summary Participants reported income from fishing as insufficient or neutral due to seasonal closures, declining customer base, and high costs of living. They stated these factors have

created shifts in port dynamics, including changes in the port's primary fisheries and a reduction in the number of full-time charter boats.

- Participants shared that most large charter businesses left the port of Bodega Bay due to limited income opportunities, and the remaining smaller six-pack operations are struggling.
 - One participant noted changes to Bodega Bay's port composition, explaining there has been a shift in target CPFV fisheries out of Bodega Bay from salmon to Dungeness crab. They also said vessels are generally smaller now than they have been historically.
 - One participant said new entrants in the six-pack fleet need additional sources of income due to high living costs. They said six-pack operators do not generate income during the winter, as regulations mandate a three-month seasonal closure, which limits their overall yearly income.
 - One participant shared that they alternate between operating their charter business and commercial fishing for Dungeness crab to diversify their revenue.
 - One participant also noted that the advent of the internet has made it so customers can be more selective about where they fish such that boats aren't sold out at the beginning of salmon season like they used to be.

Participant Quotes

"I did select neutral, but the only reason I was able to select that was because I fished almost every day the weather was fair enough to go out. I had an excellent year this year, but a lot of that is just the luck of the draw. Last January 1st, I lost an engine in my boat. If that had happened July 1st, it would be devastating [and my] answer would be different. So I do agree that it's insufficient, the only reason I was able to reference it as neutral is because of all the days I had on the water this year. If you had that breakdown in the middle of the season, that's disastrous when it comes to your income. [...] It's pretty difficult. If everything goes right, you might be able to support yourself, but it's questionable at best."

"I have to work side jobs and do other stuff. As much as I love charter boats and I've dedicated my life to it, it doesn't earn me enough income to live in this area. You spend the winter getting things ready for the summer, but even then it's just difficult. My goal is to be financially able to do this as a career [which means I need] the ability to have more days on the water. Once the season's over, we're closed by regulation for three months at least, and the regulations certainly make it difficult for other ones besides those three months as well. It's not really a viable option for charter boats in those three months, most years."

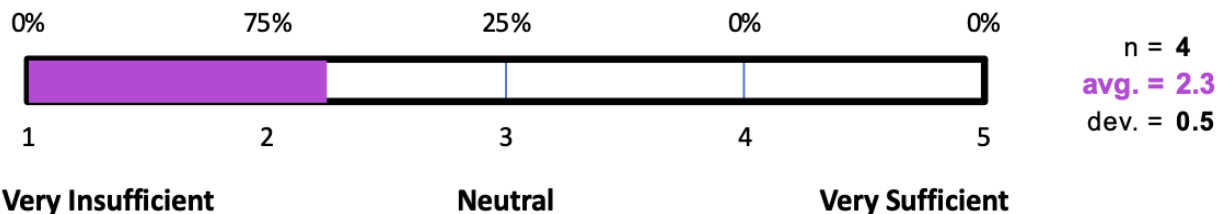
"I fish charter as much as I want to, I've knocked it down probably 40 percent [compared to how often I used to run my charter operation]. It's like 80, 90 days a year now. I also commercial crab during the winter. So I shut my charter boat operation down usually before the commercial crab season starts. That's what I want to do. After the summer, I'm done with people."

"When I first came to Bodega Bay almost 40 years ago, there was close to 20 certified boats, large boats. I happen to have the last two certified boats left and I [originally] had a fleet of three certified vessels. And when I say certified, I'm not talking about six-passenger vessels. I'm talking about boats that carry more than six. I got rid of two boats and I added another boat here, but we really don't use the other vessel for fishing, we use it mainly for mass gatherings at

sea and short bay cruises. [...] But the income is very limited and opportunities are dwindling. That's why guys have gotten out of the business. It's a labor of love. Nobody is going to get rich running a charter boat, whether he operates it or owns it, and just the fact that all these guys have come and gone, that it doesn't speak well for [the income] that guys are able to make in this business. And with opportunities dwindling and the fact that we don't ever really see any [fishing grounds] opening up, even though deeper water sounds great, but we have no structure around that area [to create fishing opportunities]. So, I mean, until there's more opportunity, the income is insufficient for most people.”

“We see a fair number of six-pack operators coming into the business, but a lot of these guys have done something else to make a living, and maybe they are retired now. Great way to take your friends out fishing and establish a business, but not when you're doing it for your sole income. To watch all these boats disappear over the years, there's a reason for that. Nobody is having a boat built, you know, a large boat because it's pretty much cost restrictive. And we're facing so many things right now. We've got some things coming up with crabs, which happens to be the most important, biggest draw we have out of Bodega Bay now. It used to be salmon many years ago. On opening day of salmon season, for years and years, you couldn't get a spot on a boat. That's not the case anymore with the advent of the internet. People choose where they're going to fish from. They wait to see what the catch is. We're losing that. Everything has changed. We're not seeing new participants. People can't buy a boat and get into this business. It's a major investment, and you really don't make anything until your boat is paid for.”

4. Allocation of Resources Overall, how would you rate the allocation of fish resources for CPFV fisheries in terms of supporting the CPFV industry?



Discussion Summary Several participants reported insufficient allocation of fish resources to support Bodega Bay area CPFV operations, which they specifically attributed to recent changes to recreational Dungeness crab trap allocations. One participant reported allocation of resources as neutral.

- Several participants described how the recently updated Dungeness crab trap allocations for the recreational industry are significantly smaller than allocations for the commercial industry. They noted the challenges of CPFVs being binned in similar categories as recreational fishermen even though they are a business operation that relies on these trap allocations to make a living. They also noted the smaller proportion of catch of CPFVs in relation to commercial catch. They believed these allocation changes will negatively affect local CPFV businesses since customers come specifically to target Dungeness crabs.
- One participant believed area closures, rather than specific resource allocations, created negative effects for local CPFV operations since area closures affect the fleet’s ability to spread out effort and avoid overharvest.

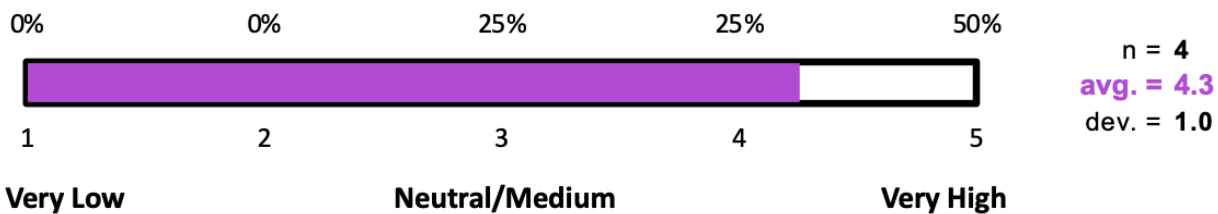
Participant Quotes

“The economic implications regarding the new Dungeness crab regulations, [California Department of] Fish and Wildlife said that there was not going to be any adverse economic impact on our [CPFV] operations. But I have to disagree, simply because they said that we could turn to other fisheries. Well, we do have rock cod that's open that time of the year. But the problem is people [CPFV and charter boat customers] don't come during November and December to catch rock[fish] or lingcod. They come to catch crabs. And so there will be a major adverse impact economically to our vessels.”

“One thing we haven't touched on is this equity thing. [...] The reason I'm keying in on the word equity is that [the commercial crab industry has] 171,000 crab pots. And once commercial season starts, our sport crabbing is over because there's so much [commercial] take involved. Our number of sport crab pots, it's less than 2,000 total. So 2,000 versus 171,000, and then they want to put more restrictions on us. It takes one pot [...] to shut down our fishery [if an entanglement involving a crab trap occurs].”

“The allocation is really the [area] we have to fish. You look at places like Cordell Bank and the ‘football,’ or out deep where we might fish, [they are] closed down in response to crashes of fisheries, which were mainly due to large commercial operations, primarily draggers. The allocation looks weird from here. We're talking major shutdowns 20 years ago, and it's hard to quantify that. [...] Every year, every regulation, it takes away a little bit more, and what it takes away is [...] the ability to spread out, which is what keeps us from overfishing a specific area.”

5. COVID-19 Impacts *How disruptive do you think COVID-19 has been to your region’s CPFV fishing operations?*



Discussion Summary While COVID-19 had mixed impacts on participants’ businesses, participants generally reported COVID-19 was disruptive and changed the way Bodega Bay area CPFV businesses operate.

- One participant said the CPFV fishing season was delayed by three months due to COVID-19 state- and county-imposed business closures.
 - One participant described an innovative marketing strategy that kept their business running during the initial COVID-19 business closure where customers pre-paid for fishing trips prior to COVID-19 restrictions being lifted to secure a spot.
- One participant acknowledged the mixed effects of COVID-19 on the CPFV industry, and suggested one positive effect from COVID-19 was customers staying close to home and investing in local activities rather than traveling abroad.
- One participant hoped fisheries managers would consider the shortened fishing season as a result of COVID-19, and provide more fishing opportunities due to decreased fishing effort during that time.

Participant Quotes

“We raised the price a little bit. Ran lighter loads. It didn't compensate for the full normal year deal. And then for the family groups, we did a regular deal, but people were scared at the beginning. A lot of people were scared. We didn't get going until middle of June almost, usually we start in April, so there's three months right there. We all felt it.”

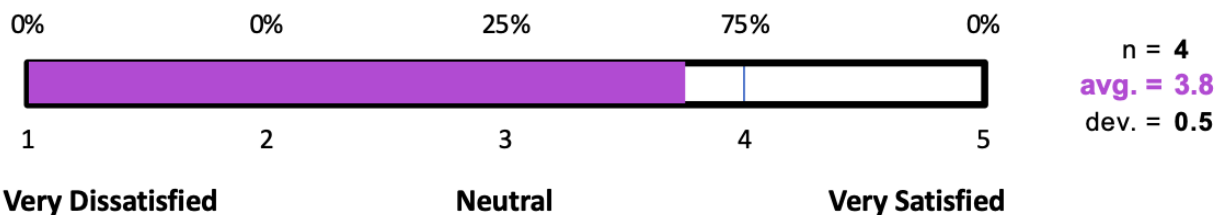
“Lucky is the right word. We could have been eliminated just by one small phrase that was in the governor's mandate or the county's follow-through with the mandate. We're very lucky that we were able to operate. And if it weren't for some of my customers early in the season, we might not have been able to start. I did a campaign where I asked customers to purchase tickets in advance while we were closed, and that was really successful. But without their support, we probably wouldn't have fished last season because you can't do anything if you can't buy your first tank of fuel.”

“Yeah, I chose high impact because I don't think there's a way to look at it where COVID-19 hasn't impacted the industry in huge ways all over the board. I mean, yeah, there's a couple of positives. People are traveling out-of-country less, so they want to go do things nearby more, but it's a lot of impact.”

“I'm hoping that part of the management process considers the fact that because everybody has operated at reduced levels [due to COVID-19]. [...] And I'm hoping that we get more time on the ocean because the effort has dropped considerably. When you start talking about numbers of people on our boats, it's far less. And hopefully that enters into the management process and creates more opportunity.”

Well-Being, Social/Political

6. Job Satisfaction Overall, how satisfied do you think CPFV owner/operators from the region are with their jobs?



Discussion Summary Participants reported they were generally satisfied with their jobs because they love fishing and being on the water, though several participants expressed some dissatisfaction due to stress and lack of job security.

- One participant acknowledged that the CPFV industry has its challenges, but was overall satisfied and enjoyed the work involved in operating a CPFV/charter business.
- Several participants expressed feeling fulfilled by working on the ocean and with their clientele.

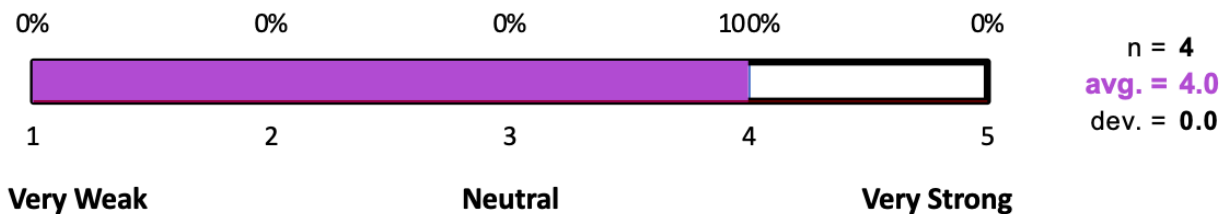
Participant Quotes

"I feel both dissatisfied and very satisfied with my job on the water. I love my job. I wouldn't want to be anywhere else. My sense of job security is not super high and my level of stress is pretty high. But the positives are fantastic. I left another industry to come and try and do this, so I love it. I absolutely love it, which is great on the fulfillment side of things, but it's hard to say, taking in all those factors."

"I [am satisfied] because I get paid to fish every day. That's pretty satisfying to me. I know there's problems and we all want it to be better than it is right now. But I'll tell you what, fishing every day to make your living is pretty good. I've had a lot of different jobs and fishing is pretty much the funnest job I ever had."

"It's definitely a labor of love. I do think that there is a certain amount of stress. I think the stress level has grown over the years simply because I think our clientele has changed. [...] They have access to a lot of information on the computer and they just don't realize how fishing really is and how it's related to conditions. But it is a labor of love. We all do it because we love it."

7. Social Relationships - Internal Overall, how would you rate the strength of social relationships (or social capital) among CPFV owner/operators in your region?



Discussion Summary All participants rated the strength of relationships among Bodega Bay area CPFV owner/operators as strong. They said local CPFV owner/operators get along well and work together toward common interests.

- One participant believed there is healthy competition between CPFV owner/operators, yet when anyone asks for help, including tips about where the fish are biting, the group is responsive and supportive.
- Participants identified one person in particular who plays a leadership role in the port and does a good job representing the interests of Bodega Bay area CPFV owner/operators as well as making sure owners/operators are aware of upcoming issues. Several participants expressed appreciation for this leader.

Participant Quotes

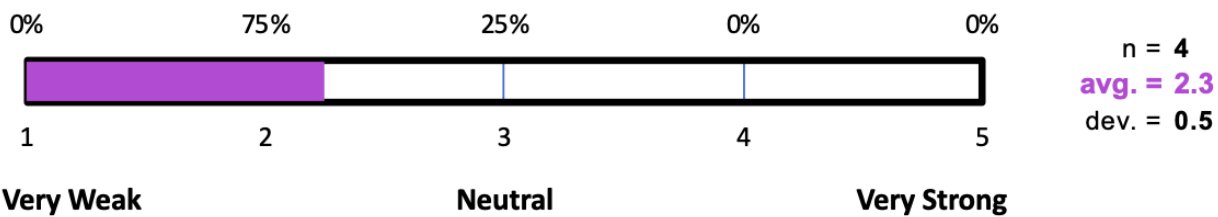
"Everybody seems to get along really well, although, you know, we all compete amongst ourselves. I believe that it's healthy competition and everybody works together and we all share common interests. There's competition on a daily basis, but it's all friendly. And we've got a bunch of great guys that get along well. So we're lucky in that respect."

"It's a very strong group that we have in Bodega. And I know people that have complimented us as a unit. I'm talking about clients that are impressed by our level of communication. And if I'm

out on the water and I need something, whether it's pointers on a spot, how they're biting or other things like a mechanical issue on the boat or even dynamics with clients on the boat, I feel that all of our group is really, really responsive to people when they reach out and ask for some support. I couldn't read it any differently than strong in that one.”

“During a particular gathering [related to an upcoming management decision], [port leader’s name redacted] called us in and let all of us know that there was an important issue that we had to get together and talk about. And I really appreciate [them] for doing that. [They] let us know that we needed to gather up and [...] get unified before we get steamrolled.”

8. Social Relationships - External Overall, how would you rate the strength of relationships between CPFV owner/operators in your region and external groups who could help support industry needs?



Discussion Summary Several participants reported weak relationships between Bodega Bay area CPFV owner/operators and external groups, while one participant rated these relationships as neutral. Participants specifically spoke to the challenging relationship dynamics between the local CPFV/charter fleet and the California Department of Fish and Wildlife (CDFW) and Fish and Game Commission (FGC) related to the decision making process about Dungeness crab trap allocations (see the *Allocation of Resources Discussion Summary* on page 7 for more detail).

- Participants discussed their desire for improved communications by CDFW and FGC to the CPFV fleet. They described a recent situation when FGC updated the regulations for the CPFV crab fishery, related to the reduction of marine life entanglements, and included CPFV businesses with the recreational fishery rather than the commercial fishery. Participants explained that they identify as commercial businesses and wish to be regulated separately from private recreational fishermen. They felt blindsided by the change and frustrated by the lack of transparency and outreach efforts to the CPFV fleet by FGC leading up to the decision. They made suggestions for their desired communication methods, including post mail and email.

Participant Quotes

“I really think it's important that the regulatory agencies that oversee our operations need to reach out to us a little better. [...] But I have to tell you that there were a few brief scoping sessions and we attended those and we were led to believe that it was just regarding recreational crabbing, not CPFVs. And in the process, we lost our commercial designation. We got moved from one section to another and were included with the recreational changes. So this is a valid concern because we don't feel like that process was real transparent from the start. We are businesses, we are registered commercial passenger fishing vessels.”

“We all operate businesses, we all have an address, things can be mailed to us with snail mail, we all have emails. There was no notification of any of that crab regulation stuff to us. [...] We were blindsided because the state was trying to push that thing through under the radar, they

kept it kind of quiet. This happened at a [Fish and Game] Commission Zoom meeting. It's really easy to make a rule change that's somewhat controversial on a Zoom call.”

Well-Being, Overall/Additional Comments

9. Overall/Open-ended *Is there anything not captured above that you would like managers and other readers to know about your fishing community/industry?*

- *What do you think federal and state managers could do to better support California's CPFV fisheries?*
- *What do you think members of your fishing industry could do to support the well-being or sustainability of your fishing community?*

Discussion Summary Participants discussed several concerns and challenges related to existing and potential future management restrictions.

- Participants discussed the compounding impacts of many existing management restrictions (i.e., MPAs, RCAs, Cordell Bank National Marine Sanctuary) which have vastly reduced their fishing grounds.
- Several participants shared their concerns about Assembly Bill 3030 and the potential negative effects to their businesses from additional area closures.
- One participant discussed the increasingly challenging regulatory landscape and financial outlook for CPFV/charter owner/operators, including an emissions reduction proposal by the California Air Resources Board (CARB) they believed has potential to greatly affect the financial viability of CPFV/charter operations.

Participant Quotes

“The MPAs closed a significant, significant amount of area from Point Reyes north to Salt Point. And now we're hearing about this [Assembly Bill] 3030, where they're going to take 30 percent. There's not going to be any ground left.”

“If you look at Bodega Bay, the area that the charter boats normally fish is typically from Point Reyes north to Salt Point. Sometimes the guys would go further north and a few of us once in a while go a little bit south. [...] We just don't have that much ground and we've been pushed into shallow water in the same area for many years. We have no access to anything offshore. The reef that's outside of Cordell Banks, [...] the RCA from 240 to 900 feet [...]. The fact we're losing ground every year scares everyone because we just don't have that much area to fish. [...] Even though depths [where we can fish] are increasing with new regulation changes next year, and there's more water to the south of us, we don't benefit from that. There is no structure out there. So we're in a bit of a dilemma, and it's got me very concerned about the future of our area and where we can fish.”

“But when I say an industry under siege, I'm not just talking about from a fisheries related aspect. Here's another example. We have CARB, which is California Air Resources Board. [The Golden Gate Fishermen's Association and Sportfishing Association of California have] been working along with CARB, trying to figure out how we're going to deal with a new proposal that they have to implement tier four engines on our vessels. Well, it turns out that none of the

engine companies are presently building tier four engines. They're very hot, and our boats really won't accommodate those engines even if they were available. And so we just went through a meeting here the other day, [...] and the whole meeting was directed at our income and projected ticket sales and capacity of vessels. They were trying to figure out what can the industry bear which would allow them to get to their desired [outcome,] less emissions and cleaner running engines in our vessels. And basically, what it came down to was new vessel replacement. And most of our boats, at least certified vessels, have gone through generations of families. It's not uncommon for a family to have a boat for 30 or 40 years. Replacing a vessel is cost restrictive. [...] The question we were asked at the end of the conversation was 'well, if there were a six-year implementation date, would that give you enough time to build up enough for a down payment on a new vessel?' There are so many things that can affect our income. It's really not a pretty picture."

Perceptions of Fishing Community Well-being, Average Responses for Questions 1-4, 6-8

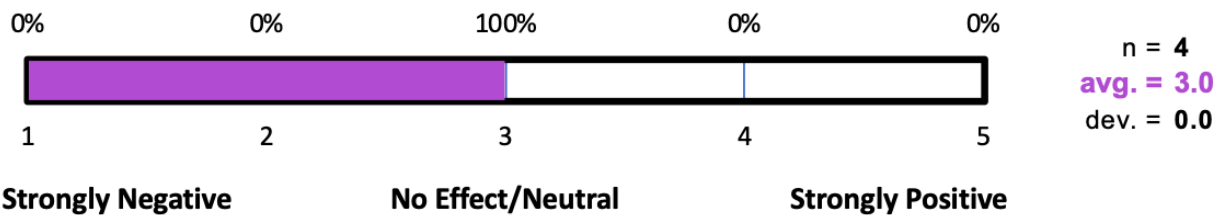
(Note: The following figure does not include the average rating for question 5. COVID-19 Impacts.)



Perceptions of MPAs

MPAs, Outcomes/Effects

10. MPA Ecological Outcomes How would you rate the effect that the California MPA network has had on marine resource health in your area?



Discussion Summary When asked about ecological effects from the MPA network on local marine resource health, all participants scored no effect/neutral. They shared examples of positive, negative, and neutral effects from MPAs on local marine resources.

- Several participants specified they have not experienced positive MPA effects (i.e., spillover of target species). However, they believe there is a positive effect from MPAs on rockfish, but these fish do not travel outside the MPAs and are inaccessible to fishermen.
 - Several participants discussed the healthy local lingcod population, and one participant suggested the high lingcod abundance is due to the Cordell Bank National Marine Sanctuary rather than the California state MPA network.
 - One participant did not believe MPAs positively affect salmon populations.
- One participant said along the coast near Bodega Bay, the size and abundance of their target species is decreasing in the open areas because of increasing fishing pressure, though they did not directly attribute a cause for this.
- One participant believed local MPAs have indirectly negatively affected the local kelp forest ecosystem that local CPFV/charter operators rely on. They explained the MPA network essentially destroyed the commercial urchin industry due to the closure of traditional nearshore commercial urchin fishing areas, and when fishing pressure decreased, the urchin population exploded and upset the ecological balance, with kelp and abalone populations suffering as a result.

Participant Quotes

“No, I mean, there was no [change to the marine resources]. Other than we can't fish there, that's all.”

“I'd like to know if the MPAs are working, I really don't see any significant change. I think overall populations [outside the MPAs] are decreasing because the pressure is increasing. I know that the size is diminishing at least up and down near coastal areas, which is the area that we fish. [...] I'd like to say that MPAs are very successful, but I think school's out on that issue. I really can't tell the difference myself.”

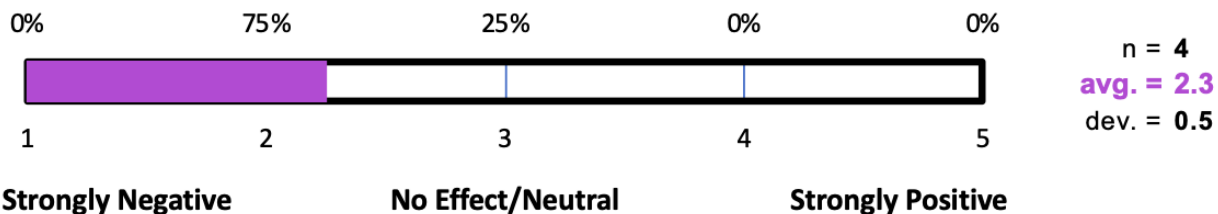
“Has it had an effect on the marine resource? Yeah, yeah, it definitely has, I don't think you could argue that. Has it had an effect on the marine resource that I get to fish? I don't know

how you would measure that. I don't personally see it. [...] For the area inside the MPA, it's great for those fish. You look at black rockfish, [or] large vermilion rockfish that are like 50 years old or something like that. It's likely to have much [more] older rockfish in those areas specifically."

"Nature has a funny way of knowing its boundaries, and I do think that the fish are larger in these protected areas and it seems the population is much higher. But I don't know about [fish] filtering out and that type of thing."

"The MPAs have devastated the commercial urchin fishery. When the MPAs went into place - they're basically nearshore, which is exactly where the urchins are at - that's one of the reasons that [urchin populations] have exploded so much and have eaten the kelp forest and had a negative impact on the ecosystem and the abalone. That's not the only reason the abalone are in trouble, but it was a huge reason maybe no one thought about, that if they [close] the best urchin diving spot on the North Coast, a series of spots, not just one spot, almost all of them, then you're going to kill the industry. [And that will] enable the urchin to have less pressure and maybe upset the balance that was found before. I'm not saying that's the only reason at all why we're struggling with kelp forest and abalone, but it could be one reason. The kelp forest is part of the ecosystem that our nearshore rockfish thrive in, which [charter operators] depend on."

11a. MPA Livelihood Outcomes Overall, how would you rate the effect that the MPA network has had on the ability for CPFV owner/operators from your region to earn a living?



Discussion Summary Please see the **Discussion Summary** following question 11b. *MPA Effects - Overall* which summarizes the conversations related to questions 11a and 11b.

11b. MPA Effects - Overall What other types of effects or impacts have CPFV owner/operators from your region experienced from MPA implementation?

Discussion Summary Three participants reported MPA effects on local CPFV owner/operators' livelihoods as negative, while one participant scored these effects as no effect/neutral. Participants discussed various negative effects resulting from the restriction of their fishing area by the MPA network.

- Several participants mentioned the need to travel further distances to travel around MPAs to open fishing grounds, resulting in higher fuel costs and less fishing time for clients.
 - One participant said the MPA network has decreased their ability to take multiple trips per day because of the increased travel time.
- One participant said crowding of fishing effort around MPA boundaries can scare away target fish from entering the open fishing areas.
- One participant said MPAs decreased their options for fishing grounds in inclement weather.

- One participant was frustrated about the restriction on salmon trolling in local MPAs, which negatively affects their business with no obvious benefits.
- One participant explained that while MPAs do affect their businesses, CPFV operators overcome the challenges associated with MPA effects by innovating solutions.

Participant Quotes

“You definitely have to use a lot more fuel to move around more because you've got to drive around the [MPAs] so that you can fish. So that's why I wrote negative. I mean, [clients] don't like the ride to be that long, a shorter ride is better, more preferable. And then [more] fuel, you know, [means] less profit. I have to burn more fuel per day per trip.”

“[The MPA network] certainly affects your ability to take multiple trips in a day.”

“I think everybody would acknowledge it has an effect on the business, but one thing charter boat operators are very good at doing is working around obstacles or conditions. [...] And that's not to say that it doesn't have an impact. It's just to say that we've managed to mitigate that impact by doing something else. But the impact that it does have is restricting the overall area that we can fish.”

MPAs, Discussion of Specific MPAs

12. MPA Effects - MPA Specific Which MPAs have had the most impact on CPFV owner/operators from your region and why?

Discussion Summary Participants shared that MPAs in their area have restricted much of their fishing grounds. They said Bodega Head State Marine Reserve (SMR) and State Marine Conservation Area (SMCA) and Stewarts Point SMR and SMCA have created the most negative effects for local CPFV/charter operations.

- *Bodega Head SMR and Bodega Head SMCA:* Several participants discussed the historical importance of these fishing grounds for the local CPFV/charter fleet due to their proximity to port. They said these closures prevent operators from making multiple fishing trips in a day. Several participants discussed the crowded conditions (due to both charter and private sport boats) along MPA boundaries, which they call the ‘fence.’ They explained the crowds can scare away fish and create compaction issues and safety risks on foggy days. One participant understood the value of closing this area to rockfish fishing, but did not understand the value of closing this area to salmon fishing. One participant said since salmon trolling isn’t allowed here, this MPA greatly affects their business in general.
- *Stewarts Point SMR and Stewarts Point SMCA:* Several participants said these MPAs closed historically important fishing grounds to the local fleet, where there is a large area of good bottom structure.
- *Point Reyes SMR and Point Reyes SMCA:* Participants reported these MPAs have smaller but still substantial effects on local CPFV/charter businesses compared to the Stewarts Point and Bodega Head MPAs. They stated CPFV operators used to make multiple trips in a day to these areas.
- *Russian River SMCA:* One participant said this was a good fishing area for rockfish, including black rockfish.

- *Various Farallon Island MPAs:* One participant said local CPFV/charter operators did not fish at the Farallon Islands before the MPAs were implemented. Several participants anticipated they would shift their effort to fish near Fanny Shoals more often, once anticipated regulatory changes open deeper water fishing.

Participant Quotes

“[Bodega Head/the ‘fence’] gets very crowded when the fish are [there] and people ask ‘why do they congregate in that corner?’ Well, they’re not congregating on that corner, we’re on the edge of them on the reef [and] they’re all the way across the reef, but we just can’t go on there and fish for them. So it gets very crowded when the bait and the fish are on that reef right there. We’ve seen times when 200 boats [both sport boats and charter boats] have been right there in that one square mile. You know, it gets ridiculous if the fish are in there. We’re sporty magnets anyways, but that’s beside the point.”

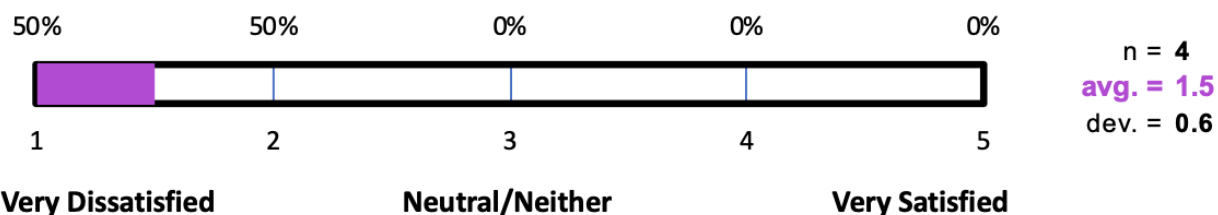
“[If Bodega Head MPAs were opened up,] it would decompress the fleet more. Instead of everybody congregating along the fence in foggy conditions, people could spread out more, you know? Yeah, because the end result is that people will press their luck rather than spread out. So because there’s a fence through GPS marking, they’ll just wad up in there. Doesn’t matter if it’s foggy or not. They’ll take the risk. And I’m talking about all boats, charter boats and sport boats. They’ll accept the risk rather than mitigate it if the fish are there.”

“That Stewarts Point [SMR and SMCA] was one of the larger areas that we had coastally [for] fishing. And I’m just talking square miles of structure. Stewarts Point covered as much good area for fishing as anywhere that we have to fish. It’s probably half again as much area to fish for bottom fish as anywhere else we [can fish] currently.”

“The Point Reyes [SMR and SMCA] one encompasses a bunch of grounds. [...] I know a lot of guys end up fishing right next to that fence, myself included, down in Point Reyes on the north side of the closures. But I would say that’s a much smaller effect business-wise than the Bodega Head or the Stewarts Point closed areas.”

MPAs, Management

13. MPA Management Overall, how satisfied do you think CPFV owner/operators from your region are with the management of the MPA network?



Discussion Summary Participants were generally dissatisfied with the management of the MPA network. Several participants said they weren’t aware of any active management of the MPA

network and hadn't received communications about ongoing management efforts. Several participants wished to be meaningfully involved in MPA management throughout the process.

- Several participants felt fishermen's input is not meaningfully considered in management processes nor valued by fisheries managers, which creates bitterness around management processes and outcomes. One participant attributed their dissatisfaction with MPA management to poor communication by managers, which creates distrust in the management process overall.
- One participant discussed the MPA implementation process and felt betrayed when MPAs were designated in areas local fishermen said were important fishing grounds.
- One participant believed California fishermen coastwide desire a management system with rotating closures.

Participant Quotes

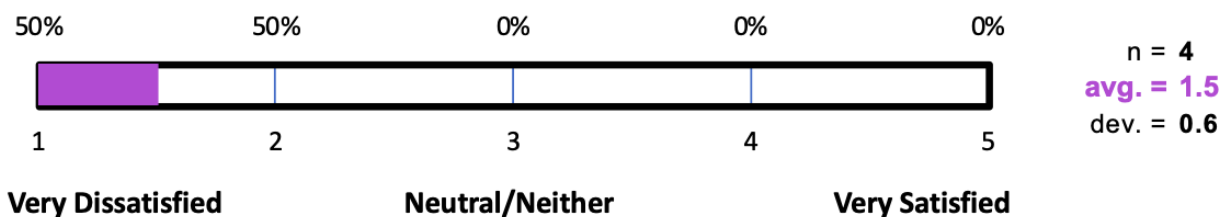
"We very much care about the management of the resources. The bitterness is because we disagree with the management and we're not included in it."

"A lot of my personal dissatisfaction is from the dissemination of knowledge about them. That has a long standing negative history, so that can be hard to say, even if they were talking more about how they were managing it or why they're making the choices they were making, it would be hard to put much faith that they would take our input into account."

"Fishermen do need to be an integral part of the management process [...] I'll bet you every single [focus group for this study] when it comes to MPAs would mention rotating these closed areas. We're not marine biologists, we're not oceanographers, we're fishermen, but we're on the grounds daily and we look at it from a fishermen's perspective. But we do know what lives where, because we have to know. [...] Being a fisherman, why would you keep one area closed? That's why I have these questions about the MPAs. Who knows whether they're really working or not? Prudent management to me would be: you close an area for a while, and then you open it and close another area. Doesn't this come up in every conversation up and down the coast?"

"When they came to put in the MPAs, [...] they asked 'well, where do you like to fish,' where it would be closed down and all that stuff. And overwhelmingly, one of the answers was 'well, one of the very best places to fish at Bodega Bay is Bodega Head.' And one of the very first things that happened is they closed that exact spot. That didn't create really good will. And so it has taken 20 years before groups like yours are able to come along and start up that dialogue again, because a lot of fishermen felt betrayed for lack of a better word."

14. MPA Monitoring Overall, how satisfied do you think CPFV owner/operators from your region are with the monitoring of the MPA network?



Discussion Summary Participants were generally dissatisfied with the monitoring of the MPA network. They said the CPFV/charter fishing community wants to be involved in the design and implementation of monitoring studies. They also discussed managers' poor communication of monitoring study results.

- Some participants had been marginally involved in past monitoring work, and were frustrated about the design, implementation, and reporting of results from MPA monitoring studies.
 - Several participants were frustrated that researchers who are unfamiliar with the local area were conducting MPA monitoring studies.
 - Several participants were frustrated about sampling locations and techniques for monitoring studies. One participant was concerned that researchers rather than fishermen choose fishing techniques for monitoring studies. They believed the maps used by researchers for study site selection might not include all of the small reef structure and rock outcroppings outside MPAs, and they were concerned that such study results would show low fish abundance outside MPAs and high abundance inside MPAs, and would be interpreted to support increasing the size and number of MPAs.
 - One participant wished to know about monitoring study results but did not know where to find them and had not received communication about results from managers.
- One participant mentioned it was difficult for them to participate in summertime monitoring studies due to scheduling conflicts with their charter operation.

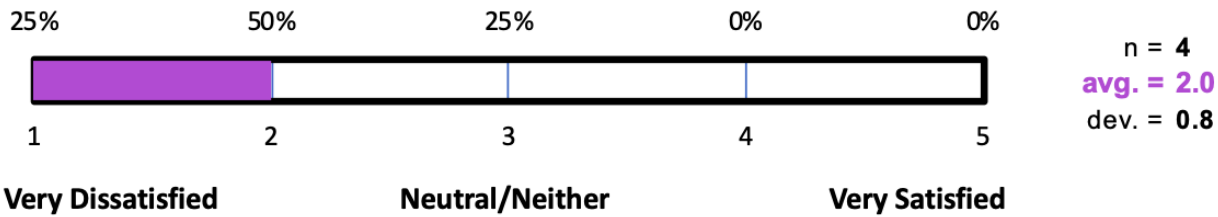
Participant Quotes

“They need to do a much better job on sharing the results because I've never really seen them. Yeah, I've heard of the trends, but where is that? Where are the results? Where do they publish them and who do they share them with, the results of the samples?”

“We want to be part of [the monitoring process], part of all of it. The whole process. The whole process.”

“So I have a concern about the MPA monitoring program. In our area, they're doing significant studies in the MPAs, as they are all up and down the coast. [...] I did some of this [MPA monitoring] stuff in its early stages, I wasn't able to [continue participating] because it's in the middle of the summer and we're just too busy to take part in that monitoring process. And [now] we have a boat that comes from out of the area and he's not real familiar with the area. [...] If you've got somebody from out of the area trying to fish just outside an MPA, a lot of times that person might not even know what's available around that MPA. So I kind of question the monitoring program. And I'm sure some of the results from the monitoring program are available. But in our area, it's not reflective of people that are familiar with local knowledge.”

15. MPA Enforcement Overall, how satisfied do you think CPFV owner/operators from your region are with the enforcement of MPAs?



Discussion Summary Participants were dissatisfied with MPA enforcement and discussed CDFW’s limitations in local enforcement efforts.

- Several participants were not aware of local MPA enforcement efforts, and one participant said they heard about one instance of an undercover enforcement boat in the area.
- One participant believed CPFV/charter operators are more actively enforcing illegal fishing in MPAs than CDFW wardens. They said while at sea, CPFV/charter operators approach other boats fishing illegally in MPAs and confront those vessels by informing them about the MPA boundaries. Since CPFV/charter operators are already making contact with folks who are fishing illegally in MPAs, the participant suggested that managers should include charter boats in an official capacity for MPA regulatory information dissemination.
- Another participant perceived most violators weren’t purposely fishing in an MPA, but were ignorant of MPA boundaries.
- One participant believed CDFW adequately communicated information about MPAs to the public. They also acknowledged CDFW’s limited resources and capacity to enforce MPAs, and said CPFV/charter operators try to help when possible.
- One participant was frustrated that CDFW does not have capacity to enforce MPA regulations.
- One participant believed CDFW’s MPA maps had improved recently.

Participant Quotes

“I haven’t seen a lot of enforcement myself. [...] Maybe I’ve missed them, but other than hearing about some undercover boats, catching people fishing in the closed zone, I don’t remember really seeing very many people doing enforcement, especially on big days like season opener.”

“I think we [CPFV/charter operators] do more enforcing than the CDFW enforcement does. We kick people off and we educate them ‘hey, you’re in an MPA.’ We’re the ones that run them out of there. [...] I don’t know if the people really don’t know, they don’t care, or what it is, but there’s constantly people in the [MPAs]. So there’s a lot of self enforcement. [And] the self enforcement kind of goes along with the comment that we heard earlier, why not use the charters to help educate on things?”

“I think [CDFW] did an adequate job trying to get the word out to the public. They had numerous handouts, they had charts, I think that they did as good as they could do to try and get the word out. The information is there. I don’t think that most of the people [illegally fishing in MPAs] are trying to access a closed area, I really don’t, I think it’s just ignorance. There’s not a [CDFW] vessel in every harbor, and they have limited resources and they only have the ability to

enforce certain areas at a time. So we do our best to try and help educate people when we're out fishing. But I don't think people are in there trying to access closed areas on purpose."

"They should make laws they can enforce. It's a waste of time."

"Recently, the MPA maps available through California Fish and Wildlife have become better, so that's become slightly easier to understand for people. So that's moving in the right direction."

16. MPA Overall *Any additional comments or concerns about the MPAs and MPA management you would like to communicate?*

Discussion Summary Participants reiterated some thoughts and shared additional thoughts they wished to communicate to managers.

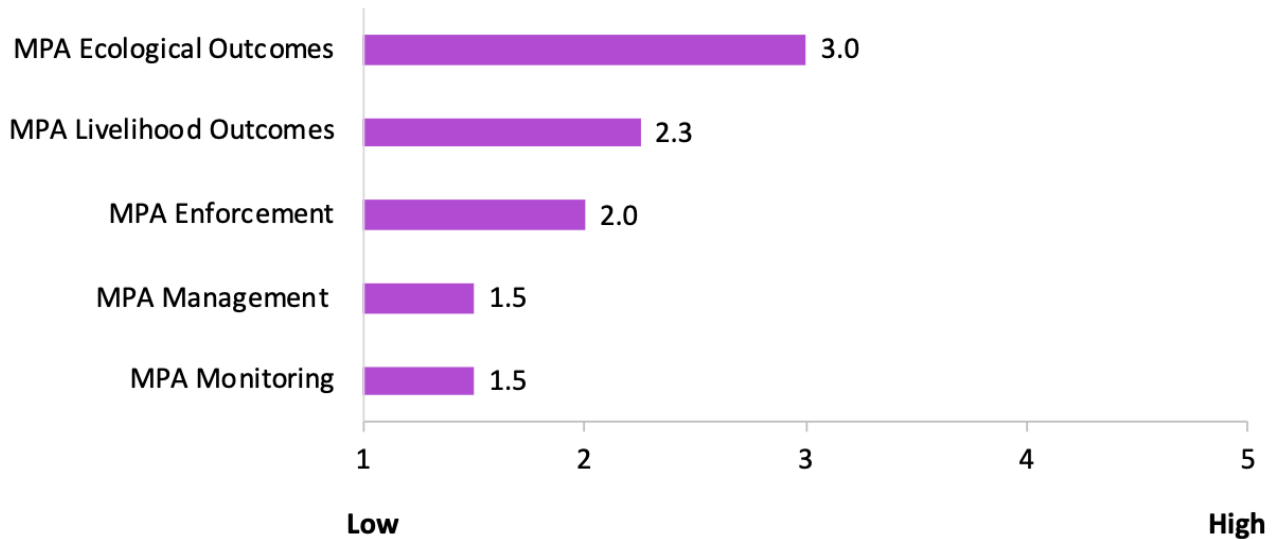
- One participant reiterated their desire that fisheries managers open MPAs on a rotational basis.
 - One participant believed opening MPAs close to port would allow them a smaller carbon emissions footprint.
 - One participant expressed concern that even though closed areas (e.g., the Cordell Banks National Marine Sanctuary) have rehabilitated some fish stocks, there is no intent to reopen the area. They expressed frustration that once an area is closed, it is closed in perpetuity.
- One participant shared their frustration about the Coast Guard's changes in CPFV license procedures, which they say has resulted in an increased number of entrants into the industry who are not serious about the business, creating challenges for those who make a living fishing.

Participant Quotes

"They've been closed too long with no access. Closing is easy, management's another. They need to split Stewarts Point up, maybe make a north and a south, or a north, south and middle and put those regions on rotation so we can gain access. You know, we want management, not closure."

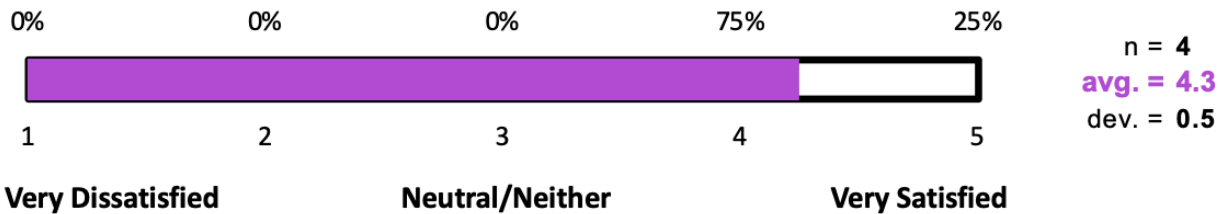
"Probably 20 years ago, the Coast Guard relaxed on licensing requirements and [...] many years ago, you had to have documented time that was signed by somebody in the industry that verified that you had enough time [relevant professional experience] to sit for a Coast Guard license. But what's happened is this has become privatized and they even have tutors that travel to different locations and will teach a person what he needs to know to pass the test. So what that's done is it has really increased the number of people that have come into this business. But a lot of the people are really not trying to make their living at it [...] and we're seeing so many people come from the outside because it's very easy to obtain a license. [...] And I don't think it's for the betterment of our industry. I think it also potentially presents problems for the public, too, because not everybody is really a serious player. [...] So it's made it tougher for the people that are serious players like these guys trying to make a living."

Perceptions of MPAs, Average Responses for Questions 10-11a, 13-15



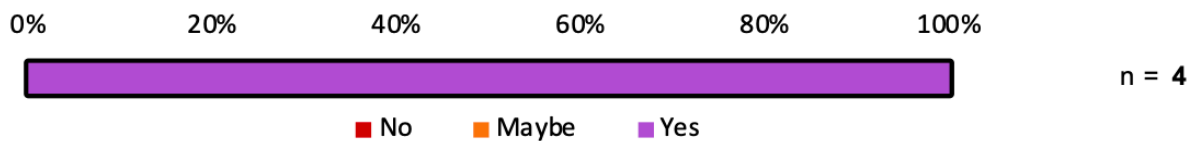
Feedback on Virtual Process

17a. Satisfaction with the Virtual Process Overall, how satisfied were you with your experience participating in this virtual focus group?



17b. Willingness to Participate in Virtual Process in Future Would you be open to participating in a virtual focus group or meeting like this in the future?

(Note: For the following figure, the length of the purple bar indicates the percent of participants who responded 'Yes' to question 20b. If participants responded 'No' or 'Maybe,' a red or orange bar would appear, respectively.)



17c. Process Open-ended *Can you share any additional comments about your experience in this virtual focus group? What do you think are some of the pros and cons of having a conversation like this online rather than in-person?*

Discussion Summary (Due to time constraints during the focus group, participants provided ratings for these questions, but were not asked to discuss their responses.)