

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 Fishing Communities in Relation to the MPA Network *Members of Moss Landing's Commercial Fishing Community*

The Marine Protected Area (MPA) Human Uses Project Team¹ anticipates hosting over 25 virtual focus group conversations with fishermen 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 Commercial Passenger Fishing Vessel (CPFV) fishing communities in California, including impacts from MPAs. A key goal of this study is to convey fishermen's 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 fishermen representing a range of fishing interests were brought together to:

- provide their perspectives on their fishing community's health and well-being, including environmental conditions, markets, infrastructure, 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 fishermen 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.

Port: Moss Landing

Date: Wednesday, December 16, 2020

Participants: Calder Deyerle, Alan Lovewell, Wilson Quick, Jerid Rold

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.

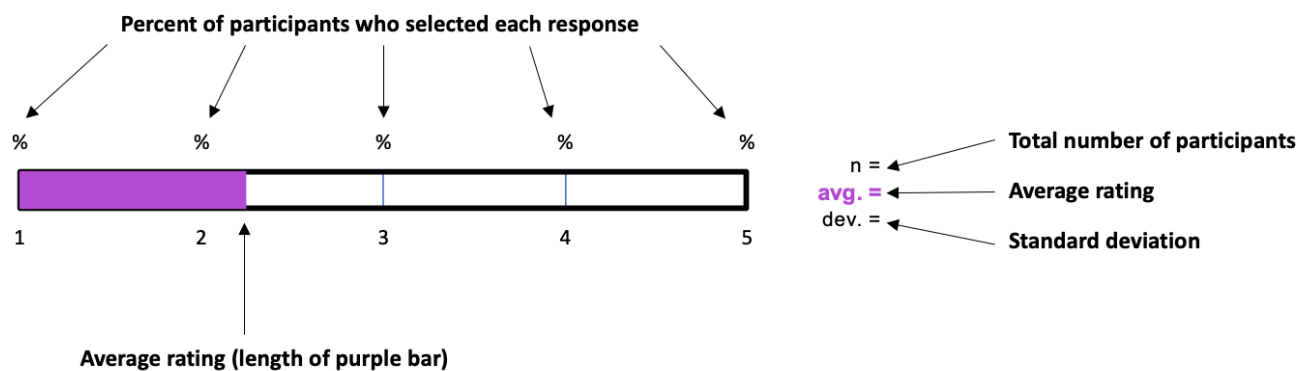
Overview

On December 16, 2020, four commercial fishermen operating out of Moss Landing participated in the fifteenth 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 16 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 18 and 29 that display the average responses for each question in the well-being and MPA sections, respectively, from highest to lowest.



Participants requested several resources be shared with them, including:

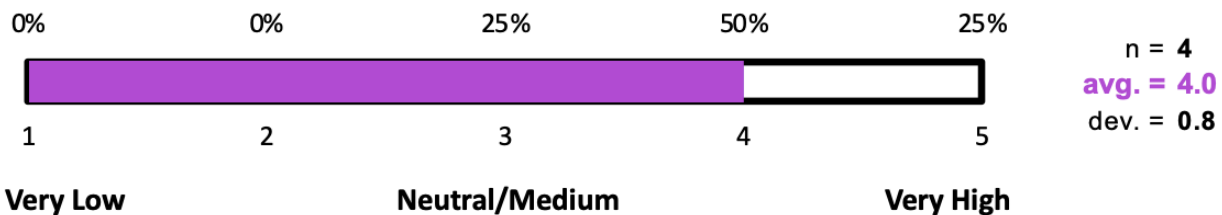
- [California Fisheries Data Explorer](#): This interactive site allows users to visualize commercial landings data (i.e., number of fishermen, pounds of fish landed, and revenue from fish landed) and CPFV logbook data (i.e., number of anglers, vessels, trips, and fish caught from specific fisheries and ports).
- [MPA Baseline Monitoring Program: Central Coast](#)
 - [Summary of Results from Baseline Monitoring of Marine Protected Areas 2007–2012, Central Coast](#)
- [Marine Protected Area Monitoring Program, 2019–2021](#)

Our Project Team would like to express our appreciation to the four Moss Landing fishermen—Calder Deyerle, Alan Lovewell, Wilson Quick, and Jerid Rold—for their time and contributions to the focus group conversation.

Perceptions of Fishing Community Well-being

Well-Being, Environmental

1. Marine Resource Health - Present Overall, how would you rate the current health and sustainability of the marine resources on which fishermen from this port rely?



Discussion Summary Several participants reported marine resource health overall, including abundance, diversity, size, and habitat, is high. A couple participants stated marine resource abundance varies across fisheries and that some species are doing better than others, making it difficult to provide one rating for this question.

- Participants also commented on the cyclical and dynamic nature of the fisheries and ocean, including water quality, and stated fishermen have come to expect and have adapted to changing conditions; one participant wondered whether these changes can be wholly attributed to natural cycles or if human-driven forces are also in effect.
- Several participants believed groundfish size, abundance, and habitat are especially healthy, particularly for deepwater rockfish and shallow nearshore rockfish. One participant estimated populations have rebuilt to pre-1980s levels.
- Participants reported Dungeness crab abundance is low but is cyclical in nature.
- One participant stated the health of salmon stocks varies from season to season. Another participant questioned whether variability is related to water usage in Central California causing low water levels in rivers, which can negatively affect salmon health.
- One participant explained that the health of squid stocks is poor. Another participant indicated heavy fishing pressure, including from out-of-state boats, may be a contributing factor.
- One participant reported spot prawn abundance is declining, but was unsure why. A couple participants believed spot prawn population abundances are cyclical and that the species is currently in a down cycle.
 - One participant recalled catching consistently high abundance of spot prawns in San Diego years ago until one day there were few to be caught; they stated the species rebounded several years later.

Participant Quotes

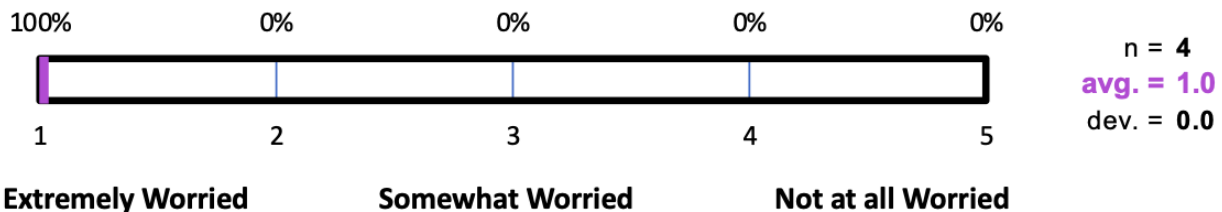
“We're dealing somewhat with the Dungeness crab crisis and [with] some pretty variable seasons in terms of salmon, and the squid I know has been pretty poor recently, so it was hard to get across all these different species [and] try to distill it into one measure of abundance.”

“The ebbs and flows of everything is just something that we've grown accustomed to and have expected. I think the question becomes: are there factors, whether it's climate or anthropogenic forces, that are making it more dramatic?”

“I think that the rockfish are doing really well in particular and that their populations are probably fully rebuilt to what they were before the 80s [. . .] And then, on the other hand, you've got [Dungeness] crab and spot prawns, which are in a really down cycle. Maybe that happens regardless of the fact that it's this year in particular... it's kind of more of a natural, long-term cyclical thing.”

“We get a little bit of [spot] prawns from another boat down south in Monterey, and it's painful to watch for that resource to somewhat go away and not exactly know why. And again, it could be just the seasonal variation, which is fine... we know that the climate is changing, the ocean is changing always. But you have to scratch your head and wonder what's going on and what is the explanation there.”

2. Marine Resource Health - Future Concerns Overall, how worried are fishermen from your port about the future long-term health and sustainability of the marine resource populations on which you rely?



Discussion Summary With regard to the future health of marine resources, participants reported fishermen are more worried about the effectiveness of fisheries management than they are about the resources themselves.

- Several participants believed fishery regulations and management are a threat to the longevity of the commercial fishing industry.
- One participant added they are worried about the combined effects of poor management and the impacts of ocean changes on the health of marine resources.

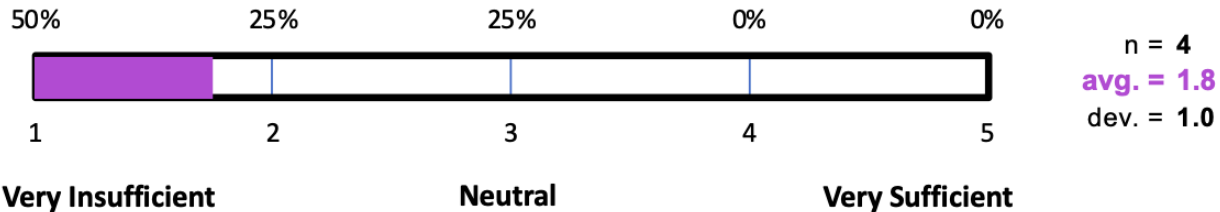
Participant Quotes

“I don't think there's any fisherman that I talk to that isn't concerned for the health and well-being of their industry and their job and the opportunity ahead. I think it's not so much concern around the resource but more concern around the regulation and management.”

“It's kind of the general consensus of fishermen [that they are extremely worried because of] how quickly everything is changing with regulations and environmental factors [. . .] And then definitely in my mind, future ocean changes are a huge issue, especially considering all that we learned about whale entanglements [related to a changing climate affecting whale distributions and populations] and the direction things are heading. I'm definitely extremely worried about multiple particulars within the management and the ocean condition changes that we could be experiencing in the future.”

Well-Being, Economic

3. Access to Harvestable Resources Overall, how would you rate your port in terms of the level of access that fishermen have to marine resources to support the local fishing fleet?



Discussion Summary Participants identified several state and federal rules and regulations, including areas restricted to fishing, fishing permit requirements, quotas, and fishery seasonality, that hinder fishermen's access to marine resources.

- Several participants believed rockfish conservation areas (RCAs) prevent access to most rockfish habitat in the Moss Landing area.
 - One participant highlighted fishermen are unable to fish their full rockfish quotas due to RCAs. They explained access to the resource would improve if RCA lines were moved so fishermen could fish deeper waters (i.e., 90 fathoms as opposed to 50 fathoms); another participant agreed and believed the resources have been rebuilt to the point where fishermen should now be able to access RCAs, especially since Moss Landing is located closer to deeper waters relative to other ports.
 - Two participants were encouraged by the recent increase in access to rockfish, though one participant reported few fishermen are targeting that fishery.
- Participants discussed the financial barrier to obtain fishing permits. One participant explained that it would be cost prohibitive for a fisherman to purchase enough permits to access the full diversity of fisheries in the Moss Landing area. Another participant believed salmon permits are currently the most affordable.
 - A couple participants recounted a time before fishery-specific permitting when fishermen were able to access a diversity of fisheries throughout the year with a single commercial fishing license. One participant emphasized that while fishery-specific permits have helped to combat cases of overfishing, they have also made it difficult for fishermen to participate in a range of fisheries.
- A participant explained that in comparison to other ports in California, Moss Landing fishermen have sufficient access to resources. However, they stated Moss Landing fishermen face the same barriers to access as other ports including area closures, difficulty acquiring permits, and quotas. The participant stated their personal access to marine resources is sufficient enough to support their livelihood despite these challenges.
- A couple participants expressed concerns with regard to the influence money and special interest groups have on both state and federal fisheries management decisions that tend to decrease fishermen's access to marine resources.
 - One participant believed management decisions made under these influences benefit large corporations while hurting small fishing businesses.

Participant Quotes

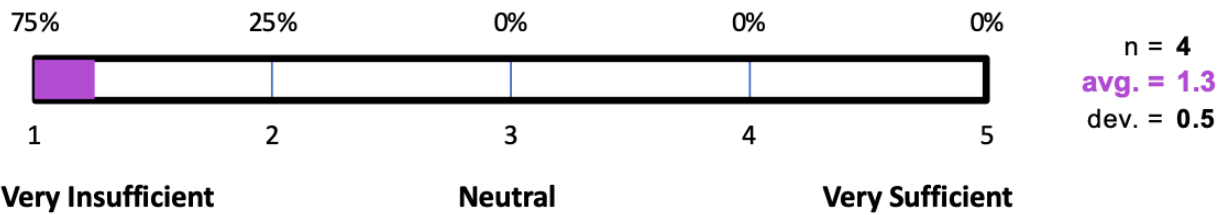
“There are so many areas we can't access where I feel like we should be able to access at this point. I feel like we were in a very bad position 40 years ago: we were gillnetting, we were dragging, we were hook-and-lining, we were harvesting aggressively and probably practicing some practices that we shouldn't have been. But at this point, we haven't been doing that for so long that our resources have built up to where I think we need to find some way to start accessing these areas where these fish are. We are starting to do that, I'm seeing baby steps, like they just moved the line out to 50 fathoms. Myself, I would have liked to see the line instead moved to 90 fathoms because I feel like the fish that we really should be harvesting are the fish in the deeper areas like chili's [chilipepper rockfish] and those types of species [. . .] Moss Landing is a very unique harbor: there's other harbors that have to go miles to get to deep water [and] edges and reefs and stuff. Moss Landing, we have edges right out front. We don't have a lot of rock... we have Big Sur. So I feel like it's kind of a unique place where we can access some areas that are fishable, but I still think we're a long ways away from accessing what we really should be accessing and the areas that we should be getting to.”

“The regulations make it very difficult to fish for the diverse species that we have around here, but if you have a billion dollars worth of permits, then you do have a pretty diverse group of fisheries here.”

“The permitted system is very constraining. It really sort of keeps fishermen from moving from one fishery to the next in a way [that] was essential as a fisherman to always be changing and to always be varying the species that you're targeting to follow that curve of those upswings and downswings. And I think there was actually a really cool dynamic associated with that relationship. These permit structures are very rigid and it's not to say that they've been a bad thing; I think it's obviously been a good thing in terms of recovering a lot of the resource and bringing back a lot of our overfished species. But it's sort of left a scar in our fishing communities in terms of the flexibility that fishermen really need to make a living.”

“I am concerned with how money is influencing the decisions [. . .] in [the California Department of Fish and Wildlife] policy, in the government's policies. I think that big dollars are influencing the decisions on how to regulate the fisheries and how to open fisheries and how to fish the fisheries. And when you have big money influencing that, I feel like their goal is to figure out a way to lump quota under one boat [. . .] and obtain everything and gather it all for themselves and take it away from the small operations that are making little bits of money feeding their family with it. And that's what I see myself: everything's being changed in the direction to benefit big businesses, big companies, big markets, and it's being taken from the small permits and the little guys. So my concern is that money is influencing these decisions more than science or the people.”

4. Income from Fishing Overall, how would you rate the income that fishermen from your port earn from fishing in terms of supporting livelihoods?



Discussion Summary Participants reported that although fishing is a difficult, essential job that few people are willing or able to do, fishermen overall are not making enough money in the fishing industry. Several participants attributed fishermen’s insufficient income to fishery management and regulations discussed on page 5, high operating costs, and the United States’ reliance on seafood imports.

- One participant explained they are surviving on their fishing income, but there have been times when they have had to rely on their spouse’s income to make ends meet. They indicated their fishing income does not allow them to contribute to savings or make big purchases like buying a house.
- One participant believed that at any given time, there is enough opportunity both in terms of access and resource availability to make sufficient income. However, another participant shared that while they earn sufficient income from fishing, they considered this income to be insufficient for others.
- One participant recalled fishermen used to make sufficient income but stated this is no longer the case.
- A couple participants cited high overhead costs as one reason why fishermen do not make sufficient income compared to other essential workers like garbage collectors and mail carriers.
- With regard to crew members’ income, one participant explained they pay their crew well, but due to the high demands of the job, they wished they could pay them more. However, they are unable to because they must also cover their operating expenses.
- One participant stated their desire that consumers eat more locally- or domestically-caught seafood rather than relying on international imports, which would help support local fishermen’s income.

Participant Quotes

“I would like to believe that a job like fishing should be at a level where you could support your family by yourself. I feel like that is a tough job. It's a real job. It's a job that supplies the community. It helps the community. It feeds people. It's something that not everybody wants to do. And I feel like there's a lot of men that are fishing that [. . .] don't have fisheries that they can get a sufficient amount of money to provide for their families. [. . .] There are guys that are doing fine, but there's a lot more guys that are struggling.”

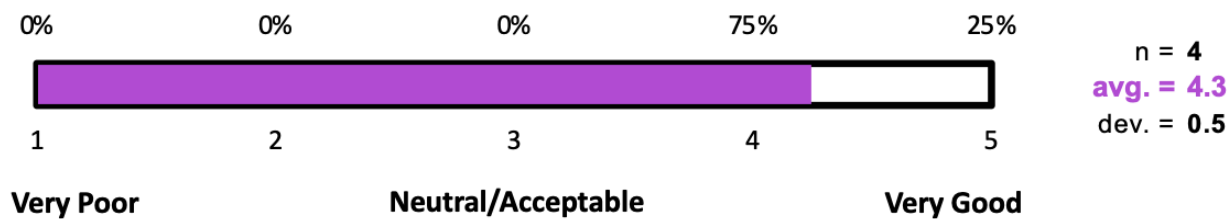
“I'm doing OK... I'm not getting rich. I have months where I'm behind, I have months where I'm doing OK, but I'm not stacking a bunch of cash, I'll tell you that. And I'm not buying a home. And we do struggle. And my wife works also and that's part of why we're OK. There would be times where if my wife did not work, we would not have been OK.”

“Costs compared to revenue is a huge one that leads me to ‘Insufficient.’ I mean, I make pretty good money, but I spend all my money trying to make that money, and other people who work hard - who drive garbage trucks or deliver mail - I feel like they make a sufficient amount of money... so we work hard and make an insufficient amount of money comparatively.”

“I even pay my crew fairly well, like over the last couple of years fishing with me, they're making a pretty good wage. But the job they have to do is so physical and so demanding that I think it probably needs to be more, but there's only so much there, and the overhead is so astronomical... my bait bill is \$600 a day. I mean, that's my expenses... that's huge. So you've got to make some money.”

“It's interesting: we as a country don't eat that much seafood, which is a problem, so we just need to eat more seafood, which I think would be great because it would create more opportunity for fishermen. But then again, the little bit of seafood that we are eating is coming from other places.”

5. Markets Overall, how would you rate the quality of the markets to which fishermen from your port are able to sell their catch?



Discussion Summary Participants indicated that while market diversity, reliability, and price in Moss Landing is good, there is still room for improvement.

- One participant highlighted that among the four focus group participants, three different buyers from varying markets in the Moss Landing area were represented in this conversation.
 - One participant felt these markets do a lot to support the fishing fleet and shared how several were created by members of the local fishing community.
- Several participants reported it is hard for fishermen to market their catch, particularly salmon and halibut, if they are not attached to a buyer.
 - One participant stated these fishermen, who often do not fish full-time, are likely to be more successful seeking out alternative market structures, like direct-to-consumer sales.
- Another participant believed there are sufficient marketing opportunities in Moss Landing, regardless of an individual's loyalty to a particular buyer.
 - One participant explained some individuals are loyal to a buyer while others may bypass their traditional buyer and sell to others to get a better price.
- A couple participants explained there are more options for fishermen to sell their catch than there were in years past, but wished existing local markets were strengthened and able to sell more product.
- One participant suggested markets are limited and prices are not as high as they should be because a lot of the seafood that is consumed is imported. One participant specified high lobster prices in Santa Barbara recently as evidence of the unpredictable nature of markets and price fluctuations in the fishing industry.

Participant Quotes

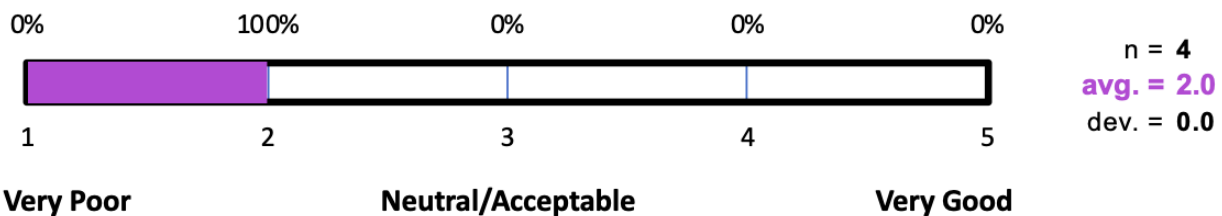
“I feel like we have a lot of good markets at Moss Landing. I feel like we got a lot of guys that really stepped up actually and created some very unique marketing systems: [name redacted], [name redacted]. I feel like we actually have a really strong market.”

“If you're with a market, the market's great. [. . .] The part-time fishermen who are trying to sell halibut every once in a while or salmon sometimes - who aren't loyal to a market full-time - have a lot of trouble, especially when there's a lot of halibut or salmon on the market and everybody's catching them. It's really hard for an unattached guy to market his catch. He's probably better off direct marketing or figuring out some way to do it.”

“I think if someone shows up to Moss Landing with fish, they're going to sell it and they'll probably get a decent price for it. [. . .] Guys are already starting to explore some off-the-boat stuff, and it's not to say we need more markets, but I am judging myself: I'd like to be able to buy and sell more fish. I'd like to be able to help more people. I'd like to be able to move more of the rockfish that comes across the docks and I think there's some more opportunity there to do better at creating healthier markets.”

“The little bit of seafood that we are eating is coming from other places. So it's unfortunate because the majority of the fish that we're catching is not being given a price that's fair and a lot of it's serving limited markets.”

6. Infrastructure Overall, how would you rate the state of infrastructure and services that support commercial fishing in your port?



Discussion Summary Participants rated the state of infrastructure in Moss Landing as poor, particularly because it is not accessible to everyone.

- Several participants reported the availability of key infrastructure is better for fishermen who are affiliated with a buyer compared to those who are not since buyers often provide supplies and services like ice, bait, and gear storage for their fishermen.
 - Another participant highlighted how out-of-town buyers passing through Moss Landing will offer a decent price to purchase fish, but do not reinvest in the port’s infrastructure, thereby undermining the buyers who do.
 - One participant identified people who are willing to help support and improve infrastructure, but due to the low volume of catch within the port, there is little momentum to make these improvements.
- A couple participants emphasized the lack of a public hoist in Moss Landing even though, to their understanding, the port is legally required to have one. They stated that while the port contains several hoists, they are only accessible to those who work with a particular buyer; they

reported the last public hoist was recently acquired by a fishing buying company that does not allow fishermen to use it.

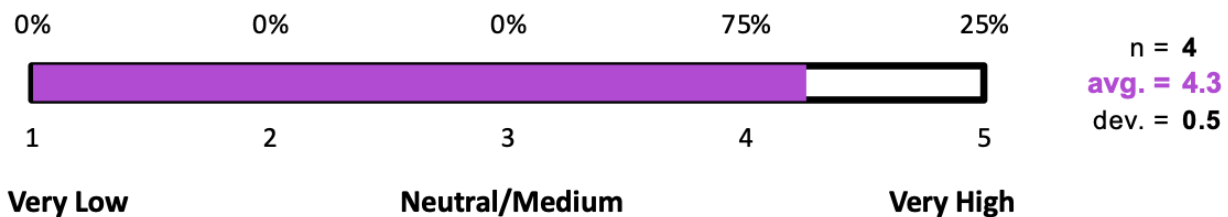
Participant Quotes

“The infrastructure that exists serves a limited group of people, mostly the people that attach themselves to a market, and for those that haven't attached themselves to a market, they're somewhat left on the fringes and having to cart their fish on the docks... they don't have ice, they don't have storage, they don't have bait. They don't have all the things that a healthy, working waterfront would have to support a diversity of fishermen businesses, not just the key businesses that exist here in the harbor right now.”

“The infrastructure is falling apart... it's very poor. And you do have good teams of people there willing to work, ready to work, but because of the lack of production on everything... you can't build a factory when you don't have any tomatoes to pack, basically.”

“One point that a guy was making recently in Moss Landing harbor is that there's no public hoist, which I believe he's told me there's a law which says every harbor needs a public hoist. And the supposed public hoist was taken over by another fish buying company, [name redacted], that moved in and apparently they're not letting anyone use the hoist, and it's the hoist that I've used for my whole life. People have asked me about it and I'm like 'well, I've always used it... because it's a public hoist,' but I guess now we can't use it. So I don't know what's going on there. If there's one note that I could make from this meeting is: call Moss Landing Harbor District and ask them about their public hoist because that would be nice for all the unattached fishermen to be able to use that which is critical for any fishing operation.”

7. COVID-19 Impacts *How disruptive do you think COVID-19 has been to your port's fishing operations?*



Discussion Summary Participants reported COVID-19 impacts on fishing operations in Moss Landing were disruptive, although the level of perceived disruption varied by participant.

- Several participants believed COVID-19 was only slightly disruptive because fishermen were able to adapt to pandemic-driven operating and marketing changes. A couple participants added COVID-19 was one of many recent issues fishermen have had to adjust to, which they addressed by incorporating COVID-19 safety protocols into their operations.
 - One participant indicated fishermen and the markets they rely on were successful in adapting to COVID-19 impacts and shared that the pandemic helped foster the public's understanding of fishing as an essential business and improved the public's perspective of the industry.
- One participant identified several immediate COVID-19 impacts, including the loss of overseas markets, delays in obtaining fishing licenses and permits, and delays in fishery-related

decision-making processes. However, they anticipated the long-term effects of COVID-19 on the fishing industry remain to be seen.

- One participant shared how they have been able to employ a high school-age crew member throughout the week as a result of online learning whereas before the pandemic, the crew member would only be able to work on the weekend.

Participant Quotes

“The fishermen and the markets have done a really good job at adapting and finding other markets for their fish, [name redacted] is an expert at the adapting market that we're dealing with. So it's been disruptive, but everyone's tried their best to keep working because fishing is an essential business. And I think now more than ever, people appreciate that. So I think that's kind of a silver lining of all this is that people are really getting closer to their essential businesses that really matter.”

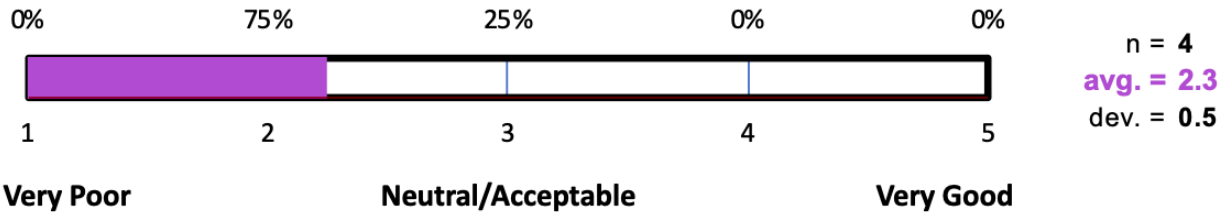
“I think for us, it [COVID-19] wasn't disruptive, it was validating; it sort of was like ‘oh, this is just a boost for us in terms of reinforcing all the things that we've already been doing all along.’ [. . .] Fishermen are some of - when given the opportunity - they're some of the best at adapting of all industries, I would say. And so there was a pretty fluid response in adapting to the situation.”

“COVID - it's hit us pretty hard as far as I don't think people really realize how it's hit, because I don't think we're really seeing the depth of it, because I think there's decisions that aren't being made or being put on hold that we don't even realize, like [the California Department of Fish and Wildlife]: you can't even get ahold of them... guys can't get licenses because you can't get ahold of them, guys can't get their permits paid because you can't get ahold of them. I believe some of the whale entanglement stuff has been postponed because decisions can't be made because of COVID. Personally, my eel market was shut down for four straight months because I had zero market because Korea got shut down. [. . .] And now Korea just went on shelter-in-place again. And I just went from doing four shipments a month to possibly one during December because of COVID.”

“My deckhand is a super avid recreational fisherman as a high school kid, and especially right now with COVID, remote learning has actually been awesome because I can pull him during the week when previously I'd only get to use him on the weekend.”

Well-Being, Social/Political

8. Labor/New Participants Overall, how would you rate your port in terms of being able to recruit new entrants to the industry and being able to retain current participants?



Discussion Summary Participants reported recruitment and retention of fishery participants is poor due to several barriers to entry for captains and a poor labor pool for crew. Fishery regulations, permits, port gentrification, and markets were identified as factors that tend to drive fishermen to leave the fishing industry as well as barriers to new entrants to fishing.

- Participants indicated longevity in the fishery is better for captains than it is for crew. They explained that a small number of people are willing to work in the fishing industry, both as captains and crew.
- Several participants specified that certain fishing permits make it difficult for people to enter the fishing industry because they can be expensive and availability is limited.
- With regard to longevity, a couple participants stated fishermen are inclined to remain in the fishing industry their entire lives because fishing becomes part of their identity. However, several participants explained longevity for crew is poor since crew members will leave and seek more lucrative opportunities within the fishing industry (e.g., on a larger boat with more capacity, purchasing their own boat and permits, etc.).
- Several participants shared how it is difficult to find quality crew members who are able to persevere through the difficult nature of the job.

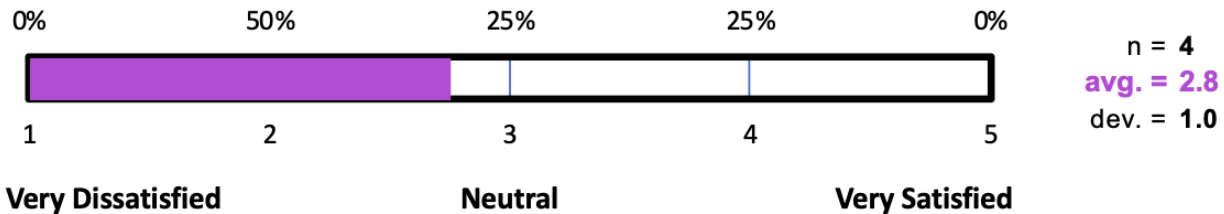
Participant Quotes

“I think the fishermen are more endangered now than the resource itself. And I think we could actually largely say that as an industry, as a whole, we're in a critical moment right now where all these other forces, including the regulatory management aspects, the gentrification of our ports, the markets that are driving the economies of our fishing industries... those are all things that I think are putting fishermen out of work and keeping new fishermen from coming into the industry. [. . .] And the permitting of all of our fisheries becomes a really significant barrier to entry.”

“Once you're a fisherman, you're pretty much in for life. If it's what you love to do, you're probably not going to find anything else. And if you do, you're going to be miserable and you're going to feel like you've lost your identity. That's the only way I can explain it. I've quit fishing for a little while before and I felt like I literally had no identity: who am I if I'm not a fisherman? But as far as longevity for crew, that's not there. You're going through guys wide open. They're always looking for something bigger and better, and you can't blame them. They're going to go get on a bigger boat to make more money. They're going to get on a boat with more permits, more licenses.”

"It's just very difficult to find talent [for crew]: reliable talent, hardworking talent, talent that doesn't get seasick, sober talent... you have to check all these boxes and it's just really hard. [. . .] You got to consider pools of talent that you wouldn't normally consider, and having to find a high school kid to help me out has turned out to be pretty good."

9. Job Satisfaction Overall, how satisfied do you think fishermen from the port are with their jobs in the fishing industry?



Discussion Summary Participants generally like their jobs in the fishing industry but indicated the negatives tend to outweigh the positives, particularly as it becomes more and more challenging to adapt to fisheries management changes and participate in fishery policy efforts.

- One participant explained there is a wide range of responses to this question based on individual experiences.
- One participant stated they are satisfied with their job as a commercial fisherman because they are able to support a livelihood doing something that brings them a sense of purpose; although the job is stressful, being their own boss provides them with a sense of job security.
 - Another participant shared similar sentiments about fishing being a satisfying, fulfilling job. They believed the areas of dissatisfaction and stress in the job stem not from the work environment but from resource management decisions that affect nearly every aspect of fishermen's lives; as a result, fishermen must volunteer their time and energy to engage in fishery policy processes which can be challenging when they already work long hours.
 - One participant added that fishing has provided them with remarkable experiences but expressed concerns with the trajectory of the fisheries they operate in as a result of how the resources are managed.
- One participant shared how fortunate they feel to fish for a living, yet expressed sorrow for not wanting their child to pursue fishing as a career; they were uncertain whether they would be in a position to provide their child with the fishing permits they would need to start and maintain their business.
 - Another participant also considered themselves a lifelong fisherman, having entered the fishing industry with the intention of passing down their business to their child.

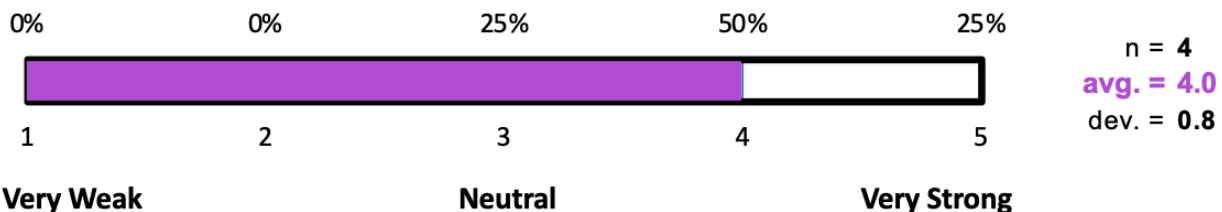
Participant Quotes

"I think there's a wide range, everywhere from people who are making a decent living like me and who feel like they have a great life. So I would say I'm very satisfied, even though it's a struggle and my stress is through the freakin' roof. I'm still satisfied with my job because I have a lot of fulfillment and purpose and I do have a secure job: no one is going to fire me... stress is high, but other than that, it's a good job."

“I think the dissatisfaction comes from everything that happens when you come to the dock. As we talked about, I think markets are pretty good, and so I don't think there's a lot of dissatisfaction there. But I do think from a regulatory standpoint and a management standpoint, it's challenging to follow the politics around which people are making decisions about your livelihood and your ability to feed your family or pay a mortgage. The fact that other people are making the decision and you're having to pay attention to it or participate in that - it's very stressful, very difficult. And you're adding that on top of a job that's already demanding 12 hours of your day, if not more. So it's a pretty heavy load that these guys are carrying. And I think the only reason why they would carry it is because on the other side of things, they're super satisfied with the life, the livelihood, and the decision to make fishing their living... I think it's more of a calling than anything else. It's just hard to summarize those opinions in one [score]... I really figured that if things were leaning one way or the other, you wouldn't have all these other issues, but ultimately I think everyone's living in a certain state of purgatory.”

“I'm living the dream, man. When I was a little boy, my daddy asked me what I wanted to be when I grew up and I told him ‘a commercial fisherman.’ I said that since I was five years old, and I'll still say it. But the sad part about that is [. . .] I intentionally keep my son away from fishing, hoping that he will find something else. And I admire what [name redacted] does: [. . .] he's one of the best fathers I know and [he] is in a position to where he's going to have those permits, his boy is going to have a great way to go fishing. But I don't know if I can do that. I don't know if I'm going to be able to put my son in a position where he's going to have those permits, those licenses, those things. I don't know if I'm going to be able to pull that off the way things are going.”

10. Social Relationships - Internal Overall, how would you rate the strength of social relationships (or social capital) within your port?



Discussion Summary Participants explained social relationships among Moss Landing fishermen are strong. Several participants indicated that while fishermen are united and care for one another, engagement within the port can be better.

- A couple participants reported fishermen in Moss Landing work effectively together regardless of differences in opinion, but believed participation and leadership within the local fishing associations could be improved. Another participant stated this is similar to ports across California, where camaraderie among fishermen is high even though engagement in local port associations could be improved.
 - One participant attributed poor engagement of fishermen in Moss Landing to the fact that there are few fishermen in the port, difficulties in scheduling meetings due to competing schedules, and other organizational and logistical challenges. They believed relationships are stronger in ports where there are older fishermen who are close to

retirement and have the time to help organize and engage in policy and regulatory issues.

- One participant recalled social relationships being stronger in years past than they are today because fishermen were not sorted into different fisheries and fished all fisheries under a single permit. They suggested that the current permitting process has weakened relationships, resulting in strong relationships within a particular fishery and weak relationships between fisheries; however, they acknowledged that both types of relationships are needed for a strong fishing community.

Participant Quotes

“I think that the fishermen work really well with each other in our port; we had a recent crab meeting and there's a wide diversity of opinions, but everyone was able to come together and talk and understand each other's opinions, and that was a cool example of the fishermen working together very well. The one thing, though, is that we could use more organization and leadership [. . .] whatever that may be: some type of port association or more participation in our port association, which is lacking.”

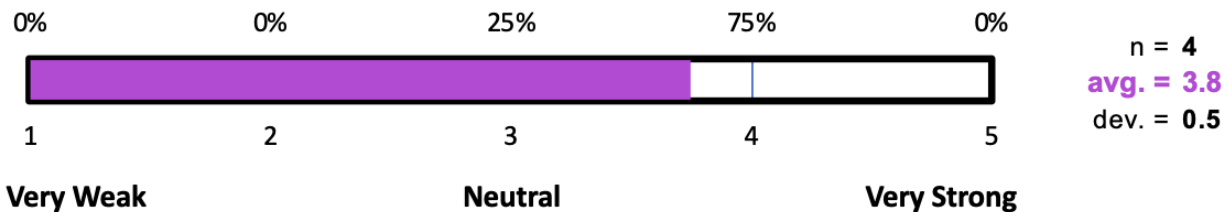
“I travel a lot up and down the whole coast and participate in a lot of fisheries and [. . .] any time I'm going into another port, fishermen are fishermen: [they] stand by each other. That's the way it is. There's always a bad apple, don't get me wrong. There's always room for improvement, especially in ports and organizations and getting information and basically getting everybody together... it's pretty hard to get a bunch of bosses all together in one room because that's exactly what we are: we're just all bosses.”

“My frame of reference is more formal, sort of like fishermen associations, and we really just don't have an effective one here or I don't know if it's even operational, honestly. But I do think the way in which fishermen are organizing is more outside of the port and more associated to other ports and other fisheries that they're involved in, so that's more indication of participation at a broader level. But within the port, there's just not a lot of fishermen and collectively not a lot of time and competing schedules, families, differing fisheries, all of those things that just make it really difficult for fishermen to organize here. I think in a lot of healthier ports, you have a much older generation that is engaged in the organizing, because I think they're either retired or trying to foster and maintain those healthier fisheries and they somewhat have the time because fishing isn't taking as much of their time and energy; they don't have the the kids, little toddlers running around. I imagine these ports of just older [fishermen] who are keeping that thread through the community alive, but we just don't really have that here in Moss Landing.”

“I went with ‘Neutral,’ and the reason I did wasn't because of the way things are now, but because I know how things used to be [. . .] At this point, I feel like it's not the fishermen's fault, it's just the lack of guys, and we're so separated. You got crabbers, you've got eelman, you've got salmon guys. Before, everyone was united more and we had more of a united goal because everybody jumped from fishery to fishery together. You had a salmon season and everybody fished salmon and they were all united in that. And then when albacore came, everybody went north and went albacore fishing, and albacore is a different beast: it unites guys in a different way because you depend on each other in a way that no other fishery does [. . .] I know what it

could be if we got our fisheries back and if we all united together. And as far as port support, fishermen need to stick together, and I believe the crabbers are sticking together, and I believe the salmon guys are sticking together, and I believe that the fisheries, the independent fisheries, are sticking together, but they're not united as one whole. And the only chance we have in this battle is to unite as one whole together because we can't throw each other under the bus anymore. We have to figure out a way to see eye to eye all together."

11. Social Relationships - External Overall, how would you rate the strength of the port's relationship with external groups who could help support community needs?



Discussion Summary Participants indicated Moss Landing's relationship with groups outside the fishing community is strong because many local fishermen participate in fisheries policy processes (e.g., the Dungeness Crab Fishing Gear Working Group, Salmon Council).

- A couple participants explained that because fishery management decisions often directly affect fishermen's livelihoods, fishermen in the port recognize the value and importance of their participation in policy meetings and discussions.
 - One participant estimated about half of the local fishing fleet participates in some kind of fisheries-related policy process and would welcome more participation by fishermen.

Participant Quotes

"The strength of the port's relationship with external groups, I would say, is strong. I mean, there's myself and now [name redacted]: we've both been a part of the Dungeness Crab Gear Working Group, and a lot of people have tried their best to be involved as much as they can, including [names redacted]. And so, that could almost be considered very strong, I guess, but it could be better also. But yeah, the key players who have their life on the line here are definitely engaged."

"I think we have a lot of examples of active fishermen who are involved in the policy process, whether it's these conversations with the Dungeness [Crab Fishing Gear] Working Group, the salmon folks... I mean, there's just a lot of people who understand that the future of our fisheries is determined by and depends on our participation in policy and so I think we have, especially as a proportion of fishermen, you could almost say that 50 percent of fishermen in this harbor are active (if not more) in some sort of policy process or government process... might not be that high, but it's really significant. I think people really care and they know that it's important to be doing this, to be talking to [Monterey] Fisheries Trust, to be working with the Dungeness Crab [Fishing Gear Working] Group, just to make themselves heard."

Well-Being, Overall/Additional Comments

12. 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 fishing communities?*
- *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 elaborated on the infrastructure discussion summarized on page 9.

- One participant shared the belief that the fishing infrastructure both in Moss Landing and across California ports is lacking; they stated that compared to years past, infrastructure is no longer sufficient to support fishing operations.
 - A couple participants reiterated the need for a public hoist in Moss Landing harbor; one participant also suggested ice be free for all Moss Landing fishermen.

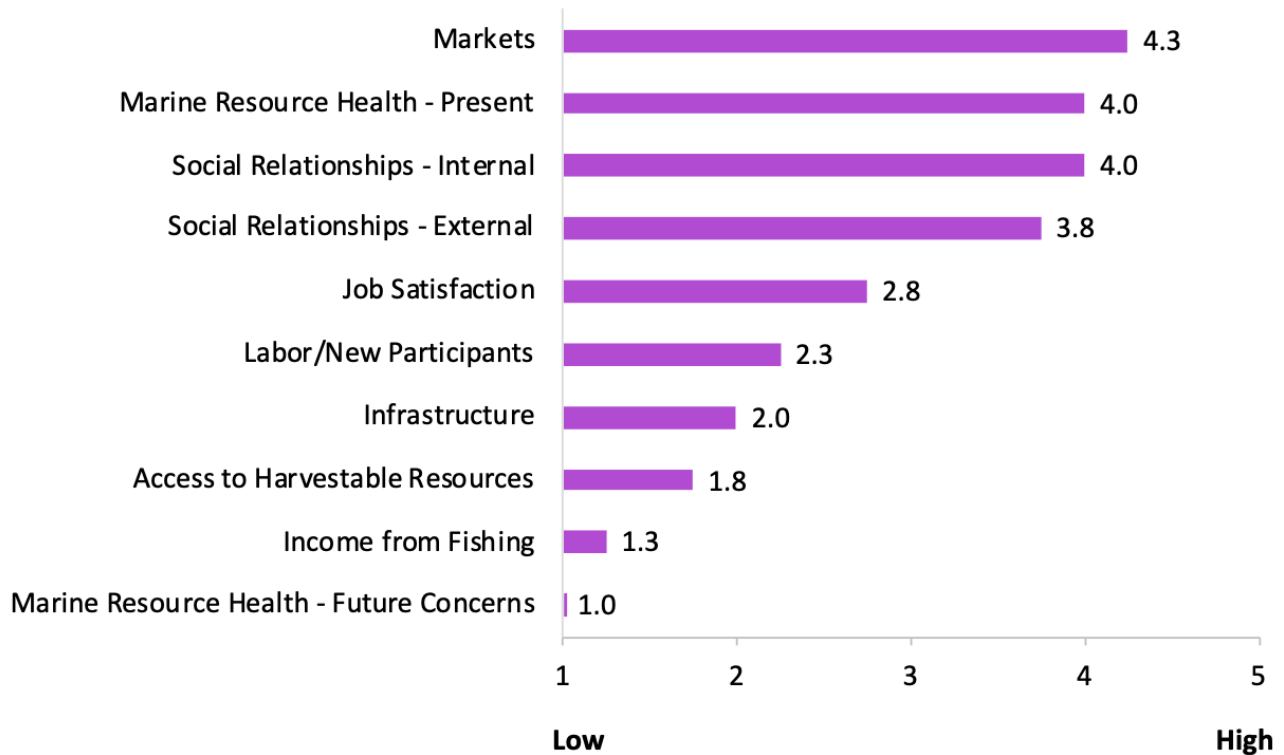
Participant Quotes

“Public hoist, and free ice for everybody.”

“The infrastructure - definitely, there's room for improvement. I don't know any port that there isn't right now, and it used to be - it wasn't too long ago - any port you went into, there was always the infrastructure to keep you going. And it's pretty much fallen apart up and down the whole coast. Like I say, I travel up and down the coast. There's only a couple of ports that I could see on the whole West Coast that could actually handle it and even then, you could be put in line to wait, but you'll eventually get what you need so you could keep going. But some of these ports, California being the worst, can't keep up with any influx of vessels coming into any one spot.”

Perceptions of Fishing Community Well-being, Average Responses for Questions 1-6, 8-11

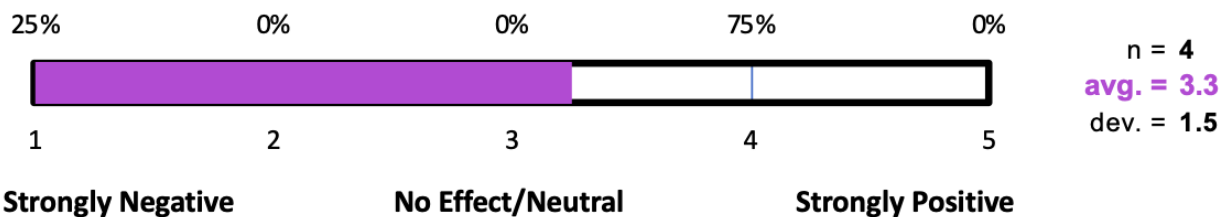
(Note: The following figure does not include the average rating for question 7. *COVID-19 Impacts*.)



Perceptions of MPAs

MPAs, Outcomes/Effects

13. MPA Ecological Outcomes Overall, how would you rate the effect that the California MPA network has had on marine resource health in your area?



Strongly Negative

No Effect/Neutral

Strongly Positive

Discussion Summary Participants shared a range of perspectives with regard to MPA impacts on marine resource health, from positive to negative, and some participants felt MPAs have had no effects at all on the health of marine resources.

- Two participants reported not noticing a difference in marine resource health, positive or negative, related to the MPAs. However, one participant believed that by closing an area to fishing, MPAs are bound to have a positive effect on marine resources. Even so, they did not

think the MPAs should have restricted fishing activity to the extent that they do, and suggested MPAs be occasionally opened to fishermen.

- One participant believed MPAs have helped to improve the health of several groundfish species, including shallow nearshore rockfish, but also suggested the MPAs be rotated periodically to improve fishing opportunities; they recommended research be conducted to help inform how to effectively incorporate MPA rotation into management.
- Another participant shared the perspective that because the MPAs cover mostly groundfish habitat that supports older fish with a low spawn rate, fishing activity is needed to harvest the older fish which would allow juveniles to populate these areas and better contribute to the overall population abundance.
- One participant believed there is an abundance of fish, particularly lingcod, in the MPAs. They expressed concern about excessive lingcod predation on juvenile rock cod in the closures.
- One participant shared their understanding that the MPAs were created to protect rockfish, yet some MPAs restrict salmon fishing. They believed this is due to the possibility of rockfish being caught as bycatch, but suggested MPA regulations be changed to allow salmon fishing in all MPAs because incidental catch of rockfish is no longer an issue since stocks have been rebuilt. In addition, they stated salmon fishing in the MPAs could help provide a better understanding of rockfish bycatch in the salmon fishery.
 - Another participant shared similar sentiments with regard to eel and Dungeness crab in which bycatch is seldom caught in the gear for these fisheries and should therefore be allowed in the MPAs.
- Several participants shared the belief that MPAs lead to greater fishing pressure in smaller areas, resulting in decreased resource health outside the closures.
 - One participant explained that prior to MPA establishment, they would rotate the areas they fished to allow the resource to replenish. However, because the MPAs decrease the area available for fishing, they are left with fewer fishing grounds, increasing the likelihood of overfishing in the remaining open areas.
- Several participants explained that MPAs cause fishing pressure to be concentrated in smaller areas along MPA boundaries, creating barriers of gear that increase the risk of whale entanglements in fishing gear. They believed without MPAs, fishing pressure would be more spread out, leading to fewer instances of whale entanglements.

Participant Quotes

“I haven't seen a positive anything come out of these areas and zones. I haven't seen populations of rock cod flourishing, other fishes flourishing, other sea life flourishing.”

“If you shut down the whole entire ocean, of course there's going to be a positive effect to the population of fish in it. So, I mean, you can't really deny that [the MPA network] had a positive effect on the population, but was it necessary to the extreme they took it to? I don't think so. Do they need to open these areas up periodically? I think so.”

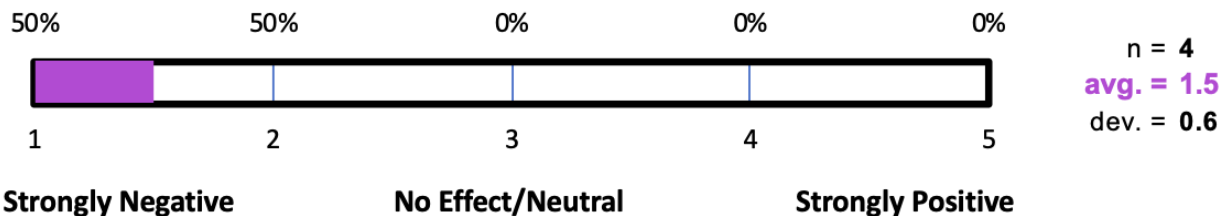
“I don't think there should be any closures for salmon. I guess they're really concerned that you could possibly get a rockfish, but I feel like the levels that rockfish are at at this point... I don't think we should necessarily be concerned with a few incidental catches. And then if we would change some of the laws to where guys could bring some bycatch in, then we would have a

better idea of how much is being caught with salmon anyway. So I'm not sure that MPAs are accomplishing anything by keeping salmon fishermen out of those areas.”

“I think what ultimately ended up having to happen was that the few areas that were actually viable for fishermen to fish ended up sustaining a lot more pressure than they would have otherwise. And so you sort of are weighing these pros and cons between the existing effort with all the people that were fishing dispersed across the ocean with less fishermen fishing in more targeted areas. Now, the areas in the MPAs, yeah, I'm sure they're great and beautiful and pristine. And that's, I think, what a lot of folks are going for. But I think the externalities associated with fishing on the lines, having to heavily target a few areas that are viable, could result in some pretty negative impacts.”

“I think that [the MPA network] is a huge contributing factor to whale entanglements, especially in Dungeness crab gear. I mean, I've seen examples of the situation myself. [. . .] It's not just a theory, it definitely contributes to walls of gear being drawn in the ocean, whereas without that line drawn there, the gear would be dispersed and potentially the whales could migrate and not have that wall of gear that they're running into. [. . .] You don't need an MPA for anywhere that there's Dungeness crabs because Dungeness crabs are going to reproduce and have a fluctuating level of biomass anyways.”

14a. MPA Livelihood Outcomes Overall, how would you rate the effect that the MPA network has had on the ability for fishermen from your port to earn a living/gain income from fishing?



Discussion Summary Please see the **Discussion Summary** following question 14b. *MPA Effects - Overall* which summarizes the conversations related to questions 14a and 14b.

14b. MPA Effects - Overall What other types of effects or impacts have fishermen from your port experienced from MPA implementation?

Discussion Summary Participants reported MPAs have had a number of negative impacts on fishermen’s livelihoods, including decreased ability to fish historically important grounds, loss of income, and less participation in the local commercial fishing industry.

- One participant recalled that during the implementation phase of the MPAs, fishermen anticipated negative impacts from the MPAs. Those concerns were validated as fishermen are now experiencing increased crowding and competition along MPA boundaries resulting in resource depletion and increased risk of marine life entanglements in fishing gear (see page 19).
- Several participants shared that MPAs have negatively affected fishermen’s ability to support a living from fishing.

- One participant reported that despite the positive MPA ecological outcomes discussed on page 19 (i.e., with respect to rockfish), fishermen must travel further distances to fish, resulting in increased operational costs. They explained that the preferred fishing spots that historically contributed significantly to their landings and income are no longer accessible.
- Another participant experienced a decrease in revenue due to diminished quality and quantity of their product. They explained that because fishermen are unable to rotate the areas they fish as a result of MPAs, they must consistently target the same area which hinders the resource from replenishing.
- One participant believed that even if rockfish quota is increased and a fisherman can supplement their income with another fishery, there are still not enough fishing grounds to fully realize the quota and sufficiently support a fisherman's livelihood because MPAs limit the options to be able to access multiple fisheries. They stated fishermen are no longer employing fishing practices that harm fish stocks and caused the need for MPAs; therefore, they suggested MPAs are no longer needed and the closures should be reopened and/or allow fishing activity.
- One participant found it difficult to rate this question due to the shifting magnitude and type of fishing impacts since the MPAs were implemented. They stated MPA impacts likely resulted in some individuals leaving the industry, thereby consolidating the fleet because of the lost access to traditional fishing grounds. However, they expected the MPA impacts would be more positive in the years following implementation because resources should have improved under MPA restrictions and fishing opportunities should have increased with a smaller fishing fleet.
- One participant requested managers consider the tradeoffs between the positive MPA ecological outcomes and the negative impacts of MPAs on livelihoods.

Participant Quotes

"When we started the MPA process back in the day, we said there was going to be problems any time we created lines and boundaries... we didn't know what they were, and they ran with it anyway. Well, now that we have these lines and boundaries out there, what has happened? It's actually contributed to whale and marine mammal contact with gear: what happens is the last place you can catch something is right up against these MPAs. You'll fish other areas [. . .] but still, you'll fish right along these edges, creating an impassable barrier of fishing gear. If it's not crab, it's something else. You're actually overfishing these small spots, which become depleted."

"I've got to run way further to get to the fish, the quota that I'm allowed to catch. Landings are down because I used to be able to fish for shallow nearshore rockfish in spots that were more protected from the weather, and so I could fish way more days. Therefore, if my cost is up and my landings are down, my income is down. So [MPAs] affect my income. And I'm not sure if it really affects the number of participants in the fisheries that we have around here. I mean, I could see how that could be a big factor for the lobster fishery or sea urchin fishery. But here, it makes it tougher: you have to go further to get to good fishing spots, and mainly the loss of my favorite fishing spots that I could fish when the weather was bad has negatively affected my income for sure over the years."

"As a fisherman, I go and I'll fish in an area and then when that shifts and I see my production level go down or the actual product quality change, then I'll move just to protect my resource."

And then move into another area and get better product and contact a bit more resource and let that area come back and then I'll go back to another area. Now I've confined it to one little spot. So I actually wind up overfishing it to the point where the quality won't be there or the quantity won't be there, and therefore I have to just fold it up, move on, go do something different. [. . .] You can only farm the same plot of land with the same thing for so long and then you don't have anything there."

"We can't obtain the areas we need to access to fish. Realistically, there really is nowhere to fish. We keep telling them the same thing: yeah, you're giving us more quota - I mean, honestly, the quota, if I was able to fish my eel fishery and supplement that with the amount of quota that they're allowing us to catch at this point, that's a pretty good subsidization of my income, like it would be a pretty good amount of money that I could make off of that allowed quota they're allowing me at this point. But it's really not accessible."

"I'm thinking about the initial impact, which I think was very significant in terms of cutting the fishing fleet into a much smaller fraction of what it had been previously. So that was devastating for a lot of people. But then the people that were able to maintain and continue on making a living... in theory, now with a lot less effort in these protected areas, you should have more abundance, which then it actually, in turn, should actually have yielded a positive result in terms of protecting the resource, to getting more access to the few remaining fishermen that are around, and allowing them to potentially have a better outlook than previously under an 'overfishing/the whole ocean is open' scenario... but it's not like the whole ocean is fishable."

MPAs, Discussion of Specific MPAs

15. MPA Effects - MPA Specific Which MPAs have had the most impact (positive or negative) on fishermen from your port and why?

Discussion Summary Participants identified MPAs that have negatively affected Moss Landing fishermen, especially those who target Dungeness crab and salmon. One participant believed decision-makers were methodical in their placement of the MPAs, having considered certain bottom structures for MPA locations which were also the areas that supported the most productive fishing grounds. They believed the resource would benefit if fishermen were allowed to fish in these MPAs, rotating the areas they target to allow the resource to replenish. Another participant shared that because they entered the commercial fishing industry after the MPAs were implemented, they have not experienced the same effects as other participants but recognized the significant loss of access as a result of the MPAs.

- *Participants identified a number of North Coast and North Central Coast MPAs that were traditionally valuable fishing grounds, including South Cape Mendocino State Marine Reserve (SMR), Mattole Canyon SMR, Big Flat State Marine Conservation Area (SMCA), Double Cone Rock SMCA, Point Arena SMCA, Point Arena SMR, Bodega Head SMR, Point Reyes SMR, and Montara SMR.*
- Participants conveyed thoughts and experiences with North Coast and North Central Coast MPAs:
 - *North Farallon Islands SMR:* One participant shared how this MPA is very impactful for

several fisheries, including Dungeness crab and salmon. They estimated losing over \$100,000 in income from salmon fishing over the last decade due to not being able to access the area. They explained there is an abundance of salmon around the North Farallon Islands due to ocean conditions in the area.

- *Stewarts Point SMR*: One participant stated that the MPA does not protect any important fisheries, as most of the valuable Dungeness crab and salmon fishing traditionally occurred outside that area. However, they explained that the MPA boundary creates a concentration of gear that increases the risk of whale entanglements.
- *Salt Point SMCA*: One participant believed this MPA was created in response to a complaint from a resident nearby who was bothered by Dungeness crab fishermen since the MPA would deter them from working in the area.
- *Bodega Head SMR and Point Reyes SMR* were identified as MPAs that pose a risk to whale entanglements due to high levels of Dungeness crab gear along the MPA boundaries. Participants also reported seeing fishing activity inside the *Point Reyes SMR*.
- *Southeast Farallon Island SMCA, Southeast Farallon Island SMR, and Southeast Farallon Island Special Closure*: One participant shared their experience having to fish for Dungeness crab outside state waters because of the Southeast Farallon Island MPAs.
- *Saunders Reef SMCA*: One participant reported not experiencing impacts from this MPA.
- Participants discussed the impacts of more local MPAs:
 - *Año Nuevo SMR*: One participant reported this MPA has negatively affected the Dungeness crab and salmon fisheries and recalled fishing here often for salmon because of good upwelling conditions.
 - *Soquel Canyon SMCA and Portuguese Ledge SMCA*: Several participants stated these MPAs encompass very productive spot prawn and groundfish habitat.
 - One participant mentioned how the designation of the Soquel Canyon SMCA led a fisherman to sell their spot prawn permit and leave the fishing industry because they could no longer support their livelihood due to the loss of fishing grounds.
 - One participant questioned why spot prawn fishing is not allowed here while it is in the MPAs near Carmel Canyon. Another participant stated spot prawn fishing is allowed in the Carmel Canyon MPAs because fishermen requested this exemption during the MPA implementation process.
 - One participant suggested the state consider a similar exemption for Dungeness crab fishing in the Soquel Canyon SMCA, and other MPAs that pose a risk to marine mammal entanglements. They believed that in doing so, fishermen would not harm the rockfish populations the MPAs are designed to protect.
 - One participant suggested the Soquel Canyon SMCA be opened to the eel, spot prawn, and Dungeness crab fisheries to provide fishermen with more opportunities to rotate the fishing grounds they target.
 - *Asilomar SMR*: Participants explained that this area provided safe fishing grounds for nearshore rockfish fishermen during poor weather conditions, and its presence increases fishing pressure in smaller areas near Pebble Beach.
 - *Point Lobos SMCA and Point Lobos SMR*: Several participants reported these MPAs

concentrate fishing along the MPA boundaries and don't provide any protection for important fisheries (e.g., rock cod). Another participant stated Yankee Point, located inside Point Lobos SMR, was among the best spots for shallow nearshore rock cod fishing.

- *Point Sur SMCA and Point Sur SMR*: One participant recalled these areas being great for salmon fishing, particularly in shallow waters along the reef's edge. Another participant believed allowing fishing in these MPAs would relieve the fishing pressure in surrounding areas while also not negatively affecting the resource inside the MPAs; they added how this area is among the best rockfish breeding grounds along the California coast.
- *Big Creek SMCA, Big Creek SMR, Piedras Blancas SMCA, and Piedras Blancas SMR*: One participant stated these are productive salmon and Dungeness crab fishing grounds.
- *Point Buchon SMCA and Point Buchon SMR*: One participant reported these MPAs provide valuable, nutrient-rich habitat for salmon, Dungeness crab, and whales. They stated the MPAs create an increased risk of marine mammal entanglements because fishermen concentrate their effort along the MPA boundary.

Participant Quotes

"That Stewarts Point MPA [SMR] goes out three nautical miles. You can't salmon fish, you can't crab. It's over sand bottom... it's really not protecting anything. There is good crabbing in this whole area and this one causes a major concern for whale entanglements. [. . .] There's guys that literally lay an impassable fence all the way around this MPA. I can't even drive through it with my boat, and I go slow [. . .] It's horrible."

"One of the historical guys that actually was prawn fishing here in Monterey Bay, he retired and sold the permit just because when they put that MPA in [Soquel Canyon SMCA], he goes 'my livelihood's over.' And he got out of the business."

"There's a clause in the Carmel Canyon MPAs that you're allowed to fish spot prawns. Maybe the MPAs that pose entanglement risk to whales could be allowed to fish Dungeness crab in those MPAs. There are MPAs that are closed to other things but are open to Dungeness crab [. . .] So it's not impossible just to write within the MPA's regulations that you're allowed to fish Dungeness crab, and that would solve that entanglement risk for that particular MPA: [. . .] the Soquel Canyon MPA [SMCA], that one not being there wouldn't cause any harm to the rockfish population that MPA is trying to protect. And it would ease up the whale entanglement risk."

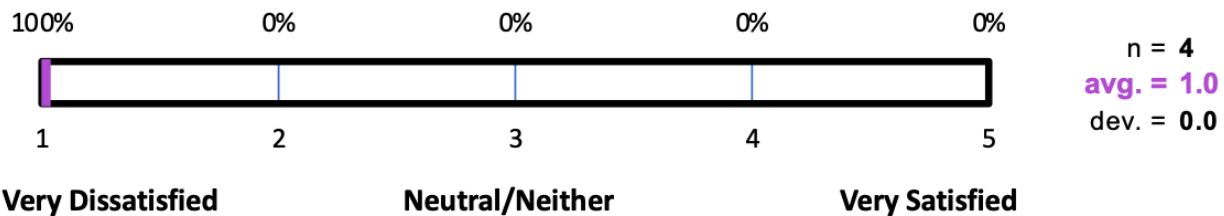
"I've been affected by the ones in the Bay [Monterey Bay]. I fish the south side right now for eels, [. . .] and I try to move around before [my fishing grounds get] down to a level that I'm even noticing that it's starting to change because I feel like if you leave an area before you notice it starts to change, the rebuild of it is really fast with eels. I can see it subtly start to decrease and I can leave and within a year, I can go back and it's 100 percent normal. But the Soquel Canyon [SMCA] forces me to have to drive almost 14 miles up there, where[as] that whole area is just amazing grounds for eels and shrimp, crab, all of those fisheries. I literally could probably spend three years in that area and never touch the population of eels. [. . .] And I just don't see the logic in keeping them [Monterey Bay MPAs] closed for certain fisheries."

“There's just so much good fishing in that Point Sur area, so I see why they took that as an MPA because that's probably one of the best rockfish breeding areas anywhere on the coast. But that would be an area that you could open up for two months, every two years or something like that in order to stabilize whatever populations are out of balance.”

“Point Buchon SMCA is horrible for crab and salmon. Absolutely horrible. This is a major point with fairly deep water coming close. You have a lot of nutrients and stuff coming up in there. The whale population, marine mammal population is phenomenal right there. And the guys will do the same thing around this Buchon: they'll just lace it up to make an impassable fence.”

MPAs, Management

16. MPA Management Overall, how satisfied do you think fishermen from your port are with the management of the MPA network?



Discussion Summary Participants were very dissatisfied with MPA management, and highlighted their concerns about the MPA implementation process and the perceived lack of current management.

- One participant shared the perspective that MPA designation was unnecessary since efforts were already underway to protect groundfish species when the MPA implementation process started.
- A couple participants shared their perspective that MPA management is nonexistent and that the state does not have adequate funding to successfully manage the network. They believed MPAs were designated for the sole purpose of a “land grab” and restricting fishing and have done more harm than good for fishermen.
 - Another participant identified the lack of funding for MPA management, monitoring, and enforcement.
- One participant expressed frustration with regard to the process to select MPA locations. They recalled fishermen being asked to disclose their fishing spots with the promise of helping to look at alternative areas for designation, but MPAs were placed on valuable fishing grounds.
- One participant compared MPA management in California to that in other countries and believed it is relatively better, but stated more needs to be done to improve management of the MPA network.

Participant Quotes

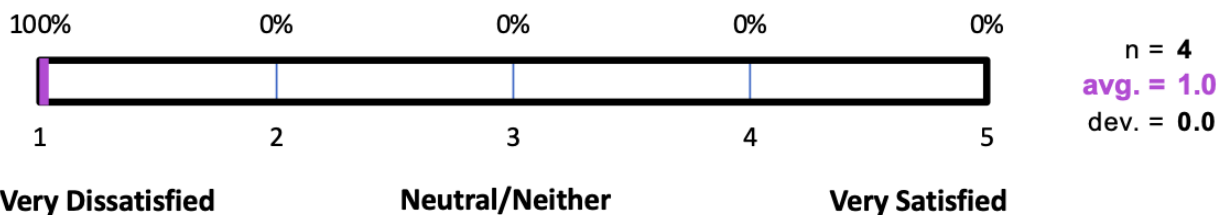
“The management [has] just been a ‘close it down and do nothing’ [scenario]. That's pretty much what we've seen. We're seeing a little bit of baby steps right now, but it was pretty much shut her down and do nothing.”

“Just a general kind of feeling amongst fishermen that they don't have any funding to do any of this.”

“When they shut these areas down, they used the data that the fishermen gave them. And they literally collected the data and got the waypoints where people caught fish, and they shut the areas down where all the fish was caught. You can't tell guys they can go fish halibut, but they can't go in the sand, and you can't tell guys they can go fish rock cod, but they can't go into the rocks. So like I said, of course it had a positive effect on the population. Did it need to be that extreme? I don't think so. And did you need to shut the whole ocean down where there was fish? I don't think so either. [. . .] They actually told them where to drag and told them where not to drag. I mean, there's more to it than just that, but...”

“From my perspective, just in terms of what's being done here, it's probably better in terms of what's being done in other countries. So from a relative standpoint, I would say that these systems are in place - yeah, they can be improved in a lot of ways, no doubt - but I just think about some other places that put MPAs in place and they really have zero monitoring, zero enforcement, all these things. So, that perspective, I think, is important to consider. But in terms of all the things that these guys are talking about, I totally agree.”

17. MPA Monitoring Overall, how satisfied do you think fishermen from your port are with the monitoring of the MPA network?



Discussion Summary Participants were very dissatisfied with MPA monitoring because they have not seen any MPA monitoring data or results.

- One participant suggested better communication is needed to demonstrate to fishermen that the MPA network is actively being monitored and managed as opposed to simply being areas where they cannot fish. Another participant attributed poor communication of results and an overall lack of MPA monitoring studies to budget constraints; they believed managers have the capacity to conduct MPA monitoring, but are limited in their communication of the monitoring information by lack of funding.
- Another participant reported data collection is poor, particularly in the rockfish and eel fisheries. They believed that without research, managers do not have the information they need to adequately manage the fisheries, including potentially reopening MPAs to fishing activity.

Participant Quotes

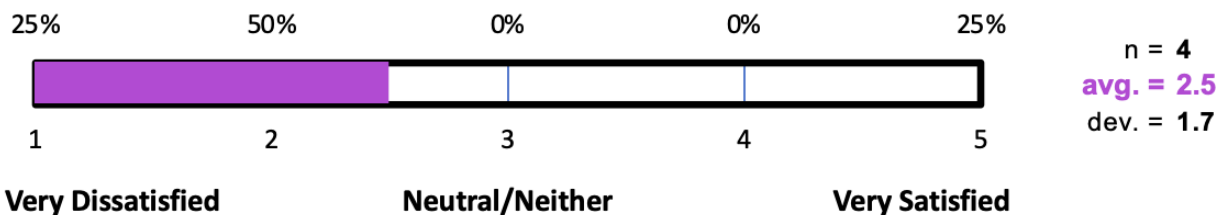
“I would like to see data on the monitoring of the MPAs [. . .] Everyone has a theory that the MPAs can harbor older fish, which can have more babies, and therefore the fishing areas will be better fishing. But that's just a theory unless it's been scientifically proven. Maybe it has, but I'd just like to see more outreach from whatever monitoring that they are doing. I think that would build trust with me at least, and just make me feel like they're actually caring about all these

giant closed areas that they made and not just creating ‘em and enforcing the fact that you can't do anything there.”

“They haven't had the finances or the means to actually do the monitoring of the MPAs except for what they can see from the beach. That's what they like to do, is go ‘well, yeah. From the road, yeah, there it is.’ That's not... that's what I was going back to earlier: it was just a land grab. There were stipulations in this land grab that you had to produce with it; they've done nothing. They've done absolutely nothing. [Results] haven't been communicated, but I haven't seen it. I've been involved in one of these processes. I have yet to see any data to come across in front of me when I ask the questions ‘what data do you have to support these accusations that this is what your piece of real estate is doing?’ Absolutely nothing. Zero. ‘Well, we don't have the funding’ - I get that a lot. Ok, well, if you don't have the funding, why do you have this? It's like having a car you can't afford to put gas in.”

“I don't see much research at all. In fact, I was asked by [the California Department of Fish and Wildlife] six months ago to go out and fish rockfish because they didn't have enough data to properly regulate the fisheries. And they said that they couldn't release quotas because they didn't have enough information to suggest that the populations were high enough to release quotas. So if they're not doing their job to collect data properly to properly manage the fisheries, then how are we ever going to get to a point where we're going to open these places up? I've been fishing eels six years and the guy's job - there's one guy that his sole job is to collect data on hagfish - he's checked my eels four times in six years. That's how much data he's collected on the population of hagfish.”

18. MPA Enforcement Overall, how satisfied do you think fishermen from your port are with the enforcement of MPAs?



Discussion Summary Participants shared various perspectives with regard to MPA enforcement, from very dissatisfied to very satisfied.

- One participant suggested that while MPA enforcement is effective at enforcing MPA rules and regulations along MPA lines, it takes away from other, non MPA-related enforcement activities.
- Several participants believed enforcement of the MPAs is better than MPA management or monitoring. One participant agreed, but also indicated that MPA enforcement lacks the capacity to cite all MPA violators.

Participant Quotes

“I feel like the enforcement of it has been not good because that's all they focus on, like literally, I watch [the California Department of Fish and Wildlife] leave the harbor and just bee-line it for those lines. They go up and down those lines all day. I literally drove into the MPA, across the MPA last year and there was 20 pots a half a mile in the MPA and I watched [the California

Department of Fish and Wildlife] go up and down the line, around the line two times and then drive back in. So they're so focused on this line that they're literally forgetting that there's a whole other ocean out there of sport fishermen, crabbers with 60 fathoms of rope in 30 fathoms of water. There's all other kinds of things they could be focusing on other than just that. So I think it's distracted them slightly on the whole other rest of the ocean. And now all they're focused on is just this one little spot.”

“It seems like enforcement is the best [between MPA management, monitoring, and enforcement]. They're enforcing it.”

“As far as enforcement goes, enforcement’s just doing their job. [. . .] Now, if somebody is breaking the law within the deal, which I've seen several times, and guys get away with it... enforcement’s spread thin and light, too. So is it being completely policed like a stoplight with a camera on it? No, it's not. But they're doing the job to the best of their means.”

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

Discussion Summary Participants shared final thoughts related to the current state of MPA management, decision-making, and MPA access.

- One participant believed a dynamic environment like the marine ecosystem requires a dynamic approach to management, but that the current approach to MPA management and fisheries management more broadly is too static for the system.
- One participant stated decisions that affect the fisheries, including the creation of MPAs and other area closures, should be made by state and federal management agencies alone without the influence of other special interest groups.
- Participants asked that the Elkhorn Slough SMR and adjacent Kirby Park be considered for reopening to allow fishing activity.

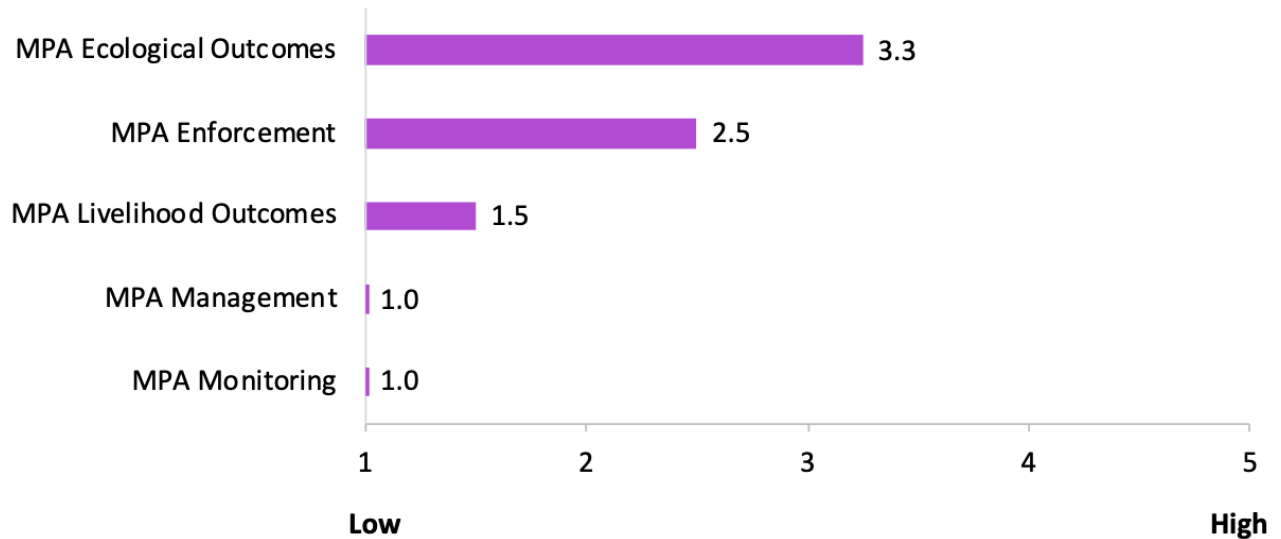
Participant Quotes

“The ocean is arguably one of the most dynamic environments on the planet, and it's being regulated in a very static way. And I think there's a giant mismatch between how much the ocean changes day to day, week to week, month to month, year to year, and the need for management strategies to be much more adaptive and dynamic in that way. And I know that is a giant ask of managers and policymakers, but I think it's imperative; I think it's essential. The environment’s changing much faster, given all the other forces in the world.”

“The Elkhorn Slough MPA [SMR] goes too far back and Kirby Park should be open. [. . .] We want our shark derby back.”

“Every year, we would have a derby where guys would go back there [Elkhorn Slough/Kirby Park] and fish and whoever got the biggest stingray or shark won the derby... it’s all over because you can't go back there and do anything anymore.”

Perceptions of MPAs, Average Responses for Questions 13-14a, 16-18



Feedback on Virtual Process

20a. Satisfaction with the Virtual Process Overall, how satisfied were you with your experience participating in this virtual focus group?

20b. 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?

20c. 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 were not asked these questions, and so did not provide ratings or discuss their responses.)