

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 Crescent City's Commercial Fishing Community*

The Marine Protected Area (MPA) Human Uses Project Team¹ is hosting over 30 virtual focus group conversations with fishermen throughout California from July - October 2020. 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 of 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: Crescent City

Date: Thursday, August 6, 2020

Participants: Gerry Hemmingsen, Victor Pomilia, Randy Smith, Troy Wakefield

Overview

On August 6, 2020, four commercial fishermen operating out of Crescent City participated in the second focus group conversation. A high-level summary of the conversation is captured below, including:

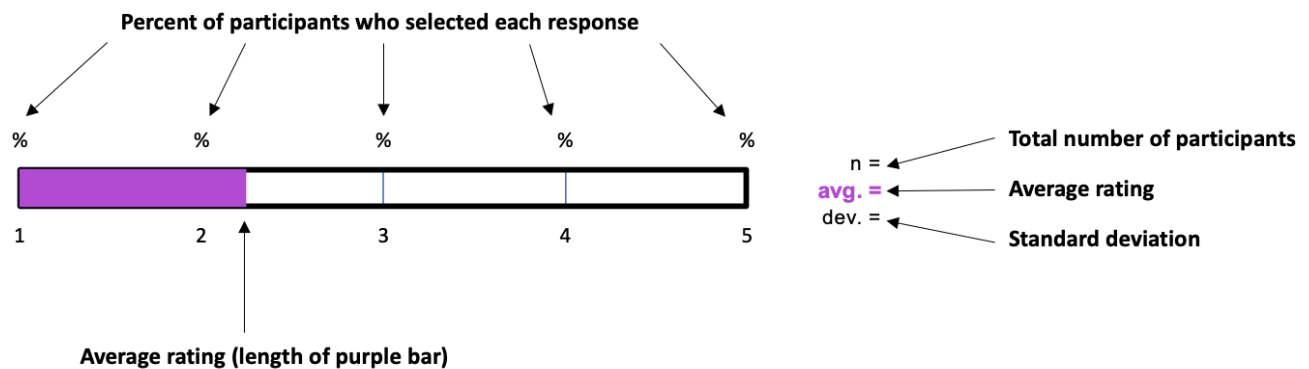
- the numerical final scores (via Zoom polls) for questions asked within each theme;
- a summary of participant's perceptions, insights, and perspectives related to each question; and

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

- 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 those 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 19 that display all of 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:

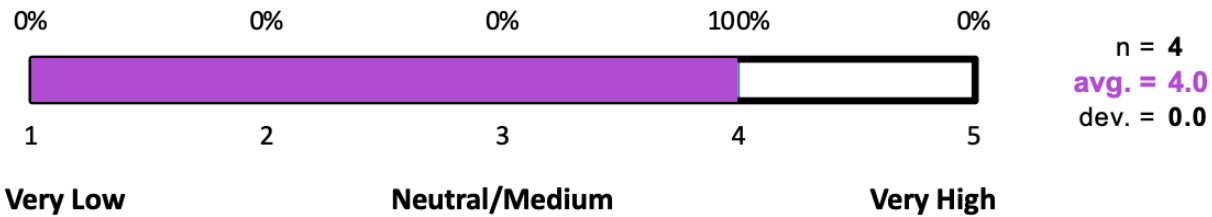
- [California Fisheries Data Explorer](#): This interactive site allows users to visualize commercial landings data (i.e., number of fishermen, pounds of fish landed, and revenue from fish landed) and CPFV logbook data (i.e., number of anglers, vessels, trips, and fish caught from specific fisheries and ports).
- [MPA Baseline Monitoring Program: North Coast](#)
 - [Summary of Findings from Baseline Monitoring of Marine Protected Areas, North Coast \(2013-2017\)](#)

Our Project Team would like to express our appreciation to the four Crescent City fishermen—Gerry Hemmingsen, Victor Pomilia, Randy Smith, and Troy Wakefield—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 In terms of the current health and sustainability of marine resources, participants expressed the view that ocean conditions and several species are generally healthy.

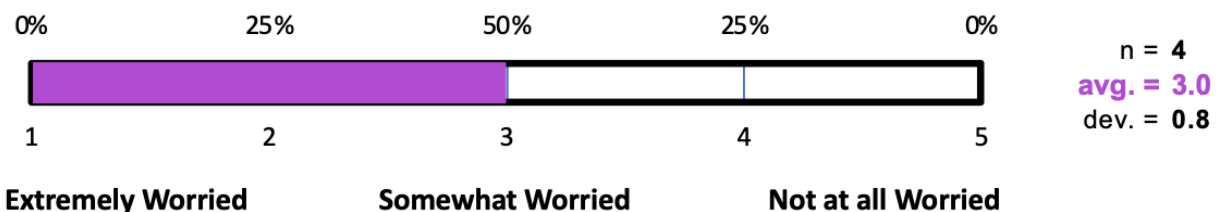
- Several fishermen noted that prawn/shrimp populations have been up in recent years, and Dungeness crab populations, though cyclical, are also doing well. One participant believed Dungeness crab in the Crescent City area is currently in a low cycle, but that it is likely high elsewhere on the California coast.
- One participant mentioned through the use of technology, fishermen can detect feed and ocean conditions, and that they are currently seeing an abundance of feed across species.
- Most participants believe that while the species sport fishermen rely on may be doing well, this does not provide a clear indication of the health of commercial species in the area.
- One fisherman highlighted some worry with regard to an overabundance of species that feed on pink shrimp and Dungeness crab larvae.

Participant Quotes

“I just, I’ve been fishing, like I said, for 10, 11 years now. And since I started in the two fisheries that I’ve been in, the ocean just seemed very, very healthy as a whole [. . .] I mean the prawns seem to be up. I know the shrimpers have had good years, the [Dungeness] crabs cycle, but somewhere on the coast, you know, they’ve been [doing] well [. . .].”

“With our technology, we could see the amount of feed and ocean conditions on our electronics and there’s [an] abundance of feed of all species through the food chain. So we’re pretty comfortable with the way the ocean is responding to the environment.”

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 When reflecting on the long-term health of marine resources, several participants expressed they are not as concerned about future ocean conditions as they are about how marine resources are being managed.

- Several fishermen believed that the ocean is and will remain healthy overall, though there was some worry with regard to climate change.
- A couple of fishermen emphasized it is difficult to separate concerns related to the future health of marine resources from those related to current and future fisheries management and regulation; many were more concerned about regulations preventing them from accessing resources than they were about the future health of marine resource populations.
- One participant communicated concerns related to how whale populations and entanglements with fishing gear might affect commercial fishing access in the long term.

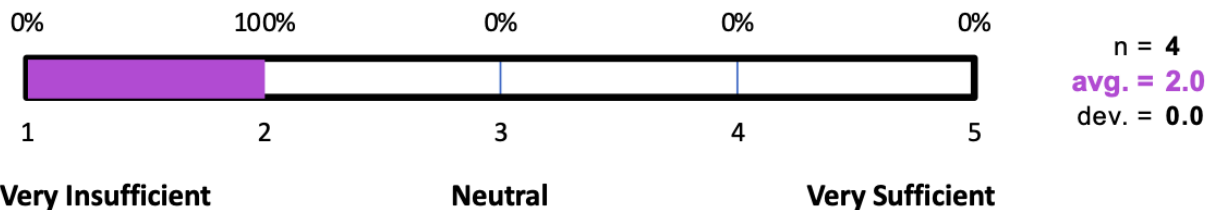
Participant Quotes

“I think, you know, there's a lot of concern about the whole climate change thing, I think, how that's going to affect the industry.”

“It's hard to separate the resource worries with the management worries [and] regulations coming down on fishermen because of, you know, of some resource issues. So it's really hard to separate that. But I know fishermen are worried about the industry overall [. . .] I don't think the resources are going away or anything like that as a personal worry but I do worry about how we're going to get regulated out of business - that's a concern. So I don't know how you separate the two when you're worried about the industry. But as far as a resource, I think it's gonna be fine, but I know fishermen are worried.”

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 expressed several concerns related to the level of access to commercial fish resources for fishermen from their port.

- Several fishermen perceived the loss of the commercial salmon industry in Crescent City as having a lasting effect on the port.
 - Several participants identified the closure of the commercial salmon fishery this year as a result of Klamath Management Zone (KMZ) regulations, and that the salmon industry is moving north and south out of Crescent City. One participant added that KMZ regulations have become a reality for Crescent City fishermen in recent years.
 - A majority of participants believed that while other fisheries have emerged, including pink shrimp, none have been able to contribute economically as much to the port as

salmon did. One participant explained that after the salmon fishery closed, most fishermen in Crescent City were only able to work two to five months out of the year.

- One participant believed participation in multiple fisheries is difficult for Crescent City fishermen because of the barriers to access associated with limited entry and lack of affordable and accessible permits. Another fisherman identified the financial and capital investments that are required to enter the commercial fishing industry as a barrier to access.
- Several participants perceived the combination of fishing regulations and area closures as having compounding effects on fishermen.
 - One fisherman cited essential fish habitat areas, KMZ regulations, and rockfish conservation areas (RCAs) as restrictions of particular concern because they affect nearly every aspect of the fishing industry.

Participant Quotes

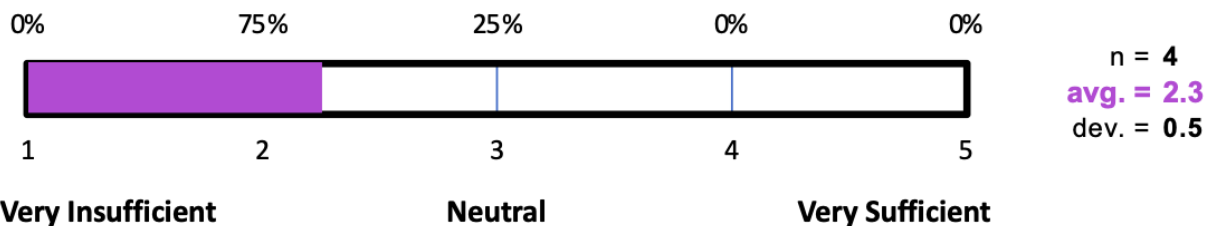
“The salmon industry certainly drags us down to, I think, insufficient because that used to be very prosperous in our port and it's no longer. I was thinking that [maybe] there's kind of trade-offs: we do a little more of this and a little less of that. But I kind of think that we've lost out on that fishery and that was a big part of this community.”

“Well, I do [wish to access other fisheries]. But if you look at the fleet [. . .] they're not able to. It's limited entry and the permits aren't available.”

“And just to expand on what [name redacted] was saying, it wouldn't be so bad if the management took one or the other [area closures], either had to be essential fish habitat areas or the MPAs, or the regulations, but we get nothing on both of them. So we get, you know, in my estimation, we get over regulated and we get the restricted areas.”

“Over the years, I saw a lot of fishermen go away because they couldn't afford to be diverse. And that's what we're seeing here. It's just, it's getting smaller and smaller, their fleets are getting smaller and smaller because people can't afford to be diverse.”

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 When discussing income and livelihoods from fishing, participants indicated that the costs associated with fishing, among other factors, have made it difficult for fishermen to support themselves on income from fishing alone.

- One fisherman estimated that most of the Crescent City commercial fishing fleet has a second job, and that only a small percentage fishes full-time.

- A majority of participants perceived that costs associated with fishing have increased while the price of fish has decreased.
 - Several participants indicated that effects from the COVID-19 pandemic have made it increasingly more difficult for fishermen to cover their costs, but that lower fuel prices have eased some of the burden.
- One fisherman reflected on how fishing used to be profitable despite the challenges, but that it has become less secure and has less benefits than other jobs.
- Due to limited access to fishing grounds, one participant highlighted the need for fishermen to diversify the fisheries they participate in to make a viable living. They added that not every fisherman has the capacity to diversify, and as a result, they are forced to leave the industry.

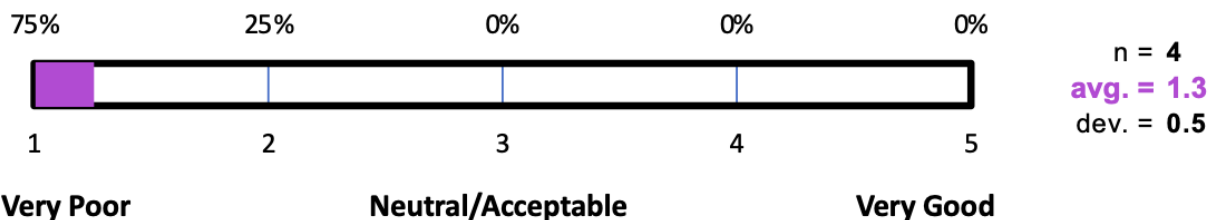
Participant Quotes

“I was just gonna say [there are] few boats [. . .] that are lucky enough to fish year around and have fisheries, you know, that pretty much go year round. There's two or three weeks out of the year, besides the closures now where you can't fish. People do make an okay living still at it. But there's a lot of people in our port when salmon shut down and stuff like that that only work for two or five months out of the year. And yeah, those, those boys have to have other jobs.”

“I mean, nothing gets cheaper except the price of fish.”

“And due to this coronavirus, we’re down and we're scraping the bottom trying to cover our costs over it and we wouldn't cover our costs if it wasn't for the cost of fuel being down. So we'd be all tied up, we'd really have a problem. So luckily the price of fuel [is down] and somebody took a hit on that because people are going broke, like the fuel companies, you know, they can't afford to compete. So that's a ball of wax on that.”

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 When discussing markets, participants noted that nearly all fish is either landed out of state or distributed south of Crescent City. Given current market conditions, they believe their local markets will continue to get worse.

- Several participants shared that the market situation in Crescent City is nearly as bad as it could be as there currently is no processing plant or steady buyer based in the port.
- A majority of participants highlighted that most of the pink shrimp caught off the California coast is landed in Oregon, resulting in a significant economic loss for Crescent City.
 - These fishermen shared that the reason for this is due to California not completing its Marine Stewardship Council (MSC) certification for pink shrimp, which is required by

buyers to sell to European markets. As a result, California's pink shrimp industry has been relocated to Southern Oregon.

- Several participants shared that while one of Crescent City's primary live buyers is located in Oregon, their remaining product is trucked to Oakland and is distributed from there. As a result, pricing is expensive because most of the buyer's revenue goes toward trucking and fuel.
- One participant indicated that fishermen do not feel supported in their efforts to sell their catch locally. They added there is a local fish store that could potentially do well, especially in the summer months, but that it is poorly managed. Additionally, selling directly to consumers does not seem to be a priority for the harbor since it was rebuilt.
- Participants reported that the COVID-19 pandemic has affected markets in several ways, including a significant loss of seafood sales and a reduction of trucks coming into Crescent City to purchase small quantities of fish.
 - Another participant shared that they expect there to be a greater price reduction for Dungeness crab as a result of the pandemic based on what they have seen happen in Alaska.

Participant Quotes

"I do feel very poor. I think, we lost the shrimp processing in California, there'll probably never be shrimp processing in California again because of the [Environmental Protection Agency] EPA and the City of Eureka. There is no processing in Crescent City. So I think we're going to have market problems in the future."

"I think we're going to lose some of our live buyers, seasons are going to be so short that they're not going to survive. So our markets are bad now but they're going to get worse."

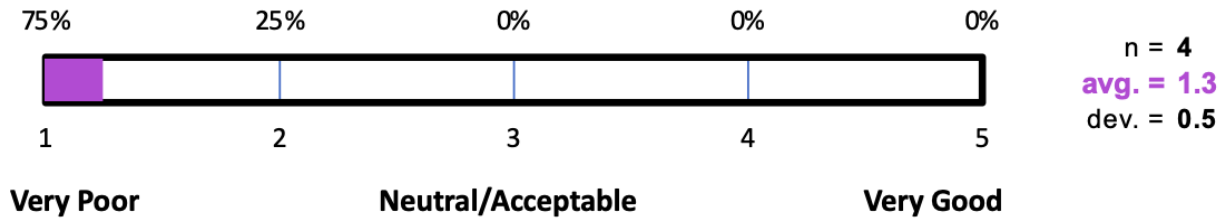
"Three of us have been unloading in Oregon all year, and the rest of the fleet is unloading in Brookings now. So because we don't have the MSC certification [in California], and in the marketplace MSC is very valuable... [the buyers] don't want to buy something if it isn't MSC. So we've kind of had the leg shot out from under us because we didn't qualify in California. So now basically the shrimp industry is out of California. It's going to Southern Oregon now, and that includes product caught off the coast of California going into Oregon. So the Department has lost revenue from all that, and so has the port itself."

"I mean, there's [no processing] done around here. And that's why there's problems with the pricing around here. It's so expensive for [the live buyer] to truck. You know, I mean, anything that could be made is spent on the truckers and the fuel."

"With this COVID-19 thing, the few small trucks that were coming up and buying a little bit of fish, just small line markets, trying to get in there, no, I mean, I haven't seen one of them come up since this started so it's really about keeping the few markets that we have going."

"I mean we lost 98% of our seafood sales this year because of COVID, and that is driving the prices down. And the ability of the markets have changed [. . .] We have pretty good markets, all four of these folks that are on here now. But there are people in this [port] that have really crappy markets this year and the price for all of this is down."

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



Discussion Summary Related to the port’s infrastructure, participants discussed the relationship between limited product being landed in Crescent City and the state of the port’s facilities.

- Several participants highlighted that fishermen are unable to sell their catch at port due to the lack of processing facilities (especially for pink shrimp) which, in turn, creates a need to truck almost all product out of the area.
- A couple of fishermen shared that without product being landed in Crescent City, particularly pink shrimp, there is no longer revenue to maintain the harbor. Services that support fishing needs, like dredging, will be harder to obtain which will make boat maintenance difficult.
- Another participant added that the harbor receives a portion of the money for every gallon of fuel sold in Crescent City, but with most fishermen now fueling their boats in Oregon, the port no longer receives these funds.
- One participant questioned whether fuel will continue to be accessible in Crescent City since fishermen are purchasing fuel out of state due to cost savings.

Participant Quotes

“Trucking is a huge problem in this port, the processing plants left right before I came in, you know, just things like that. Also makes it much harder in this port because what you can catch, it can be difficult to get rid of it.”

“Because of pounds not being delivered into this port, the dredging is going to be harder and harder to get and without dredging, we won't be able to do boat maintenance here in Crescent City.”

“The harbor has problems maintaining a brand new harbor because they don't have the revenue from the shrimp industry, which was a big part of revenue over the years.”

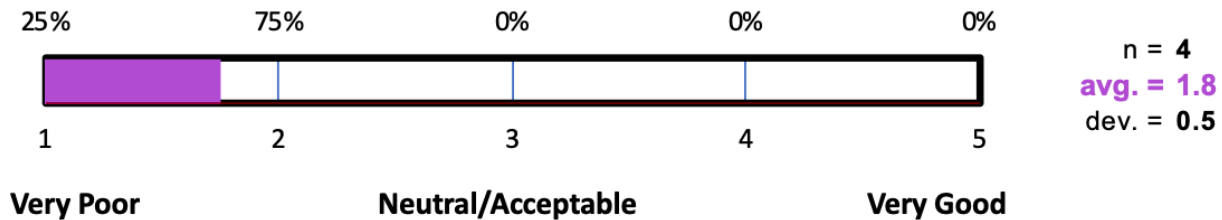
“The fuel dock is also, you know, part of that harbor gets money for every gallon of fuel. It's pumped over here and now with deliveries into Oregon, of course, we're all fueling up in Oregon. So, you know, and there's certainly a benefit to us because the fuel [in Oregon] is usually \$1 less a gallon [. . .], but we wouldn't, we probably would not be doing that if we were fishing out of this port.”

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

Discussion Summary (Participants did not rate or discuss this question because it was not asked during this focus group.)

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 When discussing labor concerns, participants indicated that recruitment and retention of participants to the commercial fishing industry was difficult due to economics and the overall challenges associated with the industry.

- One participant mentioned several barriers to entry, especially for younger individuals, including the financial investment. They also highlighted there are not many incentives to enter the industry, however there are a great deal of deterrents like regulations, lack of benefits, and overall economic instability. Another participant mentioned future concerns as reasons why people are not entering the industry, including more potential restrictions, environmental concerns, and ocean wind energy.
- Several participants explained that the labor pool is very small, and that it is difficult to recruit and retain good crew members. One fisherman explained those who enter the industry often do not stay for more than a week.

Participant Quotes

“It's practically impossible to get especially young people into the industry, you know, there's various reasons. We kind of touched on them, economics, I mean having the money to get into the industry or even in, you know, a job recruiting try to replace a crewman, nobody wants to get into this industry. There's virtually no benefits [. . .] there's not much of an incentive, especially with the regulations, the unsureness, the insurance of the industry. Overall, you know, people are just not out there wanting to become fishermen that I see.”

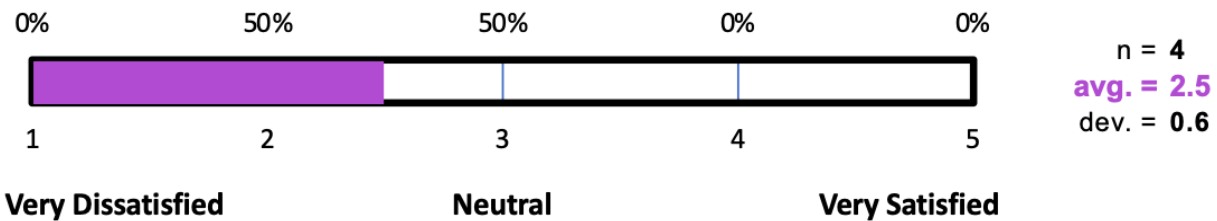
“There's a lot of people that come into this industry that don't make it more than a day or a week. [. . .] The recruitment is way down. I mean, I haven't been around that long. I know people talk about, you know, in the 70s and 80s, with the mills running here that there were people all over, but it is hard to find people.”

“When it comes to crew, the crew pool is so small. It's hard to come up with good people anymore. That's the bottom line. You go through a few people and you end up keeping one of them because they're the best of all, you know, the choice is way down, a lot worse than it used to be.”

“One of the reasons the crew pool is so small is that people look at the future of the industry and with every year, there's new restrictions. I mean, we're getting hit from all sides. If it isn't the environment, it's management and now we're looking at wind energy on the ocean. So

they're going to take more of the ocean away that we traditionally fish, and so that scares people from getting into this industry as a crew or investing in the industry.”

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



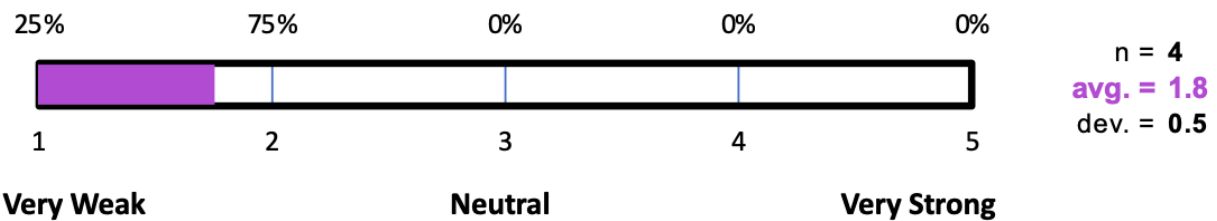
Discussion Summary One participant explained that job satisfaction in the fishing industry is often related to whether fishermen can fulfill their crew and pricing needs.

- The majority of participants estimated that given the state of the labor pool, job satisfaction will decrease. They added that when there is an abundance of product and the prices are high, job satisfaction typically increases.

Participant Quotes

“So there's going to be a lot of dissatisfied people [in the industry] over the next couple years [due to the current price of the product]. But when the years are good the products are plentiful and the prices are high, there's a lot of satisfaction.”

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



Discussion Summary Overall, participants reported they felt social relationships within the Crescent City fishing community were weak.

- Several participants believed there is a lack of trust between groups within the community, and that different groups do not seem to work together to support each other and the industry. One participant noted that only a small portion of the fleet works to sustain the industry in Crescent City.
- One participant explained that while some fishermen were able to obtain permitting for Dungeness crab pots through the Crescent City Fishermen’s Marketing Association, the association is not active.
- One fisherman emphasized that communication among community members is important, but that internal strife prevents community organization and progress.

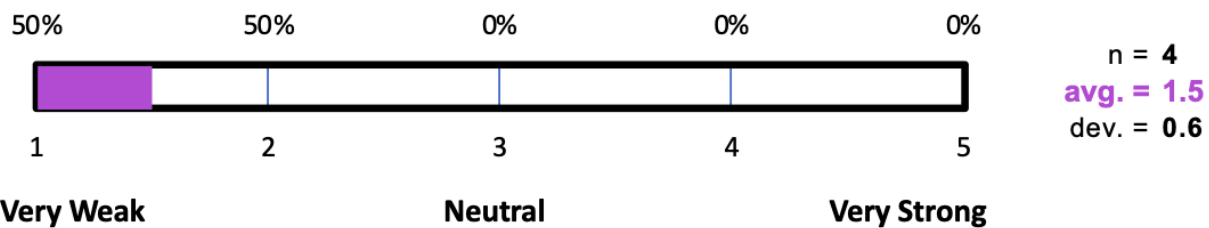
Participant Quotes

“The first question, with internally within the group of fishermen, and even though there are different factions sometimes, you know, we get into the whole small boat/big boat thing, but each of those groups has some sort of reputation. So I think within their groups they work okay together. So it's certainly weak but I don't think it's very weak.”

“I wouldn't say [the marketing association] really was active. I'm part of it. I mean, we did, me and [name redacted], [. . .] and then [name redacted] helped me. We got the permitting to pick up the crab pots through that association, you know, but that's the first thing they'd done in a long time, you know, but people pay their dues to be at the price meetings. So it had a little bit of money, so it did pay for the permit for that. But I mean that's been it.”

“None of them really seem to get along very well, and a few of them, you know, they do talk amongst each other, but they have no representation at all because they don't want representation but, you know, they will do nothing to help out [. . .] I know I'm the youngest one here, by far, but some of the people just don't seem to care at all if it ended in five or eight years - they would be done with their fishing career. Anyway, some of them have enough money where they're not worried about selling their boats, you know, I mean, it's just that part doesn't bother them that much and they just, they don't want to help. They don't seem to care one bit if the industry died with them. They get to be the last one that caught, you know, kind of a thing. So I don't see them helping, period. And it's just kind of a bummer. You know, because it is a very, very small portion of the fleet trying to, to keep it going, at least in this port. I don't talk to that many people in other ports, but in this one here. It's a very small portion.”

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 shared negative views about their fishing community's relationship with external groups.

- One fisherman believed that the fishing industry lacks support from California Department of Fish and Wildlife (CDFW) and non-governmental organizations (NGOs).
 - Another participant described how the community has had some communications with CDFW and NGOs through the California Dungeness Crab Fishing Gear Working Group and the Dungeness Crab Task Force, but there is mistrust between the fishing community and CDFW and NGOs.
 - One participant perceived that there is some engagement in policy processes among the fishing community, but that fishermen do not always trust those who are involved.
- Several fishermen indicated that the local community generally does not support the fishing industry in Crescent City, though they have provided monetary support in times of crisis in the past (e.g., tsunami events).

- One fisherman believed that the Harbor District is developing the harbor to become a tourist attraction without commercial fishing or fishermen. Given that the industry has become smaller over the years, they were not sure if the local community knows the commercial fishing fleet exists.
- Another participant explained that as the fleet ages, commercial fishing seems to become less prominent within the broader community.

Participant Quotes

“When you get into outside help, like help from [CDFW] or help from these other NGOs or these other groups, I think it's abysmal on the help that we've got to support the industry.”

“With some of the policies that we're fighting, such as the whale entanglements, there's been a small group of people on the coast that [are fighting] the battle with this problem that we're going to be confronted with every year. And I think a lot of it is, it's not all economics. A lot of it is mistrust of the people that are driving the California Coast Crab Association. They're the lead in fighting these new regulations with entanglements so there's a lot of mistrust in that [. . .] and it's a large percentage that are afraid that we're up to something - I'm part of the group - in the background that's going to hurt them.”

“But I think communication more with [CDFW], more with NGOs, you know, we've got a little bit of that through the whale working group. And we've got a little bit of that with the D[ungeness] Crab Task Force, with [CDFW], but there's a lot of mistrust [. . .] not only within the fishing community itself, but outside the fishing community [with CDFW] and these other NGOs, I mean there's not much trust. Every time it seems like we're asked to help out [by the state or NGOS] it comes back to bite us.”

“We've gotten to such a small group, I'm not sure a lot of the community even knows we exist anymore or [. . .] that we're still in business. But I think for the most part, the people that have been around a long time do have some support for fishermen. As the demographic changes, you know, as we move on, I think it gets less and less. I think we're getting to the point of being almost insignificant, which is pretty sad, in our industry.”

“I'd like to see the industry continue on it. I think at the rate it's going, it's not. It's disappointing.”

Well-Being, Overall/Additional Comments

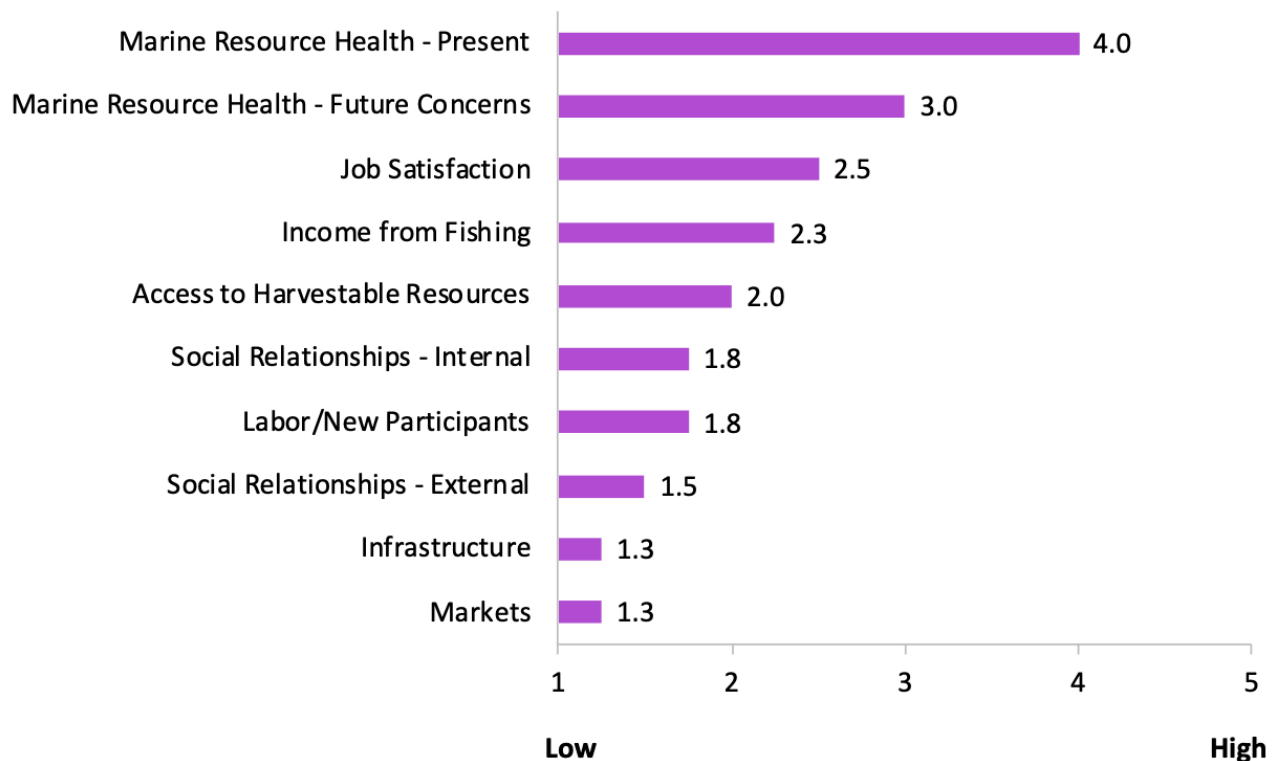
12. Overall/Open-ended *Is there anything not captured above that you would like managers and other readers to know about your fishing community/industry?*

- *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 When asked to follow up with additional information or recommendations related to fishing community well-being, several participants expressed worries about the long-term health of the industry and offered suggestions for fishery managers.

- Participants re-emphasized their concerns about the lasting effects of whale entanglement issues and the effects of COVID-19 on markets due to restaurant closures that will likely decrease sales.
- Several fishermen suggested CDFW make efforts to improve how managers communicate with fishermen.
 - One participant expressed some concern with regard to CDFW holding separate conversations with fishermen and environmentalists. They believe these meetings should be more open and collaborative.
 - Another participant recounted how fishermen were unable to get MSC certification for pink shrimp as a result of poor communication and would like to see efforts from the state to obtain that certification.

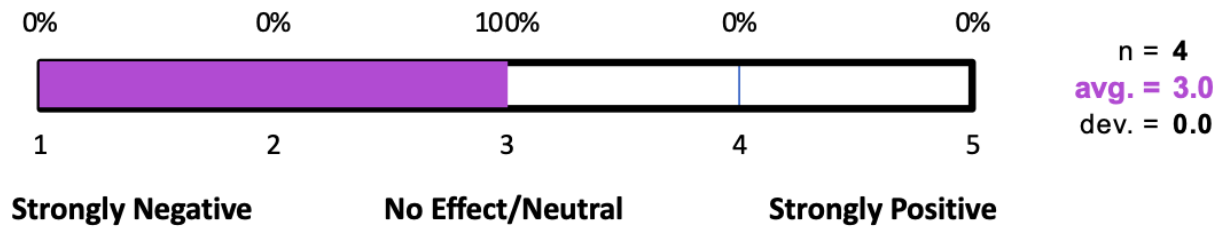
Perceptions of Fishing Community Well-being, Average Responses for Questions 1-6, 8-11



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?



Discussion Summary Several participants stated they are not clear on the effects, positive or negative, of MPAs on marine resource health in their area.

- One fisherman shared that despite having attended MPA meetings that indicated MPAs were having a positive effect on resource health, the fisherman had not noticed any change since the MPAs were designated and did not think that MPAs made much of a difference, with the caveat that they are not a scientist.
- One participant was aware of the MPA baseline surveys conducted upon implementation of the MPA network, and expressed some interest in learning about the ecological effects of MPAs.
- Another fisherman believed because so few fishermen were fishing in areas that are now MPAs prior to MPA implementation, the MPAs have not had an effect on marine resource health. In addition, they believed fishing was still occurring in MPAs due to the lack of enforcement.

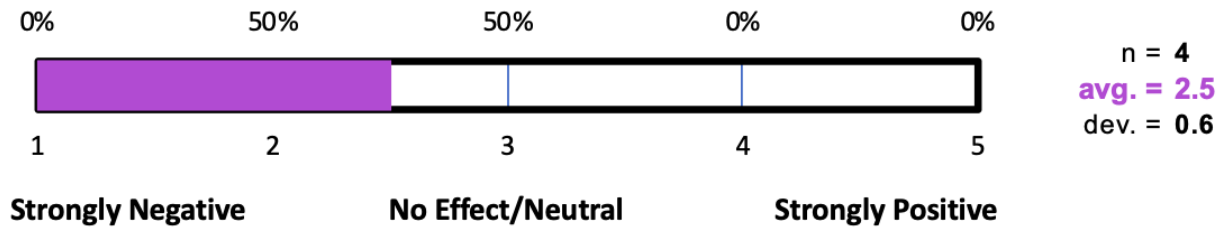
Participant Quotes

“I mean, very small, insignificant. And so, I don't think whether having them or not having them really would change anything in our area. [. . .] I have gone to some MPA meetings after the fact that they say that all these areas are doing wonderful, and I'm sure that they are, there's no reason that they shouldn't. But I think in our areas they wouldn't be able to show much of a difference, I shouldn't say that they don't, but I think little or no impact in our particular area.”

“I don't know if this was supposed to be a systematic thing. So it was, you know, they had [MPAs] completely down the coast. So they were all kind of interacting with each other and supposed to do great things. And in our area, I don't think that there's been a big difference. I could be wrong. I'm not a scientist and not an -ologist of any kind.”

“I think one thing that's going on is that they are still being fished off and on. We've had people catch crab in them and nothing happens. So then you get more and more of that.”

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 that MPAs had a minimal effect on fishermen from Crescent City, but that MPAs in general create more difficulties for fishermen overall.

- A majority of participants perceived that the MPAs in Crescent City were not placed in the most productive fishing grounds, though one participant stated that they can no longer fish for pink shrimp in restricted areas. However, most participants believed that Dungeness crab and pink shrimp do not stay within the MPAs, and that their natural movement outside MPA boundaries allows fishermen to continue to fish these species.
- One fisherman detailed how MPAs have made it more expensive to catch Dungeness crab because they are required to use more bait and spend more time drawing the species outside of the MPAs whereas if there were no MPAs, they would spend less time catching Dungeness crab by going directly to the source.
 - Another participant explained one positive effect related to MPAs in that the greater amount of Dungeness crab within the MPAs allowed Dungeness crab fishermen to fish later in the spring due to the available biomass.
- One participant noted that a fisherman’s ability to earn a living is affected any time an area is closed off from fishing.
- Participants were not aware of any fishermen leaving Crescent City as a result of MPAs, nor did they believe MPAs had an effect on the political organization in the port.
- One participant mentioned the global target to designate a percentage of the world’s oceans as MPAs, and stated that restricting areas from fishing makes it difficult for the industry to continue. They added that in taking away fishing grounds, MPAs lead to compaction and an increase in gear in some areas which exacerbates other issues such as whale entanglement.
- A participant noted that an MPA placed near the Oregon border was important fishing grounds for fishermen from Brookings, OR. After implementation, Brookings fishermen moved further south to fish near Crescent City, causing more crowding in the area.

Participant Quotes

“And the only thing that I know as a shrimp fisherman that there's two of the MPAs here that we do not fish in any longer. But shrimp aren’t staying in those areas anyway. They're moving in

and out of that area naturally and moving all the time. Anyway, so eventually we're going to catch those shrimp if they happen to be in there now.”

“I think it's minimally negative, but anytime you take an area away from fishermen, you're certainly going to impact their ability to earn more so, yeah, I don't think it's significant. But I do think it's worth noting that, I think it's negative anytime you take away fishing area.”

“I'd like to add to that, I think we can still catch the crabs [when they move out of the MPAs], but it costs us more money, we're fishing around them and pulling those animals out there with more bait. So, it costs us more with fuel - it takes longer to fish those areas. [. . .] The way we fish is to fish as fast as we can and go on to the next fisheries. [. . .] So this just slowed some of us down.”

“Brookings boats have come to California to fish crab, because of the MPAs, because there's a large MPA that covers the border and a large part of it's in Brookings and Oregon and so they feel there's more ground to fish in California. So there has been an influx of boats from Oregon into California below the MPAs.”

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 highlighted that all MPAs in their area have had a negative effect on Crescent City fishermen.

- *Pyramid Point State Marine Conservation Area (SMCA)*: Several participants shared that Oregon fishermen fished in this area before it was designated as an MPA, and that upon MPA implementation, more Oregon fishermen continued to illegally fish there in retaliation for it becoming a restricted area.
- *Reading Rock SMCA*: One fisherman expressed that this area was fairly significant for Dungeness crab and drag fisheries.
- *Point St. George Reef Offshore SMCA*: One participant explained that fishermen did some dragging and pink shrimp fishing as well as crabbing and line fishing in the area before this MPA was established.

Participant Quotes

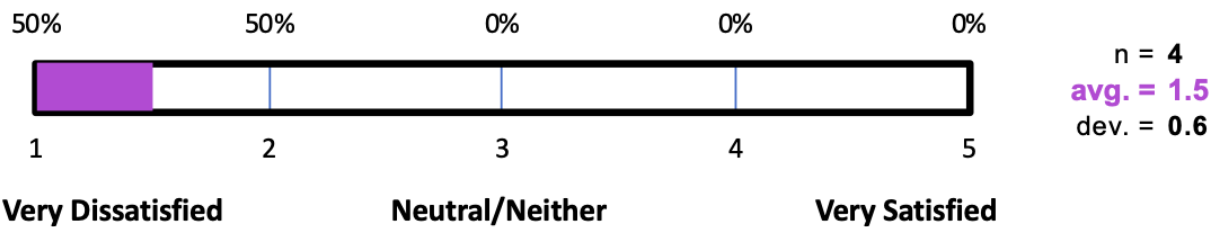
“Well, I'd like to bring up a point about the Pyramid Point SMCA that hasn't been mentioned in that when that first went in there is - and it's a political point - when that first went in, the Brookings guys were mad at us, because that's a lot of their fishing grounds or fishing area, so they think that we did it on purpose. And so some of our pricing of Dungeness crabs is done on the phone. Each Association called into the other Associations up and down the coast and they had gone fishing because they were mad at us without going and getting the price that we were all trying to get. They just went fishing on that point to get back at us.”

"I think that Reading Rock area was fairly significant to the Dungeness crab fishery and even to the drag fishery to some point because I think we used to drag fish right close to Reading Rock and now we can no longer do that."

"The Point St. George [SMCA], I think we did some dragging around that area too, if I remember right, and shrimp, and so there are some restrictions there as well as our line fisheries and maybe some crabbing too, so I think they've all had some negative impact on the fishing industry."

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 expressed they were dissatisfied with the communication of information related to MPA management.

- The majority of participants believed that managers could better share MPA goals and whether the MPAs are improving resource health. One participant explained that fishermen heard little from managers after the implementation process, and that those who did were the ones who were involved in the process.
- When reflecting on the MPA implementation process, one participant recalled that the fishermen who were involved were able to bring other fishermen's perspectives to the MPA meetings, and they believed that this resulted in a satisfactory outcome for the port overall. They explained that those most dissatisfied with the process were Oregon fishermen.

Participant Quotes

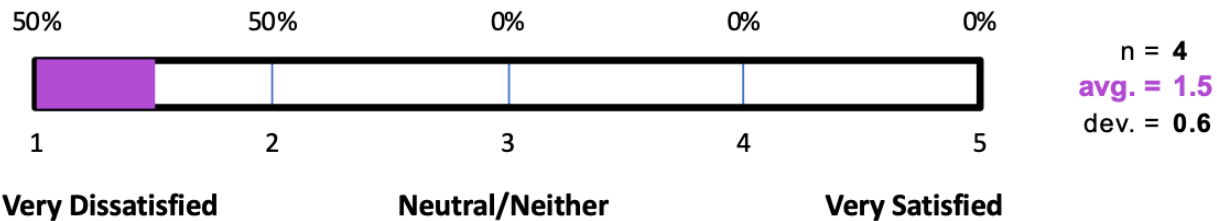
"I think for our area - I'm not talking about other areas because I know other areas did not have the same kind of information gathering [during the MPA implementation process] that we did - but I think for our area in getting the response that we did end up with what were proposed, I think we ended up in a much better place than it could have been. So I think that whole process for me was pretty satisfactory."

"Most people have no idea [of MPA management] [. . .], I just don't think that that does the state any good to not try and make people aware of why [MPAs are] there or if they are or aren't healthy."

"I just think [. . .] they need to do a much better job of making, especially fishermen, but entire communities aware of what they're doing. But the point is, it was just kind of a weird deal when

they implemented them, you know, 'we just, we have to do this,' and [it] just kind of went through, was done, and then you just don't hear much about it."

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



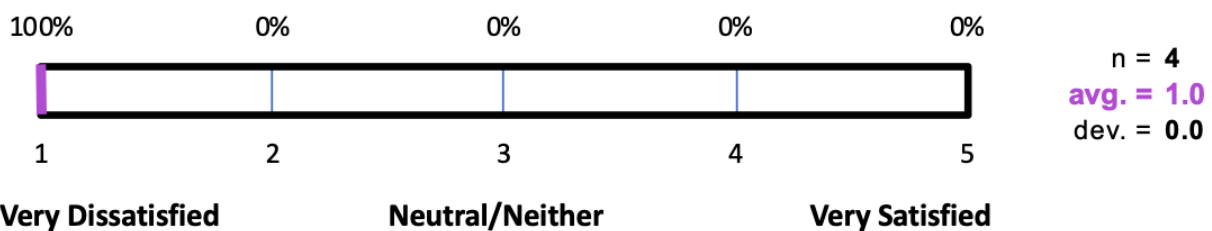
Discussion Summary Most participants had limited knowledge of MPA monitoring efforts to comment on the monitoring program.

- One fisherman shared they have not seen any research vessels in the area and are not aware of monitoring in general.

Participant Quotes

"I have the same [dissatisfied] feeling about the monitoring of the animals within the MPA itself too. We don't see any of that. I don't know that we've seen any research vessels out there, checking or going. Nobody's reported that to me anyway that, 'oh yeah, there's such and such a boat out there and they're monitoring just this MPA and they're checking it out.' So, at least in our area, I haven't heard of that. So it may be happening. But, so I kind of have to go along with [name redacted] on that, you know, being unaware of it, still dissatisfied that we're not aware."

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



Discussion Summary Participants were generally dissatisfied with MPA enforcement.

- Several fishermen believed that enforcement has declined since MPA implementation, and that there currently is no enforcement observed in the Crescent City area. One participant added that if the MPAs are not enforced, they should be removed.
- One fisherman expressed issues regarding fairness of enforcement where sometimes fishermen are penalized for fishing in an MPA and other times they do not receive so much as a citation.

Participant Quotes

"Most people are not aware because they don't think there is any [enforcement]. Fishermen basically are the only ones [enforcing]. But even if they do call in and say, 'x, y, and z is fishing in this MPA,' there doesn't seem to be any reaction. Nothing seems to happen."

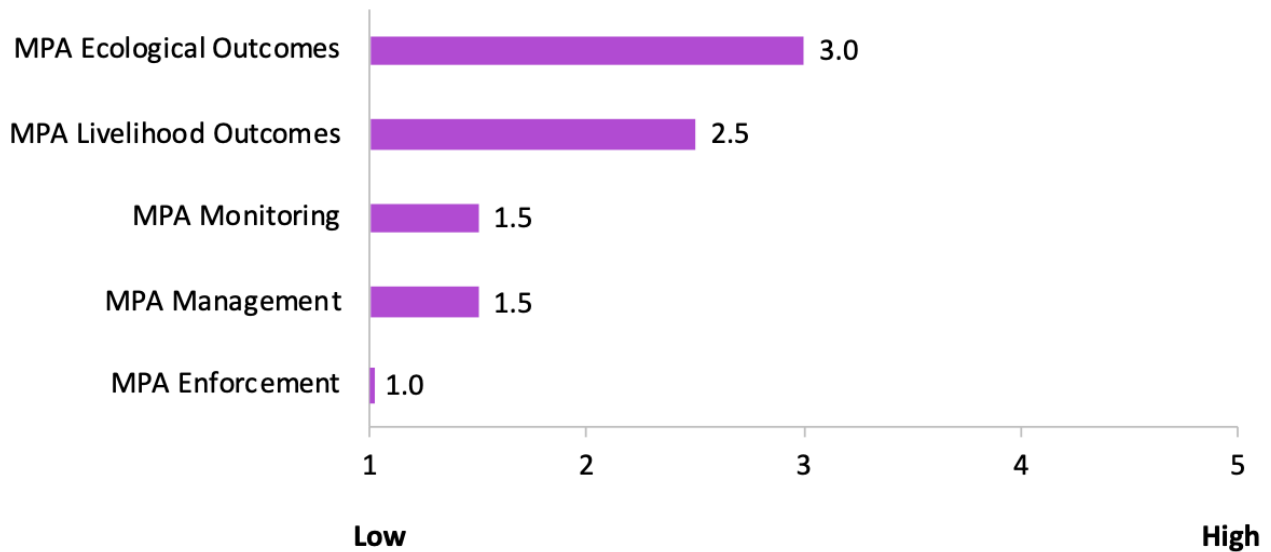
“There's been other people in MPAs and they've done nothing to them. No citations written. It's ridiculous. If they're not going to enforce it, they outta just close the MPAs down. Either that or enforce it.”

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

Discussion Summary All participants shared concerns regarding future MPA expansion.

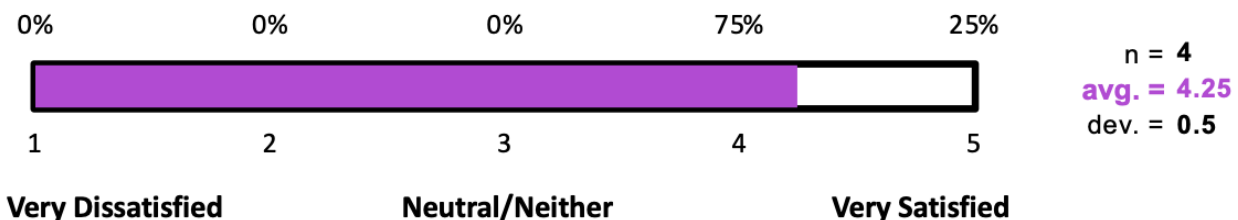
- One fisherman believed that if research shows MPAs are not improving ocean conditions, then MPAs should be reduced in size. Another fisherman expressed some worry that the state will use fishing data to justify the expansion of MPAs.
- One participant explained that the MPA implementation process seemed to be ‘one size fits all,’ and that the smaller population in Northern California compared to the Central or Southern parts of the state should warrant modifications to the size and location of MPAs in the area.

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



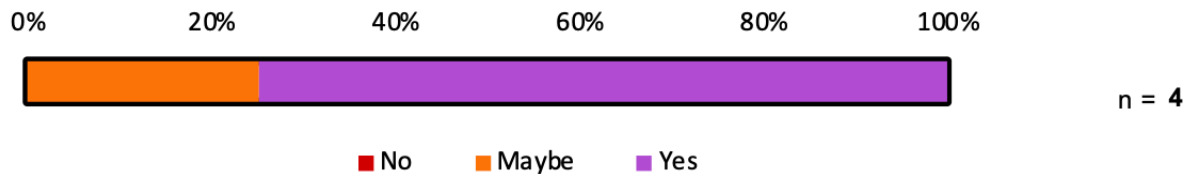
Feedback on Virtual Process

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?*

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



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 Overall, participants were appreciative of their fellow fishermen for their willingness to engage in a virtual focus group conversation, and for the opportunity to hear their perspectives.

- One participant was disappointed that more fishermen from different fisheries could not be on the call, but acknowledged the time commitment and technology needs necessary to engage in an online meeting format.
- Another participant was glad the virtual meeting ended at the scheduled time and added that, in general, this is an important consideration for them along with shorter meetings overall.