

## 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 Oceanside's Commercial Fishing Community*

The Marine Protected Area (MPA) Human Uses Project Team<sup>1</sup> anticipates hosting over 25 virtual focus group conversations with fishermen throughout California from July 2020 through Spring 2021.<sup>2</sup> 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](mailto:hello@mpahumanuses.com).

**Port: Oceanside\***

**Date: April–May 2021**

**Participants: Markus Medak, two anonymous participants**

\*In response to participant needs, the Project Team held one-on-one conversations with each participant rather than conducting the conversation in a focus group format. Participant perspectives have been combined and are presented in this summary in aggregate form.

---

<sup>1</sup> Consisting of Humboldt State University researchers, Ecotrust, and Strategic Earth Consulting

<sup>2</sup> 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.

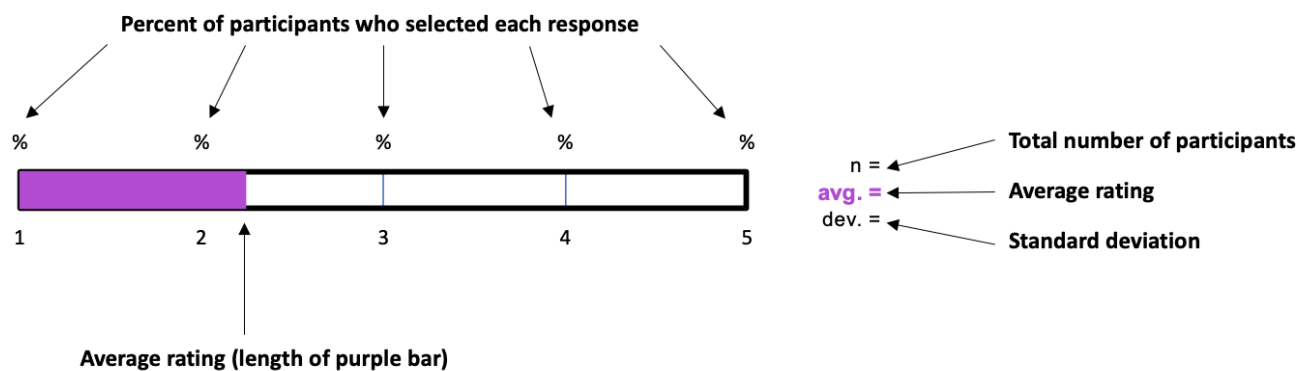
## Overview

Between April and May 2021, the Project Team held one-on-one conversations with three commercial fishermen operating out of Oceanside. A detailed summary of the conversations is captured below, including:

- the numerical scores (gathered orally via phone) 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.<sup>3</sup>

## Guidance for Interpreting Figures

There are 17 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 17 and 25 that display the average responses for each question in the well-being and MPA sections, respectively, from highest to lowest.



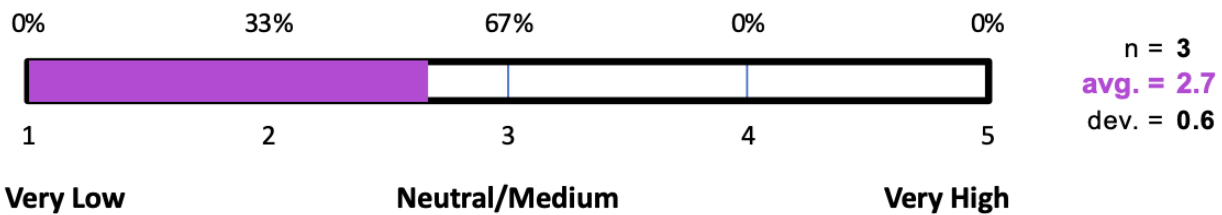
Our Project Team would like to express our appreciation to the three Oceanside fishermen—Markus Medak and two anonymous participants—for their time and contributions to the conversations.

<sup>3</sup> The quotes throughout the document came from various participants including those who wish to remain anonymous.

## 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** Participants rated the current health and sustainability of marine resources in Oceanside between low and medium. All participants discussed the negative impacts of local beach nourishment projects on fisheries. They also identified recent drastic reductions in local kelp forests.

- Participants believed sand replenishment in local beaches has resulted in the loss of natural shallow reef habitat off the coast of Oceanside. Specifically, they said imported sand has filled in lobster habitat in shallow reefs and ledges, which has negatively affected the number of California spiny lobsters that local fishermen catch.
  - One participant recalled imported sand used in past beach nourishment projects containing high levels of dirt rather than clean sand, which muddied the water. They said the resulting poor water quality negatively affected invertebrate populations and reduced their landings of California spiny lobsters.
- Participants reported substantial kelp loss over the last four to five years, which they believed has negatively affected the abundance of California spiny lobster populations that support the main fishery out of Oceanside.
  - One participant also described impacts of kelp forest reduction on the sportfishing industry. They said kelp bass populations have declined and the remaining kelp bass are smaller.
- One participant described different levels of concern across species. They reported the bluefin tuna fishery has recently been productive for local fishermen. They were concerned that there is no longer a sardine fisherman out of Oceanside, which they believed might be indicative of declining health of California fisheries more broadly (i.e., if sardine populations are not healthy enough to support a small local fishery, populations of other fished species that rely upon sardines as forage feed may be unhealthy as well).
- One participant believed there was a healthy abundance of California spiny lobster and rock crab, and attributed this to low fishing pressure from the small number of participants in Oceanside’s commercial fishing fleet.

### Participant Quotes

“A lot of habitat in Oceanside was impacted by beach nourishment projects. There have been several large-scale beach nourishment in North County San Diego, and it is apparent - as fishermen - this has had an impact on catch. A lot of the reefs get covered up when they do beach nourishment. I’ve seen it a couple times now. Every time after a big beach nourishment

project, lobster catch falls flat on its face. It appears that it mainly affects juveniles. That's what you really see up in shallows: large numbers of juveniles. The beach nourishment sand covers up surfgrass habitat and shallow reefs. Most invertebrates have a hard time when there's a large amount of sediment in water, so it makes sense that when you're dumping millions of cubic yards of sand, that it has an effect. But it is difficult to prove."

"People that run cities don't see that the sand goes out and covers up the reefs, destroys the habitat. They're not marine biologists, and neither am I, but I've seen firsthand what happens. In Leucadia especially, they took sand from an inland project, and it wasn't sand, it was more of a dirt, and they dumped it on the beach. It turned the water to mud. Truckload after truckload of dirty sand. The habitat never recovered. They built a resort on the bluff, now it's hard to catch anything on the reef. The reef just filled in. I have all these plots on my chart from before when there was reef, in the 1990s to early 2000s. Now there is no reef. What was lost was all the little ledge areas for lobsters to crawl back in. We've lost habitat. I won't say it won't come back. But if we continue to put sand on the beach, they won't come back."

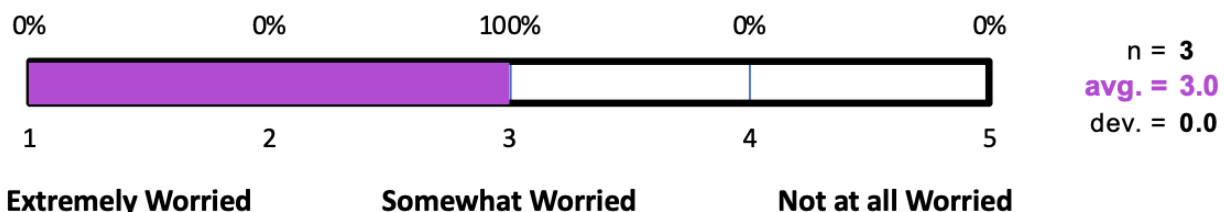
"We survive on [the California spiny lobster] fishery. We want it to be healthy so we can survive in the future. That's why when they dump sand on the beach, that's destructive. We've brought it up at Fish and Game Commission meetings, but never heard anything more. They said they'd look into it. Nothing. Money talks. The tourist industry is much larger than fisheries. But the health of the ocean matters."

"Coastal SoCal is not in great shape. An awful lot of kelp forest is disappearing, and there's been an especially marked loss of kelp over the last four to five years [...] I fish lobsters, and kelp is an important part of their habitat."

"The lobster population isn't like it used to be. When the kelp went away, so did the lobsters for the most part. I'm not saying all of them, but a majority of the lobster went away."

"It depends which resource you're talking about. Some species have been quite good, but others we are pretty worried about. Bluefin tuna fishing has been fantastic for the last four to five years now, and several fishermen from Oceanside have taken advantage of that... but the state of sardines in California is precarious, so that's got potential to be an issue. There was a guy that used to sell sardines out of Oceanside and that's not happening anymore. When [sardines] get heavily impacted, that's not a good sign for the rest of the resources."

**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** Participants were somewhat worried about future marine resource health across species due to several factors including climate change and the long-term loss of kelp forests.

- Two participants identified concerns related to climate change. One participant was worried about warm water trends leading southern species to migrate north toward the Southern California Bight. Another participant believed warm water trends are a result of natural cycles and will adjust back to normal.
  - One participant said that timescale matters when discussing future worries. They were less worried about the health of marine resources in the short-term, but expressed concerns about the impacts of climate change ten years out.
  - One participant expressed concerns about highly migratory species like tuna due to challenges in international fisheries management in addition to impacts from climate change.
- One participant reiterated their concern about kelp forest loss, and said they were worried about cascading negative effects on larval recruitment.
- One participant was concerned about rockfish populations due to increasing pressure from the growing Oceanside sportfishing industry.

### Participant Quotes

“Personally, I’m quite concerned about how warm the water has been getting every year. We’ve had some good fishing here because of it, but I don’t think it’s a good sign for the North Pacific. We’ve really seen an awful lot of fish that used to spend most of their time significantly south of here, but are now spending almost all year in the Southern California Bight. We’re seeing the same thing that you can read about in the newspapers; habitats and home ranges of species are moving north.”

“The warm water cycles we are in are a natural occurrence; we will come back around.”

“Depends on how long an outlook you’re looking at. For the next ten years, I’d be at ‘Slightly Worried.’ I think after that, I start to be concerned. I still think there’s good potential to make a good living in California for a while here. I’m investing in other fisheries, I’m not looking to get out. On the other hand, I’m not pushing my son hard to take over the business. [...] It matters what timescale you’re looking at.”

“I think local management of species in California and the US is not bad. It’s pretty decent for most species, but I think long-term, I’m concerned about climate change. It’s a pretty big concern of mine. Highly migratory species like all tunas, where they are spending time in other countries, or on the high seas, many are going to be in trouble. It’s so hard to manage international resources, and very little worldwide will to do that. Yellowfin tuna are not a particularly valuable species out of Oceanside, but they sure used to be out of San Diego. If you look at that fishery nowadays, it’s extremely precarious.”

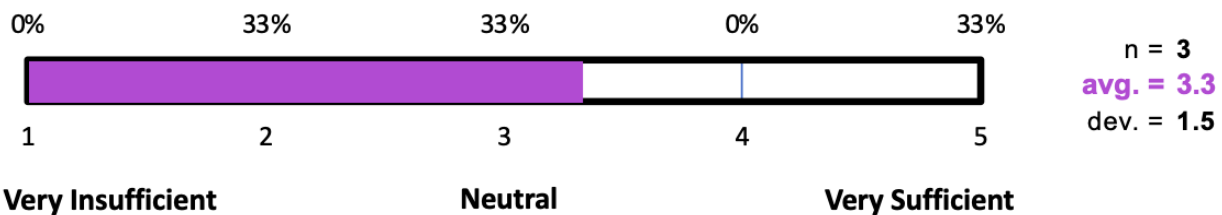
“The kelp that died off hasn’t come back, and that concerns me. I’ve been fishing out of Oceanside since 1995, and out of San Pedro before that. I’ve seen some pretty good changes in Oceanside [...] There were kelp beds so thick you didn’t want to drive a boat in there, and now

they're gone. They're gone. Sure would be nice if somebody could tell me [why]. Does anybody care?"

"They added another sportfishing landing, and there are more charters, more private boats fishing than ever. Oceanside's population is growing. My friends in the sportfishing industry are catching mostly small rockfish, and it's really hard to get big enough fish for their customers. I'm worried about those fish populations in that area, with more boats targeting them."

## 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?



Very Insufficient

Neutral

Very Sufficient

**Discussion Summary** Participants shared different perspectives related to Oceanside fishermen's access to harvestable resources, from insufficient to very sufficient.

- One participant related Oceanside fishermen's insufficient access to resources to local MPAs. They questioned whether the loss of fishing grounds as a result of the closures has helped to improve marine resource health. For a more detailed discussion related to MPAs and how they have affected fishermen's access to marine resources, please see the **Discussion Summary** on page 19.
- One participant said Oceanside fishermen's access to harvestable resources is comparable to the rest of southern California, and is sufficient overall. They indicated southern California fishermen should expect to travel to harvest available resources.
  - One participant believed their access to harvestable resources might be improving due to the small number of participants in the Oceanside commercial fleet relative to past participation levels.

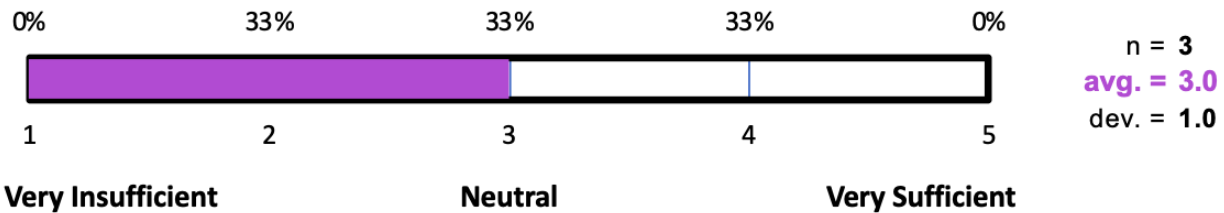
### Participant Quotes

"Compared to the history of it, access is insufficient now. We've lost nine square miles of fishing area due to the MPAs. It's about more than the loss of area... I would like to know if my and other guys' sacrifice is gonna help. Is it working? Is the quantity and quality of production of resource improving there [in the MPAs]? Are we getting overflow into other areas? That was the thing they promised."

"Access is pretty good overall... in terms of resources available, there are quite a few. From LA to San Diego, all the ports have got access to pretty much the same resources. Fishing in SoCal, you have to be willing to travel long distances."

“There are not many fishermen in Oceanside. Only about three fishermen along the coast, and one that fishes offshore. The numbers of fishermen aren't going up. There are fewer [commercial] fishermen, [...] less pressure from commercial lobster guys, so [access] might be getting better for me.”

**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' views about income from fishing to support Oceanside fishermen's livelihoods ranged from insufficient to sufficient based on the need to take on other jobs and costs compared to revenue.

- One participant rated their personal income from fishing as insufficient. They said it is difficult to support a living from commercial fishing alone, and are looking for other opportunities to expand their income.
- One participant said their personal income was sufficient in the past, but increasing operating costs (i.e., license fees) in combination with regulatory changes (i.e., recent lobster trap tag requirements) led them to rate their current fishing income level as 'Neutral.'
  - They reported not earning enough from fishing to hire crew members, despite their preference for fishing with crew. They said they are unable to purchase another Lobster Operator Permit, which would help increase their income from fishing, because of the financial barrier to obtaining lobster permits.
- One participant believed that, overall, Southern California fishermen are doing fine financially. They stated income levels vary by fishery.

**Participant Quotes**

“It's lots of work for a few dollars. Tough way to make a full-time living. You can do it, if you're willing to work every day. I'm looking at other ways to bring in income.”

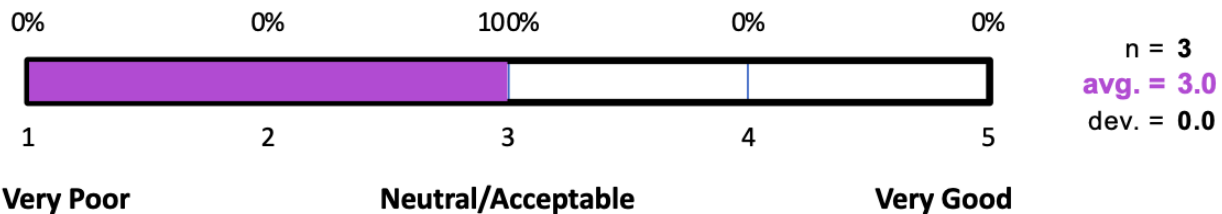
“In the past, [income has] been sufficient and very sufficient. But the combination of things - loss of habitat, destruction of habitat, reduction of equipment [trap limits], loss of area - all of those... I've taken a loss. But I'm able to survive. I've had to change up my style a lil' bit. I work alone now, which is tough as you get older. I'd like to have a crew member, but with the reduction of [fishable] area, it's not economical to have someone. If it gets insufficient, I'm no longer gonna be a fisherman. Other guys, mommy and daddy keep them afloat, or they have other sources of revenue. I don't have that one. I'm sure there are other guys in the 'Sufficient' category. They work more hours, more days. I don't live at the harbor. I like to have life outside my work.”

“I have to buy another permit if I want to fish more than 300 [lobster] traps. I’m at a point where I don’t want to retire, but I don’t want to buy another permit. I want to keep working hard for a few more years, but the state has hog-tied me.”

“The cost of business keeps going up. Licensing made a big jump in the last few years, the cost of permits have gone up two to three times what they were; I think it's around \$900 now [for a commercial lobster license], not too long ago it was \$300. After they made the reduction in traps, [now we need] tags on there, and the tags aren't free, they are charging us. You got permits, fuel, bait, insurance, slip rent - every one of those, every year, goes up. The cost of wire, rope, buoys, hauling the boat out to get painted is over \$2,000. It all adds up.”

“Overall, fishermen in SoCal can earn a decent living if they work at it. Got a lot of colleagues that are doing fine, but not getting rich. But it depends, costs are highly variable. Depending on the fishery, it’s a big difference.”

**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** All participants rated the quality of markets available to Oceanside fishermen as neutral/acceptable. Participants noted the lack of buyers in Oceanside, which they said limits fishermen’s ability to negotiate prices. Participants believed 2021 California spiny lobster prices were the highest they had ever been.

- One participant said there are no local markets in Oceanside, while another participant identified two buyers available to Oceanside fishermen, both from out of town. They said some Oceanside fishermen deliver their own product to market, which can be logistically challenging.
  - One participant said the port lacks sufficient infrastructure for fishermen and buyers to conduct business in Oceanside. For a more detailed discussion related to infrastructure, please see the **Discussion Summary** on page 9.
- One participant stated they are in the early stages of planning and developing a farmer’s market model for Oceanside fishermen to sell their catch directly to consumers. They reported being inspired by the success stories from a similar marketing structure in Santa Barbara harbor.
- Participants reported the 2021 price for California spiny lobster was the highest it had ever been compared to an unusually low price in March 2020 due to the COVID-19 pandemic. For a more detailed discussion related to COVID-19 impacts, please see the **Discussion Summary** on page 11.

**Participant Quotes**

“There are no real markets in Oceanside, so it’s markets from other cities, either from San Diego or up north. A lot of them come down to the port, but there are no real markets in Oceanside.”



“For the most part, there are only two buyers in Oceanside. More buyers, for me and other guys fishing, is better. [...] I don't know that the Oceanside harbor makes it easy to participate in the buying process. There's really only one guy showing up down there, so you're not going to get a good price for your products. It's good to have a free market. But other than price, Oceanside is not that good as far as markets.”

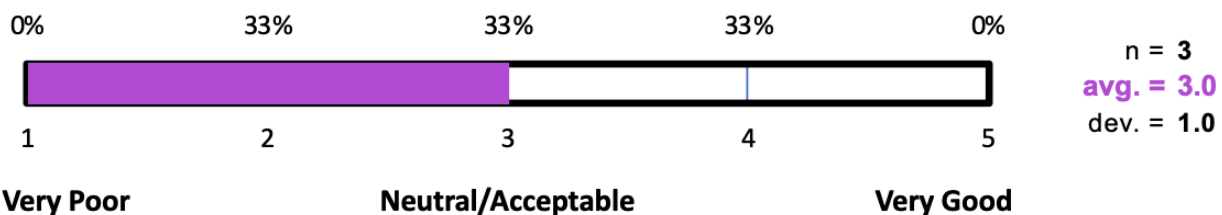
“There are quite a few Oceanside guys delivering products. Infrastructure does not exist for markets in the port. It is more logistically challenging when you're delivering your product, but in terms of costs, it doesn't change much.”

“We are working to set up a farmer's market in the future, [because we are seeing potential customers] who want farm-to-table opportunities [for seafood]. I heard about Santa Barbara fishermen working together to help build a market to sell their catch.”

“The price we got this year [for lobster] started at \$17 per pound and quickly went up to \$20, \$30s, \$40s, \$43. It didn't stay there [at \$43 per pound] long, it started dropping and stayed \$31-32 per pound, where it finished. Compare that to last year, when it finished at \$13 per pound.”

“The 2019 season started normal, low. When the price is \$20 per pound and up, it is worth fishing; less than that, it's hard to turn a profit. Once COVID hit after Christmas, that was it for the Chinese buyers. Then I sold to restaurants. It's expensive for a receiver's license, to do it legally. They [restaurants] weren't buying much volume. The next year, lobster price went higher because of trade wars with Australia and China. In March 2021 it ended higher than it has ever been.”

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



**Discussion Summary** Participants reported fishing infrastructure and services in Oceanside varies from poor to good. They identified a lack of availability and support for key infrastructure.

- Participants said that compared to other ports in Southern California and in other parts of the country, Oceanside has very little infrastructure support for commercial fishing activities. They mentioned there are no ice facilities, gear storage facilities, or cranes to load and unload catch. They believed support for the Oceanside commercial fishing industry is not a priority because the harbor primarily serves recreational users (i.e., recreational fishermen and recreational boaters).
  - One participant stated harbor management's allowance of dockside commercial fishing activities is better compared to years past (i.e., new designated loading area for buyers, citations are no longer given if gear is stored in the parking lot short-term, etc.).

- One participant mentioned there were written plans several decades ago to build a loading dock with facilities to support commercial fishing, but the dock was never built due to lack of funding.

### Participant Quotes

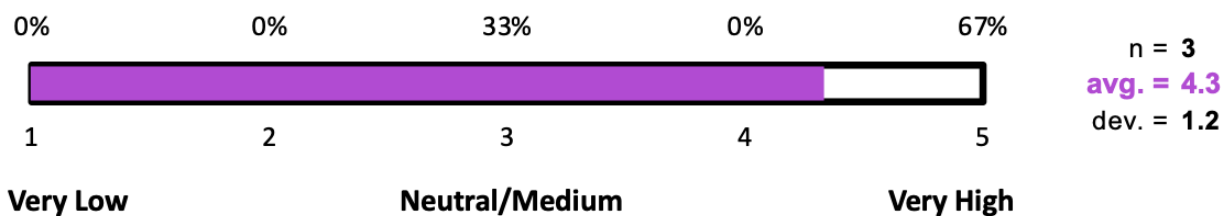
“It’d be nice if there was some gear storage in the harbor. Would also be nice for cranes for loading docks - we don’t need big ones, but if you go to any harbor in New England, they’ve got setups where you can lift your product off and load bait or whatever. I was back in Maine last summer, and every little harbor everywhere had better infrastructure than Oceanside. Could be a little tiny thing, with just a couple boats, and they’d have a crane. It’s not expensive, you do need a little real estate, but it doesn’t take much. But there’s no political will to do it down here. You can do that in San Diego or Santa Barbara, but nothing like that in Oceanside. It makes it more challenging. There’s no ice; to fish with ice out of Oceanside is logistically challenging, you have to go get it elsewhere and bring it yourself. I’m not that young anymore, I don’t like doing things the hard way if there’s an easier way.”

“Infrastructure is pretty terrible. Commercial fishing in Oceanside is an afterthought. It’s a recreational harbor, and there’s something in their charter that says they have to have spots for commercial fishing, and that’s about all they do.”

“Some places have more infrastructure support for commercial fishing, some have far less. They allow us to keep traps in the parking lot now. In years past, police would cite guys for leaving them for a day. Now, they’re a little more lenient, but I wish it was in writing. We have no freezers on [the] dock, no ice facilities. They do have a side dock and we can put insulated totes there. We have a loading zone for buyers to park; they don’t run them out now. Some years ago when the slime eel fishery started up... they were having a fit because of the water running to and from the trucks that were loading. They took the driver out of the truck, handcuffed him, sat him on the curb. Then they started doing water quality checks. They were giving guys a hard time. I haven’t seen it lately, maybe it’s due to a change in management, harbor master. The current one is a little better to the commercial guys. It’s like changing presidents, you know, policy. We have a guy that favors us right now. But infrastructure for Oceanside commercial fishing? Not much.”

“About 30 years ago there was a plan to have a loading dock with an ice maker. It was all in the plans, but the money disappeared.”

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



**Discussion Summary** Two participants reported COVID-19 was very highly disruptive to the Oceanside commercial fishing community, while one participant rated COVID-19 impacts as ‘Neutral/Medium.’

- Both participants who rated impacts from COVID-19 as ‘Very Disruptive’ clarified that the disruptions were not all negative, and one participant hoped some of the changes (i.e., direct-to-consumer sales) would remain in effect long-term.
  - One participant said that during the early months of the COVID-19 pandemic, fishermen were affected by the closure of Chinese markets as a result of safety precautions. They stated good domestic markets developed for California spiny lobster, including restaurant and direct-to-consumer sales. They identified two San Diego-based direct-to-consumer markets that successfully navigated the pandemic.
- One participant recalled demand for halibut dropping significantly during the COVID-19 pandemic.

### Participant Quotes

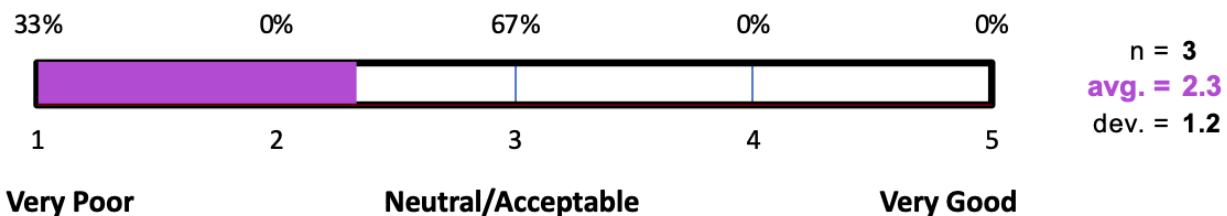
“It [COVID-19] was pretty damn disruptive. There were some significantly profound changes, but some may not have been negative in the long-term. There were lots of short-term negative effects, but sometimes disruption is good.”

“On the commercial fishing side, COVID screwed up the lobster season the year before because we lost the Chinese market because it was impossible to ship product. But very good [domestic] markets developed last year because people weren't going out, they were staying home and eating fish. There were disruptions, but not all bad disruptions. It was a time of change. A lot of us are hoping some of those things stick.”

“COVID-19 didn’t affect us as a [lobster] fishery. [...] I do know demand for halibut dropped way off, but the demand for my product this season was good. They shut down flights to China, and the majority of our product [usually] goes to China. So we had to find a local market.”

## 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 indicated recruitment and retention of Oceanside commercial fishing participants ranged from very poor to neutral/acceptable. They discussed several barriers to entry and retention in the local commercial fishing industry, including costs associated with participation in limited entry fisheries, increasing fishery regulations, and difficulty finding good crew.

- One participant related low participation in Oceanside’s limited entry fisheries to the high costs of permits; they identified hagfish as the only fishery that is not prohibitively expensive. They said that although it is not expensive to enter the open access commercial fishery, it is hard to earn a living through participation in that fishery alone.
  - One participant stated trap reductions for the lobster fishery require fishermen to purchase additional Lobster Operator Permits in order to fish more traps, which they believed might affect the number of participants in Oceanside’s lobster fishery.
- One participant thought overall participation in Oceanside fisheries is fairly stable.
- Another participant believed participation in the lobster fishery among Oceanside fishermen has decreased due to the tough, physically demanding nature of the work which has led older lobster fishermen to leave the industry. They identified trap reductions and other restrictions as another factor that has negatively affected participation in the fishery.
- Participants reported challenges finding and retaining quality crew due to their inability to pay crew members a living wage.

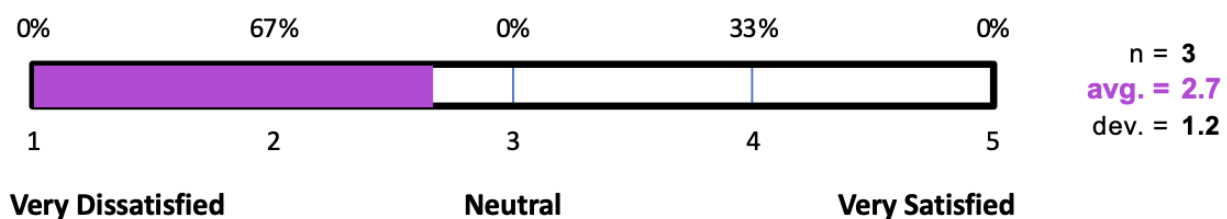
### Participant Quotes

“In the last three years, Oceanside harbor lost three commercial fishermen. Prior to that, there had been seven main guys, now there are four. Management restrictions have caused this.”

“It’s a tough one, it’s expensive to get into it: lobster. You have to buy a permit, which is in the \$100,000 range. You need a boat, which costs anywhere from \$10,000 to \$100,000s, and traps. It’s expensive. There are not a whole lotta fisheries available to get into easily. One of the few is eels [hagfish], which does not take a special permit, just a commercial fishing license. Rock crab is expensive too.”

“Moving up in the industry is hard. For deckhands, the pay isn't the greatest. My deckhand works two or three days a week because he is in school. There are not a lot of people moving up in the industry that I see. There are more guys getting out of it because of income. Even guys who have passion now have health and/or back issues in their 50s, early 60s. They start slowing down, can't do as much, sell their business, and move out of state, start over somewhere else. It’s not hard to enter the fishery for open access. You gotta buy a boat, and insurance for liability. It's possible, but the ability to make your living doing it is a huge challenge, unless you can come up with the money to buy a trap permit. I don't see a lot of permits transferring. My deckhand is a rare guy. He’s a marine biology major. He is excited about nudibranchs and plants. The hourly wage is NOT what keeps him coming, it is his interest in marine biology.”

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



**Discussion Summary** Related to job satisfaction, participants explained fishermen are more dissatisfied with the management of the fisheries and the human element of their job rather than fishing itself, which they enjoy. One participant believed some local fishermen are very satisfied with their jobs, and they spend most of their time working.

- Participants identified the uncertainty of management as a source of dissatisfaction.
  - Two participants described feeling stressed about fishery regulations, which decreases their sense of job security.
  - One participant recalled the 2010 California spiny lobster fishery management plan (FMP) process which they believed gave managers the authority to close the fishery whenever they want; they do not trust managers will keep the fishery open.
  - One participant cited uncertainty with regard to whether the lobster fishery will remain open as a challenge that prevents them from financially planning for their retirement, which is stressful for them.
- One participant stated they feel stressed about people interfering with their gear, which creates feelings of dissatisfaction with their job in the fishing industry.

### **Participant Quotes**

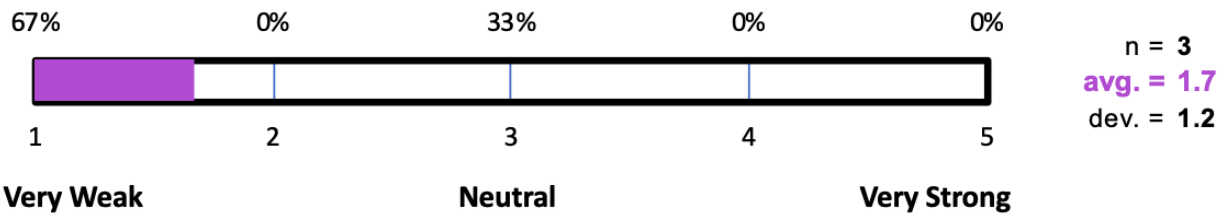
“Fishing is always very, very stressful, which has gotta count against it, because there is lots of uncertainty. It’s a pretty pleasant way to make a living, it’s fun and exciting, and you can make a decent living. It’s stressful, but then most jobs are.”

“I’m somewhat satisfied, myself, because I get to go on the ocean, see dolphins and whales, do a job most people don’t get to do, but speaking for the broader community, I think the fishermen are dissatisfied. Financially, it is more of a dissatisfactory type job, there are not lots of new people getting into it. Maybe two people in the harbor are very satisfied with their jobs, but work is their whole life. If you don’t have family, don’t mind working six or seven days a week, it’s ok. But it is tough to make a living.”

“I love what I do, I love being a fisherman. I work my own hours, at my own pace. I’m not a people person. My friends are really good friends, but I don’t have a lot of them. If I just had to deal with Mother Nature, that’s enough. It’s the human element that leaves me dissatisfied.”

“Well, sense of fulfillment and purpose, I guess I got that, but job security in this day and age, I don’t have. Say you’re in my shoes, trying to save for retirement. Do I want to buy a permit? It’s \$100,000 worth of pure profit into that. And not having the knowledge of whether the fishery is going to remain open? I still have eight good years left in me, and would like to make them productive because I feel like working, and I would like security in my future. I’m not a government employee, I have to produce my income, no one writes me a check. Prior to 2010, things were good for me. When we did the [lobster] FMP, they [California Department of Fish and Wildlife] were not willing to consider the age of fishermen [in the decision-making process]. We’re going to be gone soon enough.”

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



**Discussion Summary** Two participants reported social relationships between Oceanside fishermen are very weak due to poor leadership and trust within the port. One participant rated these relationships as ‘Neutral’ and chose not to comment further.

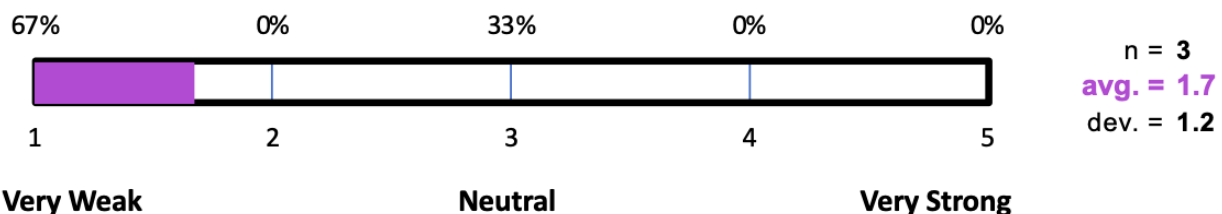
- Two participants said there is no trust, cohesion, or leadership between fishermen in Oceanside, and added some fishermen badmouth others. One participant mentioned an incident of physical altercation between fishermen at the harbor.
  - Both participants identified one individual who tries to maintain positive energy at the harbor. One participant said leadership within the port is limited to this individual, who they considered to be the official port representative.
- One participant mentioned interest among some Oceanside fishermen to create a direct-to-consumer dockside market which they believed has the potential to improve collaboration between fishermen.

**Participant Quotes**

“There is no trust, it's everyone for themselves. And on top of that, they’re creating stories, lies about you and your deckhand to put you out of business. They talk to the fuel dock [workers], the guys at the bait dock, gas station, and tackle shop. It’s everyone for themselves, no one helping anybody.”

“No leadership. Well maybe there’s one guy, he’s not in the lobster fishery, he’s in the bait fishery, he provides bait for sportfishermen. He is a port representative, he deals with Oceanside port meetings. But other than that, it’s not a tight group. It's a small group down there. [...] We were trying to get a farmer’s market thing going [last year]. The guy who owns the bait shop was trying to keep the positive energy going, stop the fistfights. But we need more people on board to go to city council meetings and stuff like that. It's a struggle. It's very weak as far as overall leadership.”

**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** With regard to the Oceanside commercial fishing community’s relationships with external groups, participants discussed factors that affect fishermen’s engagement in policy processes.

- One participant stated their engagement in past policy discussions resulted in a lack of trust in fishery policy processes in general. They recalled trying to negotiate in good faith during both the California spiny lobster FMP process and the MPA implementation process, but felt the decisions and outcomes in those processes were predetermined and believed decision-makers did not genuinely consider fishermen’s perspectives.
- One participant compared the engagement of Oceanside commercial fishermen in policy processes to the engagement of sportfishermen in the Sportfishing Association of California (SAC). They believed commercial fishermen are much less engaged and less politically organized than sportfishing industry participants. They attributed this discrepancy to financial factors; specifically, they stated lobster fishermen do not want to contribute financially to an organization like SAC, yet substantial financial support is required for these organizations to be effective.
- One participant characterized the relationship between fishermen and some California Department of Fish and Wildlife (CDFW) wardens, and between fishermen and Oceanside harbor police, as positive.

### Participant Quotes

“We worked really hard [to engage in policy processes]. It started with the MPA process, nothing we said mattered. Then we did the [California spiny lobster] FMP, nothing we said mattered. So I’m done. No more meetings. Even before the meeting, they had made a decision. [Fish and Game] Commissioners don’t listen. [They are] hand selected by the governor. He’s told them what he wants.”

“There’s only a little bit of engagement. I don’t know if it’s just Oceanside though. It’s hard to compare it to SAC, [which is] very engaged. It’s lobster fishermen primarily in Oceanside. For whatever reasons, [they] tend to not be engaged overall in political processes, they’re not very organized. I don’t know if it’s strictly an Oceanside thing or what. It’s partially about leadership, partially about economics. Very few lobster fishermen are willing to contribute part of their income to pay for that kind of organization. It costs money to be effective. The will isn’t there among lobster fishermen. Not just in Oceanside, but in all of SoCal. I think that’s why SAC is effective. [Sportfishermen] contribute a significant portion of [their] gross revenue to SAC. [...] A few of us suggested doing something similar [in the lobster fishery] so we could pay staff, but most guys said it’s not even worth considering.”

“There are some great game wardens that come by. But engagement in policy processes is hard. [...] Harbor police have been good to us.”

## 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** One participant expressed frustration regarding commercial fishermen's relationship with CDFW. They believed better communication of management decisions by CDFW to the fishing community would help to improve this relationship. They also suggested CDFW's enforcement of rules and regulations could be more effective (i.e., CDFW wardens performing enforcement activities dockside, rather than on the water).

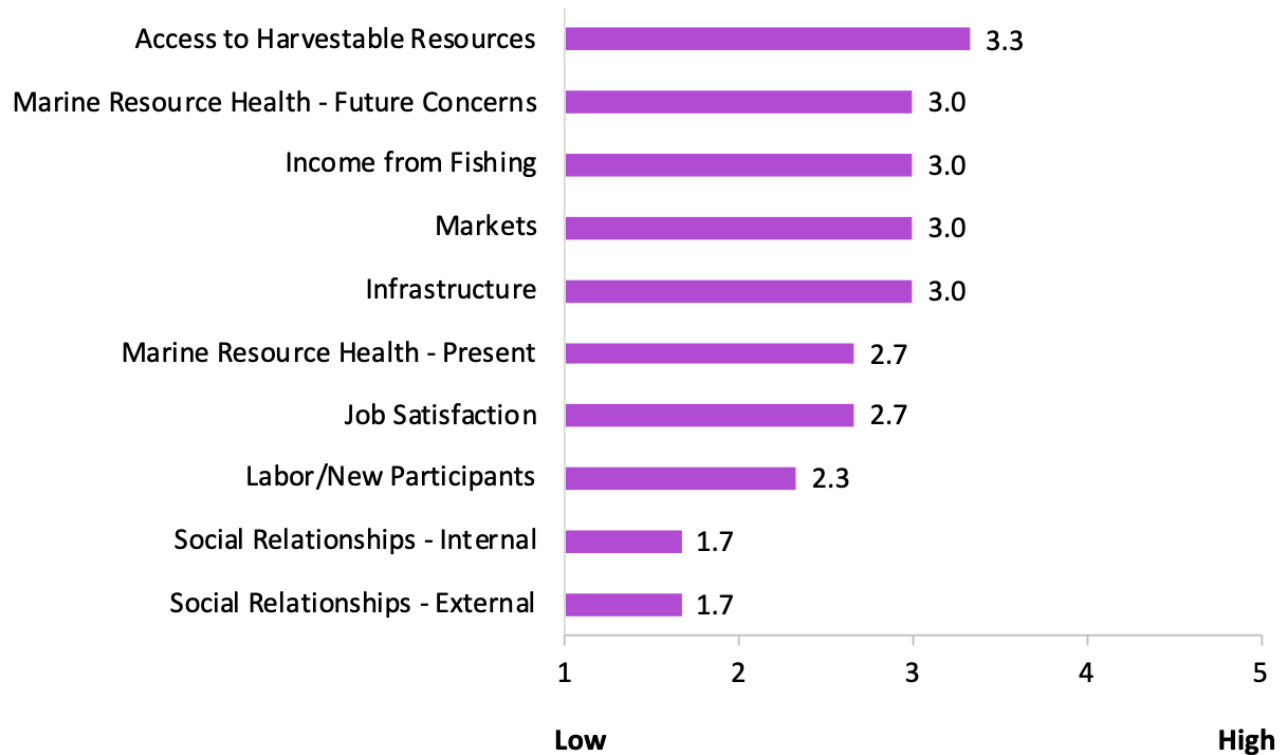
### Participant Quotes

"It would be nice to have [a positive, healthy] relationship with CDFW, rather than [the current negative relationship] going both ways. They never do what they say they will, so I don't bother dealing with them anymore. I've had to deal with thievery [of my lobster traps], and all they have to do is make a showing of wardens. But they think I'm the problem. I'm not the problem. I'm the guy that pays for the permit. They board me [on the ocean] - why don't they check me back at the dock? It wastes time checking me on the water, measuring lobsters on the water. The warden boat has three people onboard, that's a lot of resources to check a few boats. It's much more feasible to do it at the dock, and they can do a better job. So for the most part, they could become more efficient, and have better relationships with fishermen. And I would like for them to share the reasoning behind their decisions."



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

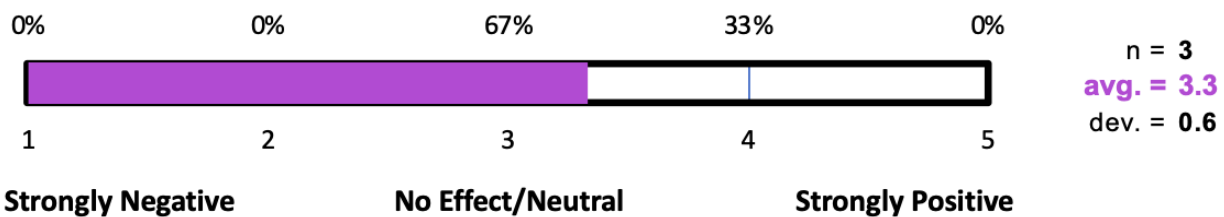
(Note: The following figure does not include the average rating for question 7. *COVID-19 Impacts*.)



## 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?



**Discussion Summary** Participants shared different perspectives on the effects MPAs have had on marine resource health in the Oceanside area. While some believed MPAs have not affected species abundance or habitat quality, others reported positive effects on size and abundance of several species due to MPAs, among other factors.

- Several participants stated they are not certain about the effects of MPAs on marine resource health because they are unable to fish in the MPAs and compare marine resources inside versus outside the closures.
  - One participant said they would like to know if MPAs have helped to improve marine resource health, and believed every lobster fisherman in the industry would also like to know.
  - One participant expected MPAs to improve marine resource health but has not seen evidence of this happening.
- Two participants said MPAs have not improved the health of local habitat (i.e., kelp forests) in Oceanside, and that reef habitat in the area continues to be negatively affected by ongoing beach nourishment projects.
- One participant stated lobsters, on average, are larger along and near MPA boundaries, while another participant did not believe lobster market quality has improved as a result of the MPAs.
- One participant believed there might be spillover of sea bass and calico bass from MPAs into fishable areas. They also believed black sea bass abundance has improved due to both MPAs and restrictions on black sea bass harvest.

### Participant Quotes

“Who knows? I put ‘No Effect’ because I don't know how [the MPA network] has affected the resource. They [CDFW] are supposed to monitor them. I thought we would have [researchers] here fairly often, doing testing of the lobster, crab. But like I said, I’ve only ever seen them taking water quality testing. As far as resource health, I don’t have a clue. I would love for them to call me and tell me. Every lobster fisherman in the entire fishery would like to know what's going on in the MPAs. Are they working? Are they studying them? What's the story? I would like to know, and I know there are 100 plus other guys that want to know.”

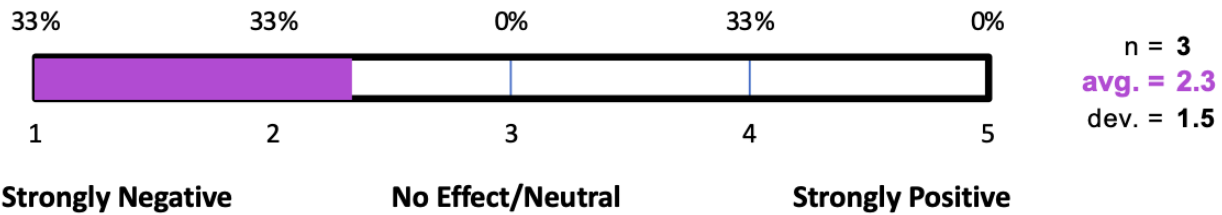
“Thinking about MPAs, I think it should help. But maybe the fish don’t move, or the lobsters don't crawl very much. So there might be bigger lobster in MPAs, but as far as catch goes, I wouldn’t see a positive effect directly. But indirectly, I don't know.”

“I only fish lobsters out of Oceanside. No doubt, you catch bigger lobster on the edge of MPAs, and the average size of lobster in the vicinity of reserves is larger. [The MPAs] haven’t made much of a difference regarding habitat... they're still doing beach replenishment.”

“The overall size [of my lobster catch] this year is a little larger. The average size was 1.24 pounds for years. Now the average size is 1.3 pounds throughout all my fishing area. If there were an MPA effect, I would think you would see it along the edges.”

“I don't see bigger fish or lobsters. I don’t believe market quality has improved. Maybe there is some spillover of seabass and maybe other reef fish? There are definitely more black sea bass, a few more calico bass. But definitely more black sea bass in reef areas. I caught one that was like 185 pounds. It took an hour to get it back down to depth, it took a lot of effort. I think MPAs and the restrictions on black sea bass might play into why we are seeing more black sea bass.”

**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 strongly negative to positive effects of MPAs on their livelihoods, including changes in access to fishing grounds, participation in the local fishing industry, and relationships among fishermen.

- One participant reported a loss of local fishing grounds due to the MPAs which has negatively affected their ability to fulfill their markets; they estimated this has led to a reduction in their fishing income by about a third. They said MPAs have also resulted in increased risk associated with fishing because they must travel further distances to fishing grounds. They described greater impacts on the fisheries and the grounds that support those fisheries, which they believe has had cascading effects on local habitat and the commercial fishing industry overall.
- One participant estimated one or two fishermen leaving the local commercial fishing industry as a result of MPA implementation.
- One participant stated MPAs did not have as negative an impact as they were originally anticipating but highlighted the financial impact of decreased landings, lower income, and increased operating costs (i.e., fuel) due to the MPAs.
- All participants discussed increased crowding and compaction along MPA boundaries. One participant explained MPAs not only negatively affect their landings, but also relationships between fishermen due to poor resource availability and greater competition. One participant said MPAs have led fishermen to become more withdrawn and less communicative with each other.
- One participant reported not experiencing impacts, positive or negative, from the MPA network because they started fishing after MPA implementation. However, they stated local MPAs encourage them to fish more areas than they otherwise would, which they perceived as a positive effect of MPAs.
- One participant believed MPAs may have encouraged fishermen to become more engaged in policy processes affecting the fisheries, but stated fishermen generally choose not to be politically engaged. Another participant had not heard of MPA implementation increasing fishermen involvement in policy processes.

#### Participant Quotes

“Loss of fishing area is a major factor. It is frustrating, the fact we lost the area, and we don't know if they're working. [MPAs have] increased my costs by six miles every time I go through

there: three miles out, three back. My income was reduced by one third when [the MPAs were] put into place. In Cardiff, I can't fish my traditional grounds, because they are closed. [Regarding the increased] travel time and distance, more travel time means more risk involved. Crowding? Of course! There is more competition in open areas, and then we had the [lobster] trap reduction on top of it. I've lost a third of my area and my potential to fulfill markets. One or two guys left the industry because of MPAs."

"The MPAs put more pressure on other fisheries. If you lose revenue, if you're able, you go to other fisheries. It upset the apple cart. In theory, I get it. If you change one thing, the habitat, it changes everything. It's the same thing. If you change the fishing pressure [in one place], you increase it in other areas."

"[Effects from MPAs are] not as negative as I originally thought they would be, but certainly negative. MPAs have certainly reduced landings and increased cost from fuel because you have to travel further, and because it takes time to travel farther, which cuts into landings also. There are the same number of fishermen in Oceanside as before MPAs, but they are going further to fish. And the MPAs [have created a situation where fishing is easier for] younger guys, because you have to work harder than you used to, put in longer days, and be willing to travel. Overall, MPAs have made it a little tougher."

"Yes, MPAs have increased crowding, no doubt. But on the other hand, we now have a trap limit, so that has mitigated crowding. It's hard to tease those apart, but overall, it might be a wash. The trap limit has been positive, I think."

"Around the MPAs, we are seeing thick trap lines. It creates competition between fishermen, and harms relationships between fishermen because of scarcity, so someone is not going to be happy about it."

"I don't see a lot of change in my livelihood. I've been able to fish north and south. I haven't seen lots of change, so I'd say [MPA effects are] neutral or positive. I landed on 'Positive' because MPAs have forced me to prospect in other areas, and that's turned out well for me."

## 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 several MPAs that have negatively affected commercial fishermen from Oceanside.

- *Swami's State Marine Conservation Area (SMCA)*: All participants said the Swami's SMCA is the most impactful for Oceanside commercial fishermen. They reported a drop in lobster catches due to this MPA because fishermen can no longer access productive lobster fishing grounds and must travel further to reach fishable areas.
  - One participant said Swami's SMCA was also a seasonally productive area for fishing bass and deeper rockfish.

- *South La Jolla SMCA and South La Jolla State Marine Reserve (SMR)*: One participant said these MPAs lead San Diego commercial fishermen to fish farther north in fishing grounds off Oceanside, crowding Oceanside fishermen and also increasing their carbon emissions. One participant said they used to fish off South La Jolla before the MPA was established, and now their fishing trips are less efficient due to this MPA.

**Participant Quotes**

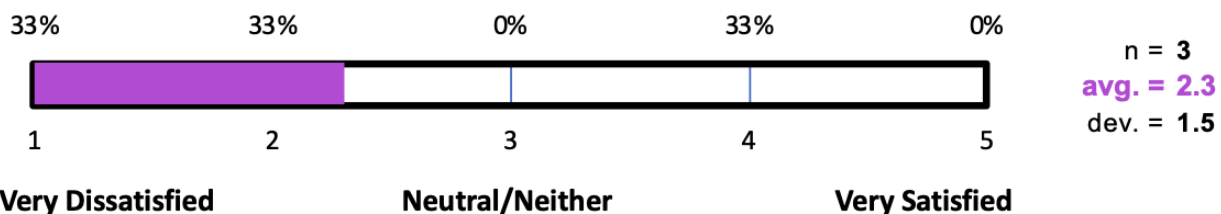
“Swami’s [SMCA affected Oceanside commercial fishermen]. We catch less lobsters [now], and we have to travel further. That used to be the bread and butter area. That’s where you’d make your expenses. Anything else you caught was how you made money. Now you don’t have that. It’s much better habitat [than other local fishing grounds]. You never went through there and got skunked.”

“The Cardiff MPA [Swami’s SMCA]. It was a good area for bass fishing in summertime and deeper rockfish during colder water months. And there’s a good kelp edge there, which was good for lobsters. It was one of the better reef areas that got closed. And La Jolla [South La Jolla SMCA and SMR] maybe a little bit. [...] On the closure lines, there are a bunch of traps. It must be worth it to fish there.”

“Definitely the one off Cardiff [Swami’s SMCA]. And the ones at La Jolla [South La Jolla SMCA and SMR] impact Oceanside guys, because the [San Diego commercial fishermen] down there lost area, so now they venture further north. [CDFW] knew it was going to happen. There ya’ go, bigger carbon footprint. To make it more efficient, I wouldn’t come home every night. I’d leave Oceanside, spend the night in Mission Bay, anchor the next night in San Diego because I had a slip there, and the next day, go out and pull [traps], maybe north or south. Then work my way back up north. But now I have to go home every night because I don’t have enough traps [due to trap limits established by the California spiny lobster FMP]. I guess I should just buy another \$100,000 permit!”

**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** All participants were dissatisfied with CDFW’s management of the MPA network, including a lack of opportunities for fishermen involvement in MPA management. One participant expressed extreme dissatisfaction with MPA management. They stated that although the lowest response option is ‘Very Dissatisfied,’ they believed this rating did not accurately reflect their sentiments about MPA management, and would have provided a ‘0’ score if one was available.

Another participant stated they were satisfied with informal MPA management, specifically MPA enforcement, among fishermen.

- One participant recalled the term “adaptive management” being discussed during the MPA planning process, but stated adaptive management has not been used in practice. They believed the use of MPAs in fisheries management can be appropriate in some settings (i.e., in countries where funding is limited for more precise management actions), but believed California has more effective management tools available, some of which are already in use. They suggested fisheries management in California could be improved by incorporating real-time management in which management goals are evaluated more often than they are now. They believed California should focus more money on both fisheries management and research.
- One participant was extremely frustrated by the lack of clarity and communication of MPA management goals, lack of opportunities for fishermen involvement, and lack of action by managers overall.
- One participant described their frustration with the MPA implementation process, specifically when fishermen were asked to put pennies on the fishing grounds most important to their businesses. They believed the MPAs were intentionally placed in those productive areas, and said their trust in management was broken as a result.

### Participant Quotes

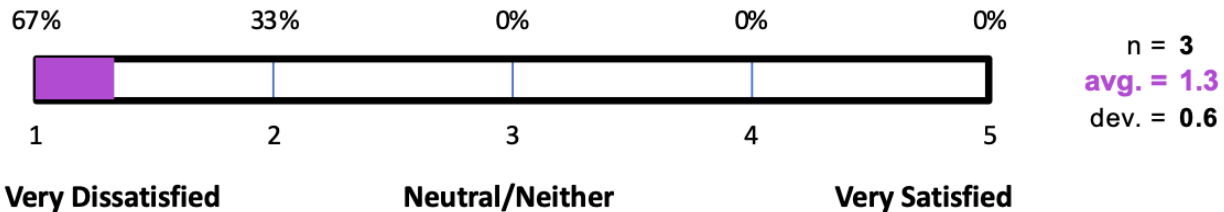
“I’m dissatisfied because for the most part, I haven't seen a whole lot of management of the MPA network. I’ve seen some lip service, but nothing serious. There have been some grant opportunities for researchers, but as far as real management that affects fisheries resources, I haven't seen much of it. [...] Adaptive management was promised. Well, maybe not promised, but teased I suppose; the politicians that set these things up were smart enough not to make promises. It [adaptive management] was not followed up on. [...] There are better ways to do fisheries management. At this point, California makes very little effort to manage things on a real-time basis. Management needs to be done on a shorter time scale and in real time to be done effectively. And when things change, you need to change the rules fast. And putting in MPAs is not a way to do that. [...] There's a time and place in California for MPAs. We should have some, but trying to manage all of the nearshore resources with MPAs is silly and inefficient. It takes money and effort.”

“Management?! That’s a good one! There is no management. Management means you are carrying out a plan. You are carrying it out, you manage it, you care for it. As far as fairness, that is a hard one to say anything about. We have closures and we are living through them. Nothing has been communicated. Had they cared, we would have heard something. It’s been ten years and I haven't heard a word about anything. Opportunities for fishermen involvement? Give me a break! There is none. Effectiveness of goals... overflow? Is that goal?”

“I won’t name any names, but let's go back to MPA implementation. Ecotrust got in touch, laid out a map of the [California] coastline, and gave us pennies. They said ‘put those pennies on areas you want to protect the most.’ They used that as a signal where the best areas were. That info was passed on, along with info that was supposed to be confidential. [CDFW] saw those pennies. They could see the most productive areas, and that's where they shut down. So I’m not very trusting. They had the entire coastline. I said ‘I know I'll have to give up something, so I'll

put my pennies on areas I need to survive,’ and they put them [those areas] in closures. It was another situation where they had their minds made up before the meetings. If I’m being honest, we shot ourselves in the foot. All the guys feel the same way that I do.”

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



**Discussion Summary** Participants expressed their dissatisfaction with the monitoring of the MPA network.

- One participant was aware of limited MPA monitoring activities since MPA implementation, but no participants were aware of results from MPA monitoring efforts.
- One participant said they would like MPA monitoring studies and results to be better communicated to fishermen. They would also like to speak with researchers who are conducting MPA monitoring, and know if CDFW has hired a crab and lobster expert familiar with the Oceanside area to monitor the local MPAs.

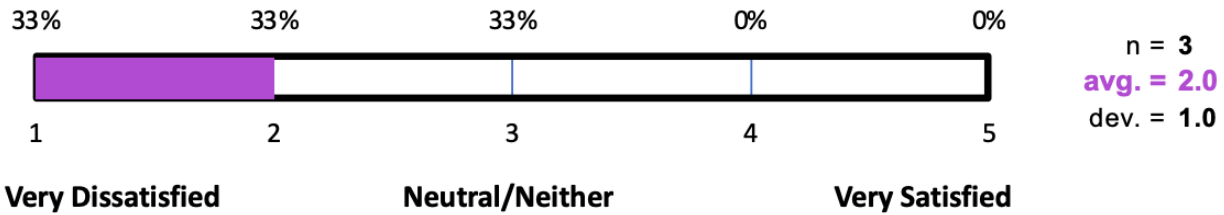
**Participant Quotes**

“They hired a couple guys for a couple years for a little monitoring but that was it. I don’t know what ended up happening with that data.”

“I’m really involved, I should hear about studies. I haven't heard of any MPA studies.”

“There is no monitoring of the network. Whatever money they had, they may have started with good intentions, but the cost of everything, mainly it goes toward salaries. We don't know if they [MPAs] are working, if they are helping us out. The only way to know is to catch lobsters inside versus outside [the MPAs]. They only do that monitoring in times when they have landings data: October through March. They don’t do it in the summer. I don’t know if they kept up with landings for that area. Did they process it? I don't know. I don’t have a clue if the MPAs are working. Abundance, diversity, size, habitat, market quality, other, I don't know any of this. [...] I’ve spent more time there than [the researchers] have, for my area. And there are other experts. What lobster and crab experts have they [CDFW] hired that know the area?”

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



**Discussion Summary** While views about MPA enforcement ranged from very dissatisfied to neutral, all participants expressed frustration with MPA enforcement.

- Two participants said they often see recreational fishermen fishing inside MPA boundaries, yet enforcement has not addressed this.
- One participant said adherence to MPA rules and regulations relies upon an inherent understanding among fishermen not to fish in the MPAs, since they do not believe official MPA enforcement is occurring. One participant believed fishermen self-enforce MPA rules and regulations better than official MPA enforcement by state agencies.
- One participant said that despite the establishment of the MPA network, they see overall less enforcement activity now than they did in the 1990s.
- One participant said they were unaware of MPA enforcement issuing citations for fishing activity inside the MPAs.
- One participant suggested fishermen’s navigation systems should include MPA boundaries, which they believed was not true of all systems.

**Participant Quotes**

“There is no enforcement. It’s pathetic, really pathetic. It’s common to see recreational fishing for bottom fish in the middle of the reserves, which is not allowed. I’ve never seen anyone getting caught by wardens. They [wardens] don’t have the resources nor the will to enforce [MPAs], it seems. I’m pretty sure there are unscrupulous fishermen that take advantage of that fact. It’s not hard if you have a little imagination. There is money to be made there, especially with lobsters. But the guys don’t get caught. Enforcement doesn’t happen. I don’t think there’s any effort made. The only thing stopping guys fishing there [in the MPAs] is their own moral code. It’s just like anything else, if there’s no risk of getting caught, unscrupulous people are going to take advantage of that, which is frustrating if you’re following the rules.”

“I’m a little dissatisfied with it [MPA enforcement]. Sometimes I see sport guys fishing in MPAs. so I would like to see more enforcement. I would like to see the chart plotter to show whether it is legal or not [to fish in a given area]. Some chart plotters have it, some don’t.”

“There are more wardens now then there have ever been, but I see less now [on the water] than I saw in the 1990s when there were far fewer of them. I’ve only seen them by the closure line one time. To my knowledge, no one has been cited in an MPA.”

“It seems like [MPAs are] working [...] Everyone is policing themselves, hopefully that will create better fishing conditions in the future.”



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

**Discussion Summary** Participants reiterated their desire for better communication of MPA monitoring work, and more opportunities for fishermen involvement in fishery management overall.

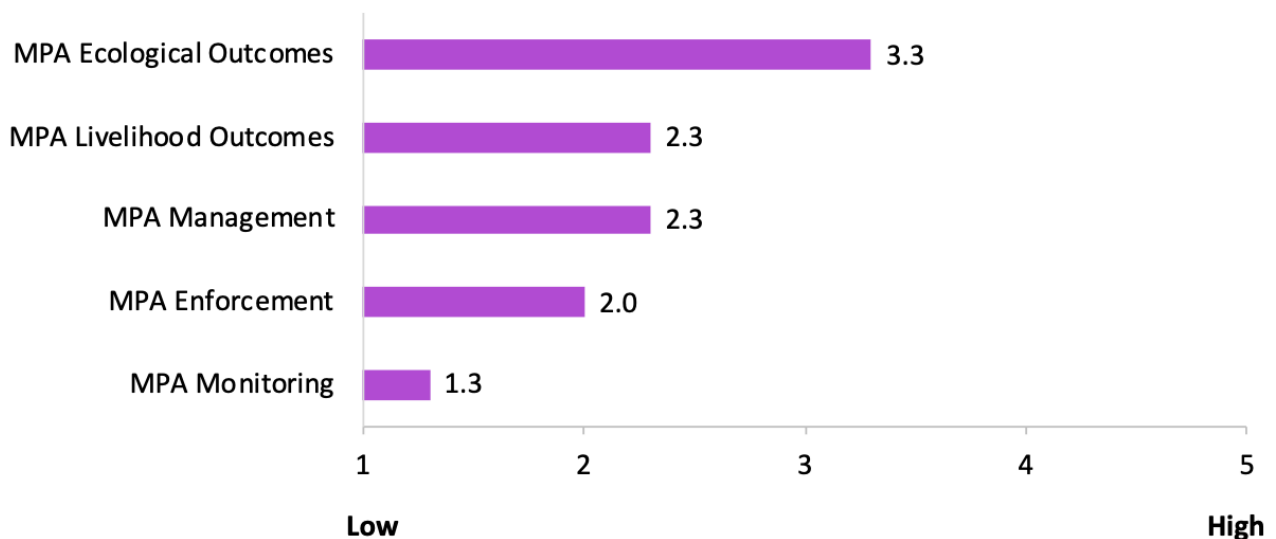
**Participant Quotes**

“I would like someone to communicate with me - someone in [CDFW] with knowledge - if anything has been done, or will be done, as far as testing if the MPAs are working. Have you tested size? Quality? When did you do it? At least 100 other fishermen would like to know the same thing.”

“I'd like to learn more about research and data about how MPAs have impacted the reef. And how surface fish have been impacted.”

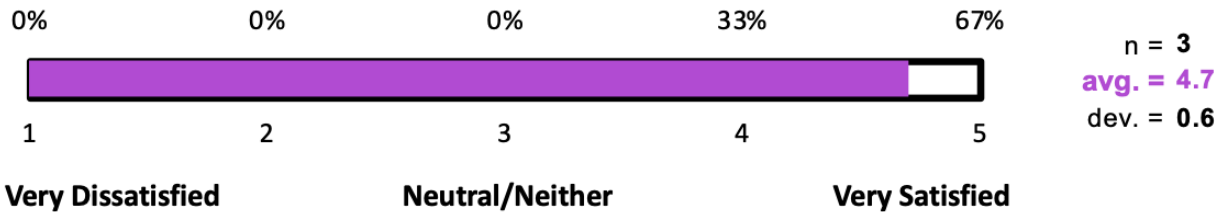
“I would like to see more outreach like this study and our phone call tonight. I would like to have more conversations. I would like to see how what we've shared tonight might change the fishing industry.”

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



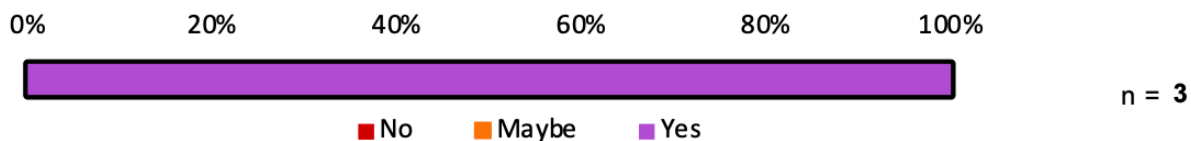
## Feedback on Virtual Process

**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 purple bar indicates the percent of participants who responded ‘Yes’ to question 20b. If participants responded ‘No’ or ‘Maybe,’ a red or orange bar would appear, respectively.)



**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** One participant was not willing to participate in a group conversation in the future but was open to another one-on-one conversation. Another participant appreciated the facilitator for making conversation scheduling convenient for them, but did not trust the information collected during this study would result in lasting change that would benefit the commercial fishing industry.

### Participant Quotes

“[I wouldn’t participate in a] group [conversation], but I would do another one-on-one phone call with you.”

“You made it [scheduling] convenient. I just am curious where this info will go and how it will be used. What’s the point? It’s like a complaint session, and I don’t know how useful it is. I have a feeling that that’s what the data will show too.”