

THE ROLE OF SOCIAL CAPITAL IN FISHING COMMUNITY SUSTAINABILITY:  
CASE OF SHELTER COVE, CA

By

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A Thesis Presented to

The Faculty of Humboldt State University

In Partial Fulfillment of the Requirements for the Degree

Master of Science in Natural Resources: Environmental and Natural Resource Sciences

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December 2018

## ABSTRACT

### THE ROLE OF SOCIAL CAPITAL IN FISHING COMMUNITY SUSTAINABILITY: CASE OF SHELTER COVE, CA

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Community development scholars have consistently highlighted the importance of social capital – the glue that keeps a community together – for the development and long-term sustainability of rural communities. There has been less discussion about the role of social capital in fishing communities. This thesis explores the historical trajectory of social capital in Shelter Cove, CA, a small, remote fishing community with an attempt to understand how the type and level of social capital has and may continue to affect the progress and sustainability of the community.

Data for this thesis were collected as part of a strategic planning effort in the Shelter Cove fishing community that documented community members' perceptions of the current state of this fishing community and recommendations of how things could be improved. Interview data from the Shelter Cove Fishing Community Sustainability Plan (FCSP) were analyzed to provide the 2017 to 2018 context of participants' perceptions of the fishing community. Research methods

included semi-structured interviews with 50 individuals, three public workshops, and document review and archival research. These data were paired with additional document review and historical analysis of the path that led the community to its current state of social capital. Both of these data streams were qualitatively coded to find emergent themes. Social capital emerged as an area for capital asset development that had been strong historically, but that has eroded over time as a result of a multitude of events that left the fishing community less resilient to unforeseen changes. This thesis provides general pathways and recommendations for rural fishing communities to invest further into their social capital assets through both bonding and bridging social networks to prepare them to be more sustainable fishing communities in the future.

## ACKNOWLEDGEMENTS

I would like to respectfully acknowledge the community members of Shelter Cove who trusted me enough to talk about and to share their perceptions of their community, which made this project possible. It is imperative to humbly thank my advisor and mentor Dr. Laurie Richmond who has employed and inspired me, to return to school to pursue my graduate degree in order to become a better candidate for future employment. Dr. Richmond has supported me both financially, academically, and personally to be confident and to be able to fulfil the degree requirements, and to produce a viable product for this university, committee, and the community to apply for the future. I am grateful for the generous funding that Dr. Richmond received which supported my education at Humboldt State University primarily from the National Oceanographic and Atmospheric Association Saltonstall-Kennedy award NA16NMF4270249 which also financed the Fishing Community Sustainability Plan for Shelter Cove that my thesis was derived from. Also, I want to thank the Eureka Rotary District # 5130 who gifted me the Woolford–Hegy Award. I give thanks to my committee members who have invested their time into the thesis that I have presented, and their involvement and mentorship has helped to propel me through to the finish line. I would like to thank my HSU and FCSP colleague Rob Dumouchel who was a great support throughout the entire project, my thesis, my graduate education, and my future employment champion. Last, and certainly not least, many thanks to my daughter Nadia Wilke who has recognized that her mother’s time invested into education is an

investment into yourself, and she has wisdom beyond her years that has helped me get through to the end of this chapter.

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## INTRODUCTION

Fishing communities all over the world are facing challenges from ongoing environmental conditions, contraction and aging of their fleets, along with increased regulations (Donkersloot and Corothers, 2016; and Van Putten et al. 2014). Despite these challenges, some fishermen continue to fish as their way of living, in part because they associate it as part of their group identity: their perception of themselves in relation to their environment and to their people, and perhaps second to making a living (Kelty and Kelty, 2011; and McGoodwin, 2001). According to Jentoft (2000, p.54), “Fishermen are born, raised and live in local communities. They are enmeshed in culture and social systems that give meaning to their lives and directions for their behavior. Their fishing practices are guided by values, norms and knowledge that are shared with their community.” Today, fishermen everywhere are faced with and adapting to changes in both environmental conditions and regulations, and the way in which they do so will shape the way they are able to enter into the future. Hackett et al. (2017) illustrate how “Fisheries exemplify the interdependencies between the natural environment and coastal communities that have characterized California since well before statehood” (p. 18).

The identity of a fishing community can include how the community relates to the place they fish, and this can strengthen fishing community relationships. Through fishermen’s shared experience with the environment, they associate fishing as part of their identity and their recognition of their peers strengthens bonds within their fishing community (Kelty and Kelty, 2011). Dasgupta and Serageldin (2001) state that social

conditions such as a sense of belonging, shared norms of society, and cultural identity are the elements that can hold society together. The type and strength of bonds within the community can determine how well its members can work together, and their capacity to do so can make them less vulnerable (Adger, 2000). The future viability of a port can be explained in part, by how well a fishing community can work together as a group, as well as how they can access resources from outside of their immediate area in response to changes as they occur.

Shelter Cove is a small rural fishing town with a vibrant fishing history that has been the backbone of the cultural fabric of the community. The community has been facing a number of changes and challenges that threaten its persistence as a fishing community. There has been a severe decline in commercial fishing participation, a shrinking of available market opportunities, and loss of key pieces of property and infrastructure to support the fleet. Community members have found themselves at a crossroads where they must decide what they need to do as a community to go forward and continue as a fishing community.

Shelter Cove fishing community challenges parallel those of other communities, but some of their unique factors make them more vulnerable than other ports in the region. The Pacific Fisheries Management Council (PFMC) and National Marine Fisheries Service (NMFS) determined that fishing communities within Humboldt County along with their neighboring county of Mendocino, were the economically “most vulnerable” of all ten commercial fishing counties in the region (PFMC & NMFS, 2006). This has to do, in part, with their isolated geographical location far from services. These

two counties were determined to be vulnerable, because they are commercially dependent, commercially engaged, or recreationally engaged or dependent. Within the already vulnerable Humboldt County, Shelter Cove might be considered one of the most vulnerable as it is extremely isolated and some basic infrastructure is lacking or vulnerable.

While fishing community vulnerability is most often thought about in terms of infrastructure and economic or political factors, scholars have been pointing to social factors as having an influence on whether a fishing community has the capacity to be successful (Béné, 2009; Clay & Olson, 2008; Norman, et al. 2007; Tuler, et al. 2008). One of the factors that can influence a community's level of success is social capital. Social capital is defined as an attribute of a community with a collective identity in which people have shared norms, values, and views of the future (Flora, 1998). This thesis explores the historical trajectory of social capital in Shelter Cove, CA, and attempts to understand how the type and level of social capital has and may continue to affect the progress and sustainability of the community.

#### RESEARCH QUESTIONS:

1. How does social capital play a role in the well-being of fishermen within a community and the overall future port viability in a small/rural fishing community?
  - a. What are community members' perceptions of the current state of social capital in the fishing community of Shelter Cove and how do the community members feel it has changed over time?

- i. What factors may have contributed to changes in social capital over the port's history?
  - ii. How have changes in social capital affected the viability and well-being of the Shelter Cove port and fishermen?
- b. How can the port invest into their community asset of social capital to propel them into a successful future?

### Literature Review

The literature on the topics of social capital and fishing communities will guide my analysis of the case study of Shelter Cove, California.

#### Communities and Social Capital

Community is described by Flora et al. (2016) “as based on a shared sense of place” in addition to “location, social system, and common identity”. This definition has evolved over time with increased transportation and telecommuting, which can bring people together through their common identity in a virtual space like telephones, social media or publications (Flora, et al. 2016). Today, many different types of communities exist from towns to bridge and little league clubs to the American Association of Retired People (AARP). One thing that all communities have in common is some level of social capital.

Social capital “involves mutual trust, reciprocity, groups, collective identity, working together, and a sense of a shared future. *Bonding* social capital consists of interactions within a specific group or community, and *bridging* social capital consists of

interactions among social groups” (Flora, et al. 2016, p.16). Flora, et al. (2016) drew from Coleman’s (1988) parameters of social capital that include norms of reciprocity and mutual trust. Flora (1998) states that social capital “must contain two main dimensions: integration (intracommunity ties) and linkage (extra-community networks). Social capital cannot exist without a community to support it, and so we must begin with the community” (p.483).

In Rural Communities Legacy and Change Flora, et al. (2016), lay out the community capitals framework (CCF) that describes a community’s assets as: financial, built, natural, human, cultural, political, and social capital. Each of these community capitals works in conjunction with the others, so a deficit in one capital area could result in other decapitalized assets throughout a community.

A holistic consideration of all of the community capitals contributes to determining a community’s viability for the future (Figure 1). Flora et al. (2016) define community viability as requiring a “healthy ecosystem, economic security, and social inclusion” (p.xv). Financial capital is the easiest capital to measure. Financial capital refers to the community’s savings, assets, philanthropy, loans, taxes and exemptions. Built capital is the infrastructure made by humans and includes information, energy, buildings, roads and transportation. Natural capital includes the resources that exist in the natural environment of the community such as air, water, soil, minerals, plants and wildlife. Human capital encompasses the education, skillset, and potential of the individuals of the community. Cultural capital is how the groups in the region view the greater world including their shared history, values, and symbols. Political capital



includes how a community is able to convert the values and their norms into rules and regulations providing the insurance that those are enforced. Social capital includes the shared identity, cooperation, reciprocity, and trust among community members. Social capital can be further partitioned in to two categories: bonding social capital includes the actions of individuals in the community; and bridging social capital includes the social actions in between social groups.

Flora, et al. (2016) show that over-investment in one form of capital can result in “other resources [that] are *decapitalized*, and the economy, environment, or social equity is thus compromised” (p.15). Emery and Flora (2006) propose that as one capital in the CCF model is incrementally increased, it results in increases in other capital assets which can cause “spiraling-up”: a process where “asset growth becomes a self-reinforcing cycle of increasing opportunity and community well-being” (p.23). Emery and Flora (2006) contend that social capital is the best way to start this process.

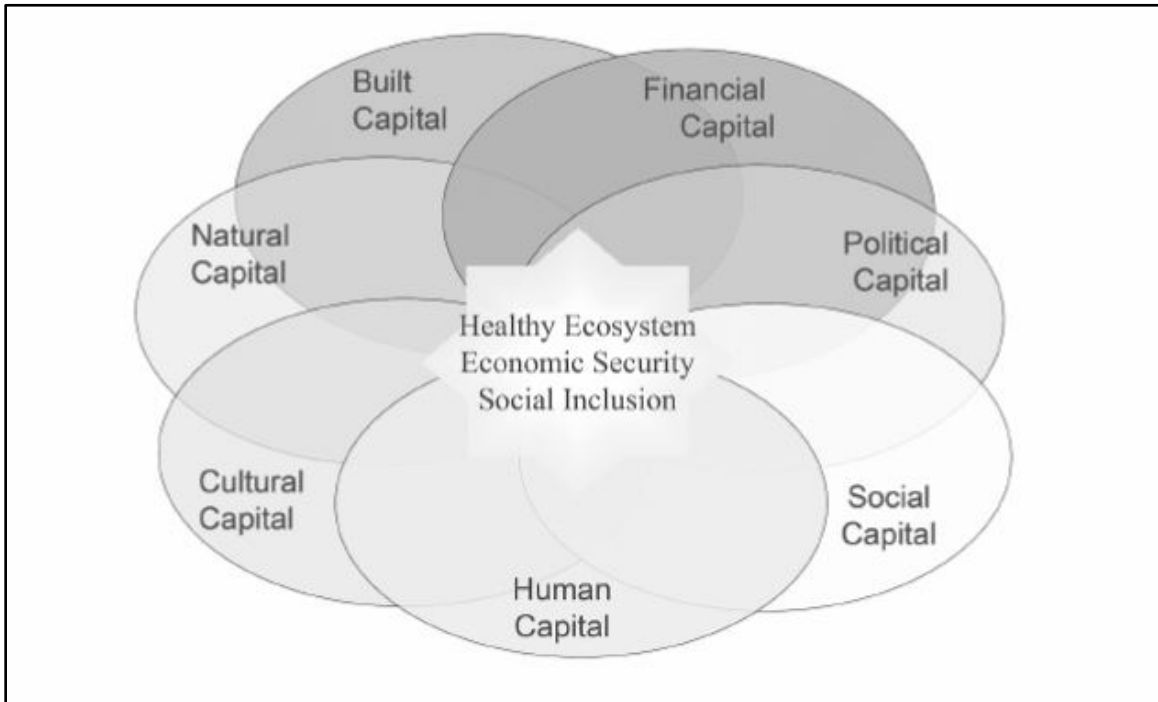


Figure 1. Community capital framework illustrating the interdependence of all of the capitals to influence a viable community Flora, et al. (2016, p.17).

Social capital includes trust between people, the identification as a group, cooperation, reciprocity, a similar future vision, and the idea that they are in this together (Flora, et al. 2015). This trait of social capital, as described by economists, is accumulated by community members that are part of core social networks which bring people and resources together. It is the elements of social capital as described by Putnam (1995, p.2) that “refers to features of social organization such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit”. It is not a quality of an individual, but an attribute of the whole group of individuals with a collective identity who have shared values, norms, and views of the future (Flora, et al. 2016). The combination of bonding and bridging can vary depending on the particular

group. A matrix developed by Flora, et al. (2016) can be used to assess the relationship between bridging and bonding and the quality of social capital that is present in a given community (Figure 2). This figure shows that a balance of both strong bridging and bonding capital on the top right of the matrix is necessary for a community that “decides priorities based on the common good”, something that the authors call “progressive participation”.

In Bowling Alone, Putnam (1995) describes communities that have the advantage of social capital networks and civic engagement that allow them to grow reciprocity and provide a place for social trust to evolve. Serageldin (1996) describes social capital as the “glue that holds a societies together” as it gives a sense of belonging to a group which can strengthen the community (p.196). A “rural community with the social capital to foster transitions might be regarded as resilient” so investment into this capital would be an investment into future unforeseen circumstances that are inevitable (Robards and Greenberg, 2007, p.27). Social capital is “necessary to a functioning of social order, along with a certain degree of common cultural identifications, a sense of ‘belonging’, and shared behavioral norms” (Serageldin and Grootaert, 2001, p.44). Social capital could be the best place for a community to begin investing in their CCF, which could be the catalyst for “spiraling-up” in their community (Emery & Flora, 2006).

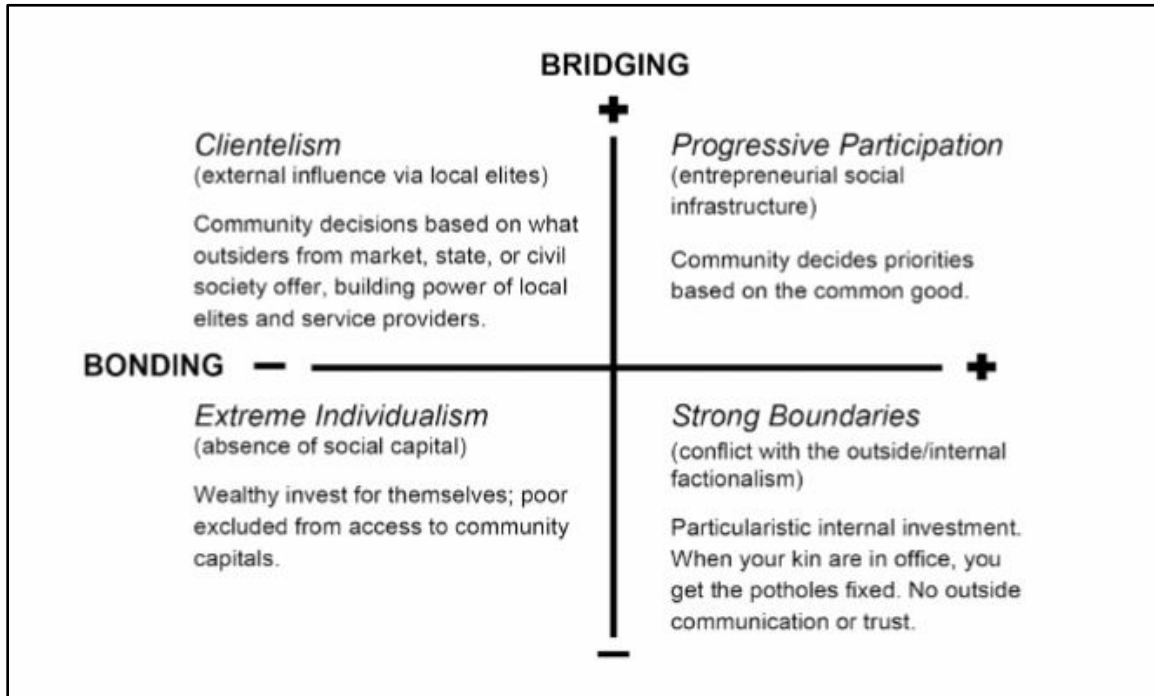


Figure 2. Flora, et al. (2016) illustrate the bridging and bonding typology which exhibits the relationship between both forms of social capital (p.167).

The Shelter Cove fishing community is at the end of a long period of spiraling down. The community is now interested in understanding the investments that are needed to start the process of spiraling up and becoming a more viable and sustainable fishing community (Figure 3). Community members have engaged in a strategic planning effort - Fishing Community Sustainability Planning - with the purpose of coming together to assess needs and prioritize investments. Social capital has emerged as a key factor in the community's trajectory as well as a key area for investment. Assessing community social capital from both a bridging and bonding perspective can help provide a holistic assessment of the community's social networks.

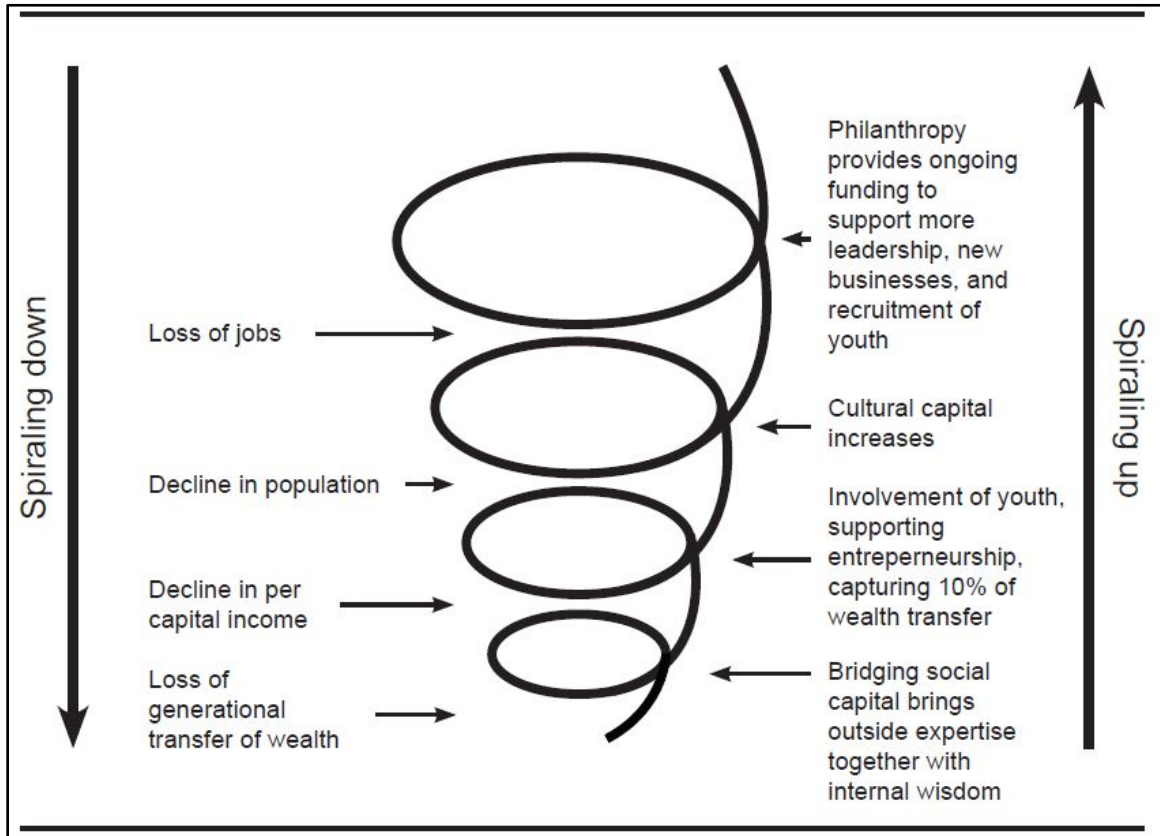


Figure 3. Flora and Emery (2006) illustrate spiraling up or down and the effects on a community (p.22).

### Social Capital Bonding.

Bonding ties are one component of social capital. Ties of bonding are “relations between family, friends and neighbors in closed tightly connected networks” through these ties trust is built and they make a community more able to adapt to changes (Newman & Dale, 2005, p.1). However, too much of a good thing is not always good, and overemphasized localism can make a group less diverse through a strong localized trust that can lead to the distrust of outsiders (Newman & Dale, 2005). The bonding networks made up of a community’s peers can create a strong network preparing them for

civic engagement. This foundation of strength can come from the norms that guide the group and trust that helps to foster the coordination of that group (Putnam, 1995). This could directly benefit a fishing community by creating a unified voice. These bonding networks help to strengthen social trust through ties of peer groups which is a crucial building block for social capital (Fey, et al. 2006; and Bodin, et al. 2006). Bonding is built through the ties of peers, family, and neighbors, which can help to create a unified voice through social organization.

The strength of bonding ties can affect whether the community expands its scope of concern beyond its self-interest. Bonded groups include people from similar backgrounds - this can be based on class, ethnicity family, and gender – and groups that have a higher degree of bonding are familiar with each other through multiple roles where inclusion can expand their community (Flora, et al. 2016). Additionally, bonding contributes greatly to the community's social capital due to the selfless focus on contributing to the larger group (Flora, et al. 2016; and Pawar, 2006.) The perception of being connected to a larger group fosters trust within that group, and “members of a group are much more likely to participate in politics” (Putnam, 1995, p.8). The foundation of bonding social capital prepares a community to receive the benefits that could be acquired in the form of outside resources (Bodin, 2005). Community bonding ties are necessary to absorb resources that can be acquired or skills that can be added to the human capital of the group or community. Subsequent networks created through a bonded group that contains internal trust with other groups that have trust between them,

can have a broker who can “initiate and maintain adaptive co-management” which can be a beneficial goal of a community and their resources (Bodin, et al. 2006).

### Social Capital Bridging.

Bridging includes the pursuit of moderators who can connect bonded groups to resources of human capital (skills), political power, information, and financial capital. Bridging facilitates “a network’s ability to access more vertical power networks” (Newman and Dale, 2004, p.2). This type of social capital does for communities what its name illustrates: connects different people and groups in the community to people and groups outside of the community (Flora, et al. 2015). Stanley, et al. (2012) more specifically define “bridging” as the connection across groups when members of one group connect with members of a clearly different group. It is through this collaboration that they are able to secure resources for the broader community. Aldrich and Meyer (2015) found that the increased access to external resources prepares communities for unforeseen stressors and makes them more prepared for the future. Organized membership networks described by Kwon, et al. (2013) show how entrepreneurship builds social trust which elevates community social capital, and this results in the increased flow of information between groups. Civic participation with one voice could lead to better communication with the broader community, local government, and fishery managers. This typology of social capital in a fishing community could include different relationships with groups from the fishing industry, other fishing port associations, other industries, as well as local, regional, and national governments which may be what a

small, rural, and geographically isolated community needs to go forward and fortify their port for a sustainable future.

#### Fishing Communities.

The Magnuson Stevens Act defines a fishing community as "... a community which is substantially dependent on or substantially engaged in the harvest or processing of fishery resources to meet social and economic needs, includes fishing vessel owners, operators, and crew and United States fish processors that are based in such a community" (NMFS, 2007, p7). The 2006 reauthorization of the MSA, included a provision called National Standard 8 that direct federal fisheries managers to "take into account the importance of fishery resources to fishing communities by utilizing economic and social data that are based upon the best scientific information available" (NMFS, 2007, p58). This standard helped to reframe fishery management decisions to include the community that relies upon the fishery and its success and it validated the importance of considering the community component when government evaluates fishery regulations.

The literature from both government documents and academia has established and identified where fishing community's vulnerabilities and viabilities lie. Tuler and Tuler (2008) explain how a reduction in vulnerabilities of a fishing community can be achieved by community-based organizations. The mandatory consideration of fishing communities when regulations are changed has shifted the conversation toward a more holistic process, where all parts are evaluated. Holistic analysis of fishing communities must include cultural and social factors because the social ties within a community guide economic activity (Langdon-Pollock, 2004).



Many fishing communities in the U.S. have experienced fishing fleet contraction, and that in conjunction with climate change intensifies the communities' level of vulnerability (Van Putten, 2014). Sekhar (2007, p. 502) shows that fishing communities can be successful in fisheries management through self-regulation and "social capital ... plays an important role in fisheries governance". This is due to the increase in effectiveness of governing from the inside, which is based on trust and norms of the group highlighting that self-organization and development of social capital in fishing communities can strengthen their viability. Fishermen and their communities can be considered vulnerable due to their high exposure to risks (Béné, 2009). Strengthening communities to prepare them for hazards and unforeseen circumstances can help to lessen the intensity of future impacts to community.

### Setting

Shelter Cove, California is located in the southernmost part of Humboldt County. There is only one access road that is a two-lane mountain road tenuously connected by multiple stretches of one lane sections in need of countless repairs, yet it remains a destination for fishermen, hikers, and outdoorsmen (Figure 4). Point Delgada shelters the "Cove" from northwestern winds and swell with the jetty insuring vessel protection from weather from that direction, but the boat launch area remains totally exposed to weather from the south making boaters take the risk during part of the year.



Figure 4. Case study location of the town of Shelter Cove, California featuring Point Delgada. (Photo: Google map, 2018).

Point Delgada, California physically presents itself as the midpoint of the Lost Coast, a wild California coastline, to both the north and south. Despite the access challenges, the coastline has been inhabited by many people, including Sinkyone Indians, early American settlers, and the suburban dwellers of present.

The Sinkyone Indians (Kaikomas), part of the larger group of Athabascans were first known to Euro-Americans in 1853 as documented by the US Government, although they lived in the area for 4,000 years and probably earlier. The two Sinkyone tribelets

occupied the territory that spanned from the Mattole River and the strip of the coast from Spanish Flat (north of Punta Gorda) south to the mouth of Usal Creek at the southern end of the more recently named Sinkyone State Park in Mendocino County (Heizer, 1976). The Sinkyone territory is geologically framed by rivers, tributaries and coastal mountain ranges (Figure 5).

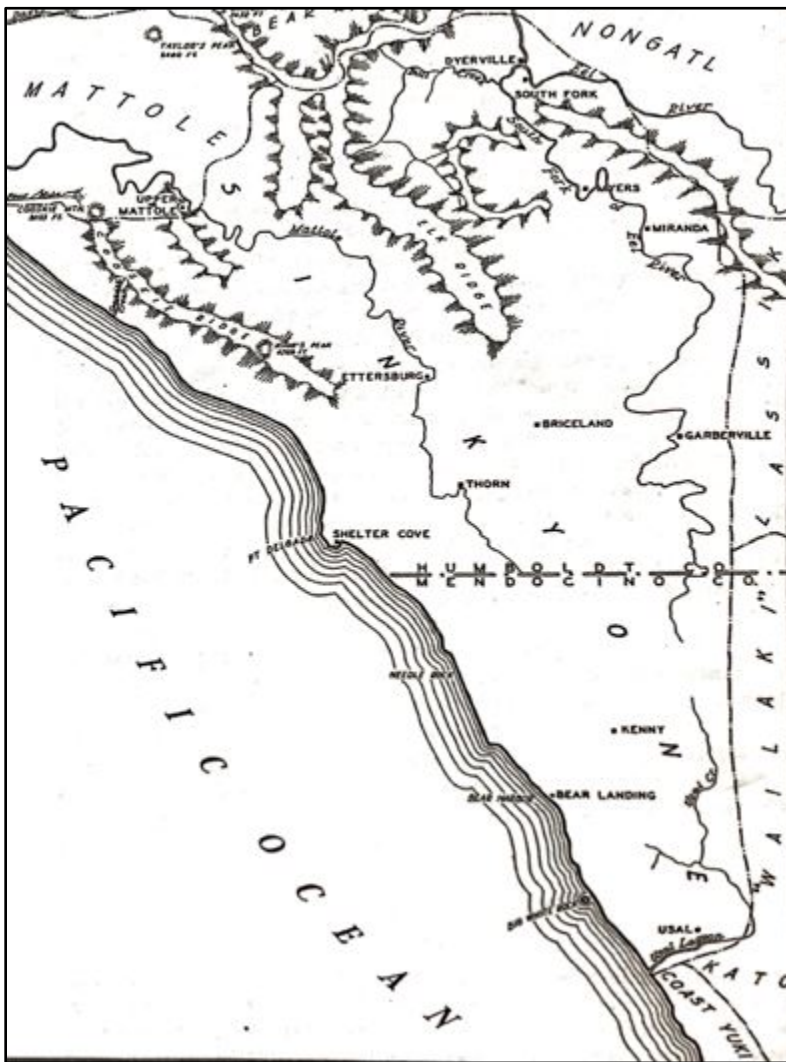


Figure 5. Shelter Cove sits in the middle of Sinkyone territory as described by Jim Woodman the last known full blooded Sinkyone tribal member (Nomland, 1935, p.150).

Access to Shelter Cove's point of entry on the shore has historically been a challenge. Hamilton and Oliver, the first recorded white settlers in the area, arrived in the area that seemed perfect for grazing their herd in the 1850s to claim squatter's rights. However, Mr. Oliver had been killed, so Mr. Hamilton headed south instead (Machi, 1984). Other early settlers John, William, and James Ray, headed west to Shelter Cove from Missouri driving their stock, and they met Oliver who traded Shelter Cove Ranch and his squatter's rights for the Ray brother's oxen sometime between 1853 and 1855 (Cook & Hawk, 1997). In 1885, the Ray brothers built the Shelter Cove wharf to allow supplies to be shipped to town and facilitate the sale and shipment of tanoak logs (Figure 6). The next year, the brothers built the Shelter Cove Hotel, which served as the main hub for supplies to and from Shelter Cove (Cook & Hawk, 1997). The boat ramp from the bluff of Point Delgada down to the beach has now been a landmark for over 130 years, evidence of infrastructure that was integral to the growing economy of Shelter Cove in the early 1900s. Scofield's (1953) photo recorded the 63-year-old relic posts of the Shelter Cove Wharf (Figure 7), but today these signs of the wharf are gone. The landscape itself has changed as the bluffs have eroded from wave action that also took the bulkhead to the sea, and erosion continues to evolve this coastline to the present day.



Figure 6. Shelter Cove wharf (Photo: Swanlund-Baker collection HSU, 1907).



Figure 7. The remains of the Shelter Cove wharf are barely visible by the few posts that are seen in this photo taken 63 years after its construction (Photo: Scofield, 1953).

Shelter Cove has been an important delivery point for salmon landings since the open-ocean salmon trolling spread from Monterey, CA in 1914 (Scofield, 1953). The

Ferndale Enterprise reported on “A Lively Little Town” and how the campground held 500 people, and 200 fishing boats targeting salmon with one fisherman landing at least 140 tons that year (280,000 pounds) (Ferndale Enterprise, 1919). Salmon landings dominated the record in the port averaging one-third million pounds in years between, but in 1932 and 1947 the Cove had more than one-half million pounds of salmon. Lingcod, halibut, and rockfish were landed alongside salmon but not nearly as much of those species was landed when compared to salmon) (Scofield, 1953).

Many people moved to the Southern Humboldt county area in the late 1960s and 1970s in the back to the land movement in hopes of being self-sufficient with little oversight from the government, and some of them became fishermen. The fishermen make up a small group within the community of Shelter Cove. However, many of the commercial salmon fishermen from this era lived in Shelter Cove seasonally and were not part of the permanent population. In the 1970s and 1980s, a fleet of about 100 small wooden skiffs – fondly referred to as the “Mosquito Fleet” – fished out of Shelter Cove and primarily targeted salmon (Figure 8). They have had to hold onto the limitation of small vessel sizes reminiscent of the “Mosquito Fleet” that echo the historic ties due to the limitations of the port: minimal jetty protection, lack of moorings, no unloading hoist, nor a floating dock (Figure 9).





Figure 8. Shelter Cove Coast Guard bell and harbor view of Mosquito Fleet below from Point Delgada on July 17, 1980. This retired Coast Guard bell can now be found at the College of the Redwoods campus in Eureka, CA. (Photo: Tony and Maryann Machi).



Figure 9. Boat launching facility at Shelter Cove includes road from the bluff down to the beach, boat ramp, the jetty, and the ocean. Note the tractors, trailers, and trucks used to get vessels in and out of the water (Photo: Dumouchel, 2017).

Like most West Coast fishing communities, Shelter Cove has had a history of setbacks due to declines in fish stocks and increased regulation after historical high salmon landings in the latter 1980s. Over 500,000 pounds of salmon were landed in Shelter Cove in 1987 a peak season of salmon landings at Shelter Cove (Machi, 1989). Landings began to severely decline after the closure of the commercial salmon season in 1980s, the Rockfish Conservation Area (RCA) regulation introduction in September 2002, and the West Coast groundfish federal disaster of 2000 (PFMC, 2006). (Table 1). The salmon regulations increased dramatically overtime and included: the closure of commercial



salmon season, reduction of new entrants; the implementation of limited entry in 1983 which included a quota reduction; and the listing of Pacific salmon under the endangered species act in 1989 (CDFW, 2001). The RCA program developed a set of rockfish conservation areas up and down the West coast where certain kinds of fishing are prohibited. The regulations follow depth contours that connect latitude and longitude coordinates of closed areas that are specific to season, gear types, in order to minimize incidentally caught species that may be present while targeting a fishery that is in season (NOAA, 2018).

The groundfish disaster was the final straw for many fishermen in Shelter Cove that further decreased their potential in landings after the loss of the primary fish buyer and buying station in the 1990s (H14, 2017). Many fishermen pursued other jobs to make a living and so they had lost a part of what they thought made them who they are. The final blow was the Shelter Cove's point of ocean access change of ownership in 1990s when the Machi family had to sell the marina property due to increased regulations, reduction of participants and an overall lack of fish landings in the port (H14, 2017).

Table 1. Timeline of important events in Shelter Cove.

<b>Year</b>	<b>Event</b>
<b>1960s</b>	Shelter Cove subdivision developed
<b>1970s</b>	Mosquito Fleet
<b>1975</b>	Initial jetty built
<b>1980s</b>	Commercial salmon season closure

<b>Year</b>	<b>Event</b>
<b>1988</b>	Fish cleaning station built
<b>1989</b>	Bluff stabilization
<b>1990s</b>	Fish buyer closed
<b>1998</b>	Mario Machi died
<b>1999</b>	Marine Life Protection Act (MPLA) was passed to create a network of Marine Protected Areas (MPAs)
<b>2000</b>	Machi family sold Marina property to private individual from out of the area
<b>2000</b>	West Coast groundfish fishery federally declared a disaster by the Dept. of Commerce
<b>2002</b>	West Coast groundfish fishery introduction of Rockfish Conservation Area (RCA)
<b>2010</b>	Breakwater rehabilitation
<b>2010</b>	MLPA outreach process
<b>2014</b>	MPA implementation on North Coast
<b>2015</b>	MPA Baseline Monitoring at Shelter Cove
<b>2016</b>	Fish station remediation
<b>Dec</b>	Humboldt Bay Harbor Recreation and Conservation District (HBHRCD or
<b>2016</b>	Harbor District) leased marina property at Shelter Cove
<b>Jan</b>	Harbor District began managing the Marina Property and the boat launching
<b>2017</b>	facility

<b>Year</b>	<b>Event</b>
<b>2017</b>	Fishing Community Sustainability Plan (FCSP) outreach
<b>2018</b>	Fishing association membership interest and planning
<b>Nov</b>	FCSP for Shelter Cove completed
<b>2018</b>	
<b>Dec</b>	Harbor District no longer managing the boat launch facility
<b>2018</b>	

Today Shelter Cove is an unincorporated community in Humboldt County, CA. It sits at the southernmost boundary of the County where it is geographically isolated by mountains and a poorly maintained one-lane road. The port of Shelter Cove has been described by some as more of an anchorage as it does not have a marina, nor floating docks, but it is entirely reliant on trucks and tractors to tow vessels into the water on their trailers. Shelter Cove is self-described as tough and independent.

As the regulations increased, and critical services and fish stocks waned, the Mosquito Fleet contracted. A number of Shelter Cove fishermen continued to fish commercially at the reduced level but these historical challenges have shaped how the fishermen move into the future and how they interact with agency managers and local government.

The West Coast groundfish quotas here today have been referred to by fishermen as “poverty quotas” since fishermen cannot live off of the profit margin from these small and variable limits (F20, 2017). The data show a marked upswing since 2006 in Shelter

Cove commercial landings and in number of participants, displaying a loosening of regulations (Figure 10). This community has been able to persevere despite the “poverty quota”, and the upswing in landings since 2006 which has helped participants continue being part of the fishing community.

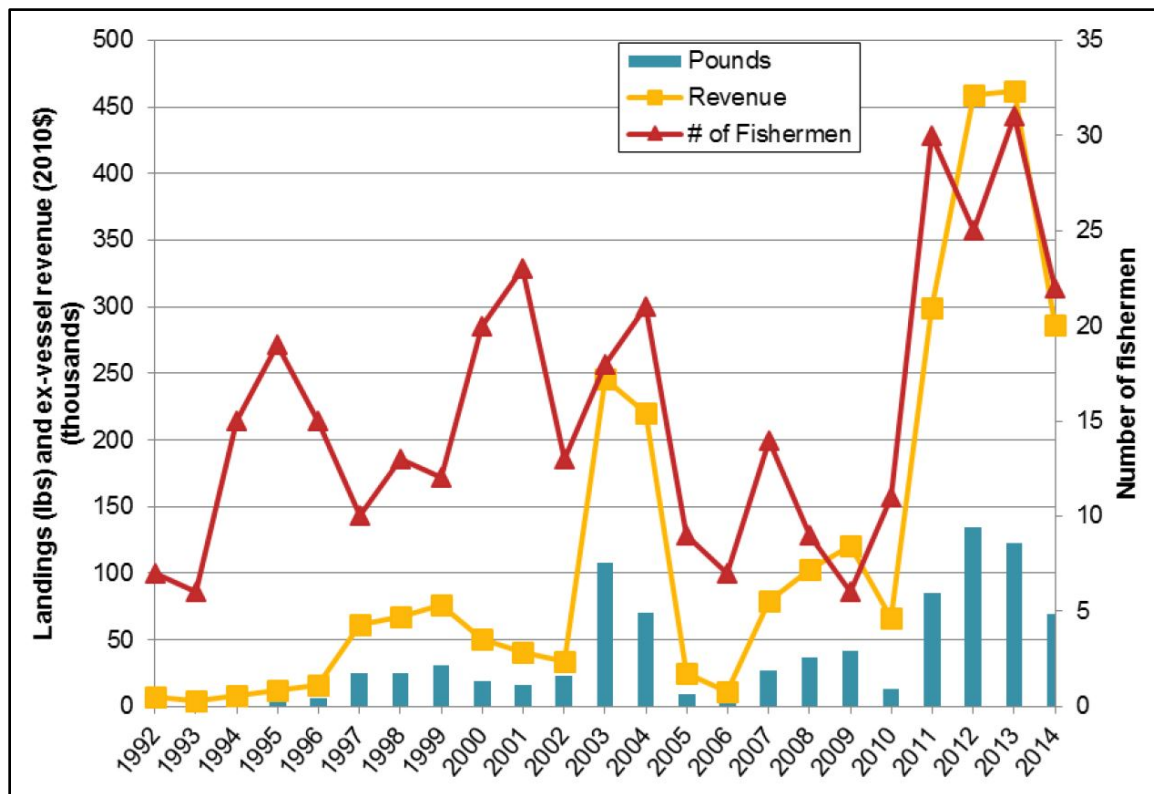


Figure 10. Shelter Cove commercial landings, ex-vessel revenues, and fishermen's participation for fisheries of interest from 1992 to 2014 (Hackett, et al. 2017, p.204).

Shelter Cove is currently a patchwork development of smallish, sprawling, suburban cul-de-sacs and 1970s homes peppered across the most accessible southwest facing knolls and hillsides. The reliance on a single two-lane road creates a challenge daily

to those who rely on it for business or day to day business in the main towns of Redway and Garberville a forty-five minute drive one-way.

This small and unique port is reliant on minimal infrastructure that includes a cement boat-launching ramp to launch vessels from their trailers, and a small jetty that protects that ramp from north and west swells. Two buoys mark the entrance to the harbor known as “The Bell” and “The Whistle”. Commercial and recreational fishermen do day trips, returning to the harbor to pull their boats out onto land each day. This type of operation requires boat length to be “trailer-able” (approximately 12’ to 30’ long) in order for a truck or tractor to successfully put the boats in and out safely.

It is one of the state’s two smallest ports, and the sheer remoteness of the port’s location could make it one of the most difficult ports to access by land. Shelter Cove does not have slip fees because there are no docking facilities. Harbor District has invested resources into the small port since they were formed in 1971 and the fishing community continues to depend on this infrastructure such as: a boat ramp in to the ocean, the jetty, a retaining wall for the bluff of Point Delgada, a fish cleaning table, and a basic storm drain (Figure 11). Fishing is entirely dependent on beach access to the ocean with truck or tractor launch of boats defended by minimal protection from the jetty to the west.



Figure 11. Shelter Cove's infrastructure includes the fish cleaning station (above bluff) and the retaining wall, "storm drain", boat ramp cement skirt, and the jetty. (Photo: Dumouchel, 2017).

The ocean access is primary to the existence of this small port, and without it they would not be a fishing community. Fishing vessels are self-launched into the surf with privately owned trucks and tractors, or publically owned tractors (Figure 12). In 2017 and 2018 boat owners could pay a \$35 fee for help launching with Harbor District owned tractors, a service that historically had been operated privately for a monthly fee of \$50 where trailered boats could be parked when not in use for a monthly fee of \$50.

There are visible moorings floating in the harbor of the “Cove” which are privately installed, maintained, and replaced annually as needed by the few commercial fishermen who fish year round. Vessel length limits are determined by what is possible to launch successfully by a trailer (coining the term “trailer-able”) into the surf and boats over 30’ would have to motor by sea from another port. Shelter Cove lies in the middle of the 110 mile coastline half-way between the ports of Noyo Harbor to the south and Humboldt Bay to the north. While tractors and trucks with trailers make it mechanically possible to launch in the Cove, it is inevitable that folks must wade into the hip depth water to manually release or retrieve vessels (Figure 12).



Figure 12. Shelter Cove fisherman self-launching from the boat ramp next to the jetty, it is likely that they will wade into the water when launching into the surf (Photo: Dumouchel, 2017).

The ocean access is reached by passing through a privately owned property on Point Delgada. This property was the Machi family's land and was once part of their empire, but they had to sell after Mario Machi passed. The current owner lives in Europe and comes to Shelter Cove twice a year, and is not involved with the local community. In December of 2016, the owner initiated a lease agreement under which the Harbor District would manage the boat launching facility and boat storage, continue to take care of the fish cleaning station, and clean up the remnants of the old fish buying station that was in shambles. The Harbor District would not have to pay rent to the property owner for some time, but they would be improving the property in exchange. One part of this lease included the first right of refusal if the owner decided to sell. The Harbor District obtained some grant funding and planned to build one combined structure in three subsequent phases for the three different purposes of: fish cleaning station, tractor bay, and fish market, to replace the existing fish cleaning station and add on to that fishing hub. This property negotiation was one of the biggest events since the property had been purchased from the Machi family. These negotiations underlined the vulnerability of the community. The fishermen found that they did not have any control over the access to the ocean that they depend on and that some have exercised for their entire lives.



## MATERIALS AND METHODS

### Overall Approach

Data used for this thesis were collected in connection with a strategic planning effort conducted in the port of Shelter Cove to develop what is called a Fishing Community Sustainability Plan. The strategic planning process used a variety of methods to assess the historical and baseline conditions of the port and to develop a set of recommendations for how the future sustainability of the port could be improved.

Methods included semi-structured interviews, public planning workshops, secondary data analysis, document review, and participation observation. All of the methods have contributed to my assessment of the past and present levels of social capital in the community of Shelter Cove.

Due to my position within the community as a recreational fisherman and surfer, I had previously formed relationships with other fishermen both through recreational fishing and my personal social networks. This foundation helped me to initially contact key fishermen and to obtain the fishing community support for the planning focused research project: Fishing Community Sustainability Plan (FCSP) for Shelter Cove.

The effectiveness of data collection was greatly enhanced by my past participation in the fishing community. Prior to this study, I had lived in the area for more than 25 years. I had fished recreationally and surfed in Shelter Cove for the majority of that time, and I continued to do so, after I moved to northern Humboldt County to pursue

my graduate degree. I have personal relationships with some of the community members and some of the commercial and recreational fishermen.

My professional network and my personal network created a bridge from academia to the fishing community of Shelter Cove. Through networking for employment, I had become involved in the process for the Request for Proposals (RFP) in the North Coast Marine Protected Area Baseline Monitoring. I was approached by Ocean Science Trust to create a meeting of the Shelter Cove fishermen to meet with potential academics in preparation of this endeavor. I later was employed by Humboldt State University and Professor Laurie Richmond of the Department of Environmental Science and Management for the project “Socioeconomics of North Coast Fisheries in the Context of Marine Protected Area Formation” in 2015. I used my established relationships in the community to engage fishermen in that project so that I could obtain survey results from them for the baseline project. This successful outreach project by Hackett et al. (2017) strengthened these social relationships and steered them into a researcher and interviewee relationship. Like many other fishing communities, the Shelter Cove community is wary of outsiders and they have low trust of managers and researchers (Hackett, et al. 2017 and Ordonez-Gauger, et al. 2017).

These established relationships made it possible to obtain personal letters of support to include in the FCSP Proposal, which was successfully funded by NOAA. Through the FCSP process, I continued to build trust and build more relationships with additional fishermen in the area. Collaboration was developed further through the FCSP process from Shelter Cove, where planning for the future of this fishing community was

the focus. There was a high level of participation of fishermen in the FCSP project which was uncharacteristic of the port and likely the result of years of trust-building with university researchers including myself since 2015.

### Advisory Committee

The Fishermen Advisory Committee (FAC) was a crucial component of the strategic planning process where one of the priorities was to include the bottom-up process – that is the fishermen and waterfront stakeholders would be involved and have oversight in the process. It was formed at the beginning of the FCSP project in order to have community oversight from start to the finish of the project. The twelve person membership was chosen by the principal investigator and myself. The FAC membership was based on the overall diversity of the group, broad representation of the community, their involvement in the fishing industry, their willingness to work with others, and the likelihood of attendance of in-person meetings. These members helped to network the researchers with contacts in the fishing community. It was also very important for the project to be able to have the FAC accept the recommendations before the plan was finalized.

### Semi-structured Interviews

My primary method of data collection was semi-structured interviews with 46 stakeholders connected to the Shelter Cove waterfront including commercial and recreational fishermen, representatives from the tourism industry, waterfront businesses,

and local government. These interviews were conducted verbally in public places, and my hand written notes were later transcribed for further analysis. Interviews were semi-structured, allowing the conversation to flow to topics important to the interviewee.

However, all participants were asked a basic set of four questions:

1. What is going well for the fishing industry in Shelter Cove?
2. What is not going well for the fishing industry here?
3. What have you seen work in other ports?
4. If you had \$5 million to invest in the fishing industry in this port how would you do it?

Interviewees were recruited from referrals by the FAC members, my contacts, as well as through snowball sampling. The interviews lasted between 15 minutes to 75 minutes dependent on the mood and time constraints of the respondent. All fishermen interviewed were men which is reflective of the demographics of the port. A breakdown of the types of people interviewed is included in Figure 13. This body of interview data collected as part of the FCSP process (F) was coded to retain confidentiality and is referenced by a discrete code of F (1-50), 2017.

Four more additional interviews were needed to develop the historical context after the FCSP initial contacts, and respondent fatigue was addressed, so only respondents with historical involvement in the port who were open to additional contact were followed up with regarding this focused interview topic. Participants with experience in the Mosquito Fleet in the 1970s and 80s were asked about what they remembered from that period, how they fished, what kinds of relationships the group had with each other, and with government. Shelter Cove Fishing Association members were asked details about when it formed, how the meetings were, who was involved, and who

is still around. These respondents were also asked if they had participated in Pre-Marine Life Protection Act meetings, and if they were well represented. A list of historical interview questions can be found in APPENDIX B. This body of interview data (H) was coded to retain confidentiality and is referenced by a discrete code of H (1-50), 2018.

A total of fifty interviews were completed in the community of Shelter Cove. The research involving human subjects was approved by the Humboldt State University (HSU) Institutional Review Board (IRB) 15-052.

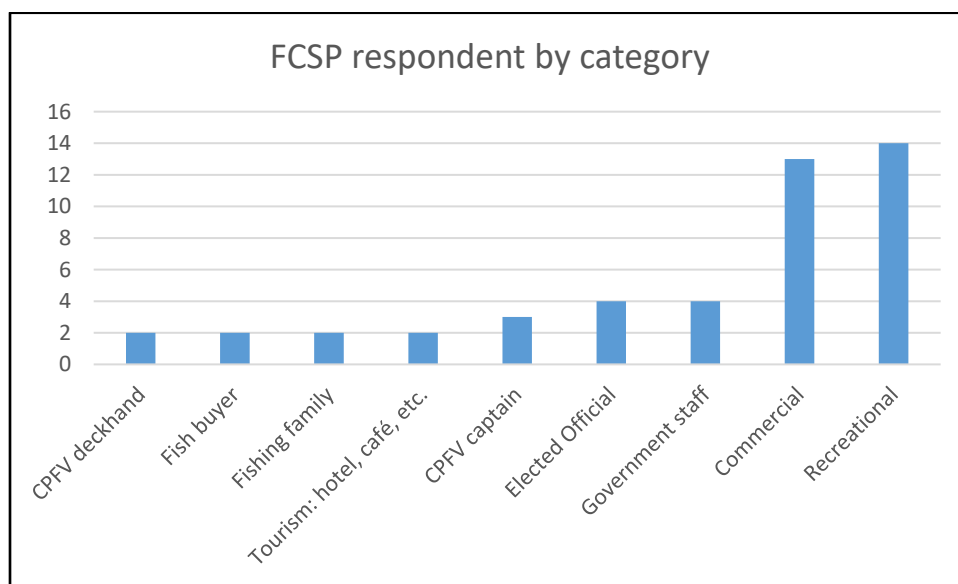


Figure 13. Shelter Cove FCSP 46 respondents by stakeholder category.

### Planning Workshops

Public planning workshops were held in the community of Shelter Cove to collect community perspectives, local knowledge, and community buy-in for the overarching FCSP. Additionally, the ongoing face-to-face communication of researchers with community members strengthened these relationships which resulted in trust building for

this and future projects. The FAC included critical informants for the area within the fishing industry, and their network was helpful to inform the fishermen and the community about the public meeting. One public planning workshop and two advisory committee meetings: one in May of 2017 at the kick off of the project and the interviews, and one after data was analyzed for feedback from the advisory committee (Table 2). The public meeting attendance was made up of additional community members and a smaller number of fishermen (Table 3).

Table 2. FCSP meetings type, date, and amount of attendees.

<b>Meeting</b>	<b>Date</b>	<b>Attendees</b>
Advisory Committee	May 31, 2017	12
Public Meeting	September 29, 2017	36
Advisory Committee	June 5, 2018	14

Table 3. September 2017 Public meeting attendance by stakeholder type (FCSP preliminary analysis) where community residents were the majority of the participants.

<b>Type of Participant</b>	<b>Number</b>	<b>Percentage</b>
Shelter Cove residents	18	50%
Recreational fishermen	8	22.2%
CPFV captains and crew	4	11.1%
Commercial fishermen	4	11.1%
Government staff (RID)	1	2.7%
Elected officials (RID)	1	2.7%
Total	36	99.8%

## Document Review

Archival review of the fishing community's historical planning documents, newspaper articles, and Harbor District meeting minutes were used to understand the historical context of the built infrastructure, governmental involvement, funding sources, and fishing community engagement. The majority of historical documents were found from outreach with the Harbor District former CEO who had historical printed documents pertaining to the specifics of Shelter Cove, their infrastructure and funding resulting from the port management. Some documents were obtained through in person research in HSU Library's Humboldt Room, the Humboldt Historical Society, and some items were sourced from the internet from Resort Improvement District (RID). Some historical photographs were obtained from community members and study participants.

Secondary data from the previous study in the port Socioeconomics of North Coast Fisheries in the Context of Marine Protected Area Formation (Hackett, et al. 2017) were also used for historic landings data from 1998 to 2014.

## Participant Observation

Participant observation for case studies can help researchers to see beyond the formality of our determined roles, and allow people to view each other as people, and not researcher and subject. Newing (2011) states that this type of case study analysis helps a researcher to "develop a really in-depth understanding of what is going on" in the community (p.53). Observation at public meetings, before or after interviews, and of

casual interactions within the community added depth and context to the entire fishing community profile and their prevailing sentiment. These were recorded as handwritten notes, transcribed, and analyzed for emergent themes upon review. Observing Shelter Cove's social groups, community participation, fishing participation, and civic engagement helped to determine how participants interact outside of the interviews, how they engage with each other, with local politicians, and how they deal with issues.

### Analysis

Interview transcripts, participant observation, document review, and planning workshops were analyzed by coding for reoccurring themes. Preliminary analysis of interview transcripts were quantified using emergent themes to establish ideas that were important to the community of stakeholders interviewed (Figure 13). Ideas of importance were categorized as to whether the ideas were strengths, challenges, or an area for future investment. The Atlas.ti program was used predominantly in coding for emergent themes in the interview transcriptions as well as with document review. The codes that were used in the software were those that were reoccurring and those that were used in the creation of graphs to display the results from the FCSP data such as common responses from interviews, common topics in meetings, and common topics of conversations with participants. Secondary coding specifically included social capital bonding and social capital bridging; and each of these topics were broken down further to historical, present, and future. These transcriptions were analyzed further which revealed an area for



possible growth which could directly benefit the community and this guided the overarching theme of the case study.

## RESULTS

This research focused on determining the state of social capital over time for the case of Shelter Cove, CA. The results were synthesized through multiple methods as described in the methods section. The data were divided temporally into two main sections of historical (from 1970 to 2010) and present day (from 2010 to today); and each temporal section was further broken down into examples of bonding and bridging social capital. First, the historical data were developed through the oral history interviews accompanied by archival document review. Information regarding the present day was compiled through analysis of FCSP personal interview data, participant observation, meetings, and document review.

### Historical: 1970 to 2010

#### Bonding

Bonding is one of the two forms of social capital that are the focus of this case study. This type of social capital is the foundation of peer groups, and it affects whether a community expands their scope of concern beyond themselves and onto the greater good of the group. Interviews conducted with individuals who were connected with waterfront activities in Shelter Cove during the 1970s and 1980s conveyed an overall sense of a socially cohesive community with strong social bonds. Many interviewees described the fishing community as possessing tight and productive social relationships in the past. Examples of bonding in Shelter Cove's historical fishing community were brought up in

discussions of the now disbanded Shelter Cove Fishing Association, the “Mosquito Fleet”, and their community’s experience as the fishing industry reality evolved into the situation found today. A strong sense of community and tight social relationships are a large part of the historical memory of Shelter Cove’s fishing community.

#### Mosquito Fleet.

When I spoke with participants about a sense of community in the past, fishermen nearly always reminisced about what they called the “Mosquito Fleet,” the group of 100 or so fishermen who fished out of Shelter Cove during the 1970s through the early 1990s. They were called the Mosquito Fleet because they fished out of small wooden boats that could be easily blown in the wind (Figure 15). These modern fishermen had the signature wooden boats “from 16 ft. to 24 ft. that were gradually outfitted with sophisticated equipment. Radios, fathometers, hydraulic gurdeys, and direction finders were installed” unlike the early days when fishermen had to use hand lines and a compass, the fishermen had new areas to access with these tools (Machi, 1984 p.70). The Mosquito Fleet in the 1980s and 1990s had a core group of 60 to 70 people who regularly fished the salmon season at Shelter Cove (H30, 2018; Figure 8 and Figure 15). The fact that the group was called the Mosquito Fleet suggests a sense of bonding as the fishermen from Shelter Cove were considered part of the same unit or fleet, and this idea of a tightly bonded group of fishermen still feeds their sense of being a fishing community.

Interviewees who were around during the “peak” of the Mosquito Fleet described that during those years fishermen from Shelter Cove were strongly bonded from their shared experiences- at sea and on land- and they created a strong sense of comradery of

both the local and summer break commercial fishermen. One interviewee remembered how “the Mosquito Fleet was a great big family who moved in for the summer since they were a bunch of school teachers and state workers. They were a community that moved in the end of May through the end of July and then everyone left.” (H26, 2018). Mario Machi was a seasonal fisherman who was part of the group with the summer season off, as he was a school bus driver and a grade school teacher for the Southern Humboldt Joint Unified School District before he moved his family to Shelter Cove permanently in the early 1970s (H14, 2017). The Mosquito Fleet were in the Cove for the summer where “Some of the men are retired and others are employed during the winter months. They all have a great deal in common – a deep love for the sea and the challenge of commercial salmon fishing” and these bonding experiences helped to strengthen their group (Machi, 1984, p.71).

These seasonal commercial salmon fishermen built a temporary, but long-lasting community, who came together to fish, and who lived as an extended family from the end of May until the end of July. Each year they continued to fish the summer months to supplement their primary incomes from construction, working for the state, or teaching with salmon income. This group was both cooperative and independent, as they did not have a boat launching service, so they had to use their own trucks to get their vessels into and out of the water. They also used custom trailers called stingers that they pulled manually with a group of people to haul out the boats out of the water and on to the beach at the end of the day of fishing. During this period, a commercial fisherman told researchers that, “we would manually take out about 100 boats with fifteen to twenty

guys with the stinger” (F44, 2017). “It was a big family and a big party; sometimes tourists would help” (F26, 2018). They shared information “after they figured out you weren’t a threat” about where and how they were catching salmon via the marine radio, or around the campfire at the campground (H26, 2018). One of the remaining Mosquito Fleet fishermen remembers how “we all used pickups to launch the boats”, how they got along, had fish fry’s, drank together, and ultimately, “we took care of one another” (H30, 2018). Another fishermen recounted that they would “take the trailer off the beach with 6 to 10 guys and shove you out into the water, and when we had the southerly’s and there were 100 boats we would have to relay boats on trailers up the hill.” (H26, 2018). The group felt strongly connected through the time that they spent together fishing as a group every season in Shelter Cove along with their fraternization, mutual protection, and after hours of fun.

#### Shelter Cove Fishing Association.

One of the strongest examples of bonding in Shelter Cove’s history is the formation of an alliance within their industry: their fishing association. The Shelter Cove Fishermen’s Association was a 501(c)3 non-profit entity made up of approximately 70 to 100 members (Figure 14). Members were mainly commercial fishermen who operated seasonally out of the port, predominately fishing salmon and rockfish (H30 and H26, 2018). It was formed through their need for collective marketing “because of price negotiations with Mario’s and the Eureka Fisheries” and the local commercial fishermen sometime in the 1980s (H26, 2018). Those who remember the association describe it as a close-knit group who not only fished together as a unit, but who “brought their trailers

somewhere local and lived in Shelter Cove...” (H30, 2018). Another respondent recalled that “they lived in the campground [and] people had their own parking spot for every year” during the summer salmon fishing season (H26, 2018). They all knew each other by name and because “everyone comes back every year and catches up with each other” (H26, 2018).

Interviewees recounted, that members looked out for each other when they were on the water fishing, and “people said where they were catching” (H30, 2018) informed one another via the radio and “sometimes someone who was catching would say ‘they’re biting this’ and give you a lure, by floating it over to your boat, or later at the bar or the campground”, (H26, 2018) in their conversations onshore. The surviving members of the organization have fond recollections of a sense of belonging to a shared idyllic community lifestyle, as well as a sense of accomplishment for what they achieved collectively through their cooperation.



Figure 14. Shelter Cove Fishing Association in 1988 (Photo: MaryAnn Machi).

Interview accounts indicated that the Fishing Association was very successful at pulling together resources to support and take care of their local fishing fleet. The fishing

association was well-funded through “the highest self-imposed landing tax on the West Coast” (H26, 2018). In addition to their landing fees, the local fish buyer and member of the Association Mario “Machi he would buy salmon and hold out about \$0.06 per pound. This was held out of our checks for the purchase of our landings of salmon. Some would haul fish from the big boats to the shore and they got \$0.10 per pound, but they also got this \$0.06 per pound taken out by Mario that went into the fishermen's association account” and Machi deposited into the fishermen’s association account even though he did not charge a launch fee for the boats to use the launching facility (H30, 2018). Interviewees noted that the Association was so successful that when it ultimately dissolved in the late 1980s (H26, 2018) the non-profit’s bank account contained approximately \$60,000 (H30, 2018). The Association used these funds to further support their membership when they purchased a mooring puller, installed a streetlight, and “gave the Pacific Coast Fishermen’s Federation Association (PCFFA) thousands of dollars” (H26 and H30, 2018). These purchases display their concern for the greater good of their group.

The Association reinvested some of their funds into needed infrastructure for the fleet. They had purchased equipment for the group to use collectively, and an A-frame mooring installer/remover was acquired for their members to be used seasonally. One fisherman said, “We bought the ‘Leaky Teepee’ mooring puller, and we bought a light and installed it at the bottom of the hill” since there were no street lights it helped fishermen trailer their boats and unload successfully in the dark hours (H26, 2018). Moorings were installed and removed, independent of government involvement or

oversight. This cooperation and coordination of the fishing association are some of the best examples of bonding social capital in the history of Shelter Cove's fishing community.

The Association finally dissolved due to the response of fishermen to changes in regulations for salmon and rockfish fishery management. In "the late 1980s people weren't showing up to fish, people didn't bother because of all of the closures" (H26, 2018). Members of the Association were witness to the dwindling membership due to declines in fishing participation in the community, and those who remained in the area remembered that "It was not feasible to fish after that" (H30, 2018) due to multiple regulatory and ecological factors (H26 and H30, 2018). One participant shared their lasting memory of the Association and "Every time I get bummed out now, I just remember I was a part of it, and it brings a smile to my face. It's a bummer that it's not like that now and most of them have passed away." (H26, 2018). This kind of sentiment shows that members of the Association felt a sense of belonging that is a missing factor today. Although the Association dissolved, it is reflected upon as a positive time for their group who had shared these experiences together.

The historical Shelter Cove Fishermen's Association account yielded a substantial amount of money due to their active membership and sizable salmon landings in the port. One proxy for landings in the late 1980s was Machi's estimate of the pounds of salmon landed at Shelter Cove since he was the sole fish buyer in the port. These landings represented the magnitude of both the Association and the Mosquito Fleet's participation. A letter from Mario Machi dated January 20 (1989) stated:



To whom it may concern: ...During the summer season from May 1 to Sept 30<sup>th</sup> over one-hundred fishing boats are involved in Shelter Cove and in 1987 five-hundred thousand lbs. of salmon were brought ashore and processed. In 1988, five-hundred twenty-six thousand lbs. were landed (Machi, 1989).

Machi further extrapolated that the 1988 value for these landings was \$2,630,000 (in 1988 dollars), so an estimate of what the Association may have had in their account from those two year with just the landing fee payable to Machi for only 1987 and 1988 was at least \$157,000 but likely more from membership dues from those two years alone. The accumulation of wealth in their association was related to their salmon landings at Shelter Cove in the 1980s.

#### Teaching of Community Norms.

Bonding was further strengthened by the introduction and inclusion of others to the group and the teaching of acceptable norms. The broader community of Shelter Cove has its set of norms that distinguish it from surrounding communities. People who have come to surf usually were brought there by someone who was from Shelter Cove because, “You only knew about it from two ways: either you grew up here and lived close or transplants were initiated into the Shelter Cove surfing community” and you didn’t tell others about it (F35, 2017).

Locals had a high regard for their community, for example, Machi (1984) referred to it as the “Gem of the Lost Coast” in his book on the history of the area. Additionally, due to Shelter Cove being far from the two Coast Guard stations “The ‘Mosquito Fleet’ learned to rely on its members for assistance when in trouble and many serious accidents were avoided because of timely help from members from the fleet.” (Machi, 1984, p.73).

Because of the small community atmosphere, where many of the commercial fishermen have fished all of their life, the community enforced its own set of rules. One historical fishermen said, “not throwing trash on the beach were held in high regard, and you treated the ocean with respect,” (F35, 2017). This community prided itself on its “self-reliance” and “outsider status” (Lisa Wise Consulting and Humboldt State University, 2018). Many, but not all, locals still abide by the unwritten rules of looking out for others, keeping the beach clean, and locals only. Even so, the history of this small fishing town’s reverence for the ocean, and for each other remains a valuable aspect and asset of their heritage that is a tie that bonds the group together.

### Bridging

Interviewees also described examples of bridging social capital in the fishing community’s historical interactions. Scholars describe bridging as “links to a diverse web of resources strengthen a community’s ability to adapt to change” (Newman and Dale 2004 p. 1). This type of social capital includes people from different groups networking together which results in the acquisition of resources across groups in the form of different skill sets or other resources. A few of the members of the Mosquito Fleet and the Shelter Cove Fishing Association are still around today and they provided most of the information through one-on-one interviews from the historical perspective that they shared. Shelter Cove has seen many examples of bridging in their history. Current community members can draw from this history to work on revitalizing bridging relationships into the future of their port.

### Political Engagement Through the Shelter Cove Fishing Association.

Additional conversations with community members from Shelter Cove suggested that the Shelter Cove Fishermen's Association leadership helped them to engage politically with other group memberships in their region. Not only did the Association bring people of the Cove together through their organized leadership, but it brought them in alignment with other groups that had similar goals including the Pacific Coast Fishermen's Federation of America (PCFFA). This developed a foundation for political engagement that helped members bring more resources and attention to their fishing community. This social network bridge helped to form a core of leadership they could reach out to across groups to collaborate and coordinate with.

Unfortunately, the Fishing Association did not last, and its decline and ultimate disbanding contributed to a decline in bridging social capital in the community. Due to the increased regulations on salmon and rockfish including a major reduction in quotas in the late 1980s and early 1990s there were no more sales from commercial fishing, and, as a result, there was no more money being deposited into the Association's account. The Association faded into history at this time, as the remaining commercial fishermen suggest that it was no longer feasible to fish out of their home port of Shelter Cove. Some fishermen pursued other revenue sources in or out of the area, some fished in other ports, and a handful of them remained to scratch out their fisherman's lifestyle in Shelter Cove despite the reduction in income. The simple lack of fishermen who could continue to fish under these reduced quotas and limited seasons meant there were not enough fishermen to keep the organization going without dues or the energy of their membership to continue. Emeritus members of the fishing association have kept a strong sense of pride

in what their membership was able to accomplish through their resources that they donated for the greater good of their community. However, it also marked a great loss in their potential bridging relationships.

The final president of the now disbanded Shelter Cove Fishing Association non-profit recounted some of the past actions of the non-profit organization in his historical interview. The fishing association had a board of directors including a president. This formalized leadership role helped to guide the fishing community to become more organized as an entity. The former Association president still retained his briefcase from the organization with many items from the days of the historic “Mosquito Fleet” commercial salmon fishermen. This fisherman having a briefcase illustrates the other side of fishing where many meetings must be attended in order to advocate for the needs of the fishermen. He saved these relics for posterity as tangible evidence that he was part of the “good old days” of fishing at Shelter Cove; part of the group who achieved this positive legacy that was displayed by the retained fishing grounds.

#### Local Government Relationships and the Shelter Cove Fishing Community.

Three local government entities have some influence on the Shelter Cove community and waterfront: the Harbor District, Resort Improvement District (RID), and the County of Humboldt. RID, Harbor District, and Humboldt County all play a part in the Shelter Cove fishing port through their specific responsibilities to the area.

The RID has been involved with maintaining the fish cleaning station in the past as a service to Harbor District. RID has proclaimed a resolution to support the fishing industry, and they supply services to the Marina property which is the only support

infrastructure for the fishing community. They remain an important player in the future of the fishing industry of the Cove.

Harbor District has been acquiring and managing grants to provide infrastructure in Shelter Cove since their inception in 1973. They have been managing the jetty, boat ramp, fish cleaning station and bluff stabilization at Point Delgada. They have continued to procure funding and use their far reach to acquire these funds from outside sources.

The Humboldt County government serves the region by overseeing the building and planning code regulating development. The Humboldt County Board of Supervisors can help the community of Shelter Cove by bringing additional attention and/or funding to support projects in the area issues that affect the fishing community, such as the only road to get to the Cove. Their involvement with fishing industry matters in Shelter Cove has historically been with permits for critical infrastructure projects.

Successful bridging relationships between the fishing community and appropriate members of these three government entities could help bring resources and policy changes that benefit the fishing community. This section will describe the historical roots of these three entities and their relationship to Shelter Cove. The section will also describe how successful the fishing community was, historically, at forging and maintaining relationships with these entities.

#### *Humboldt Bay Harbor Recreation and Conservation District*

The Humboldt Bay Harbor Recreation and Conservation District (HBHRCD or Harbor District) website states that “This HBHRCD oversees planned development of the harbors and ports within the District, as well as protection of the natural resources located

here.” Although the focus of the organization has tended to be in Humboldt Bay, Shelter Cove is one of the ports within the district and is also part of their jurisdiction. (Harbor District, 2018). Since its creation in 1973, this entity has oversight of Humboldt Bay tidelands and estuaries of Humboldt County, as well as natural resource protection, development of the harbor, ports, and recreational development.

The responsibility of the Harbor District at Shelter Cove was also clearly defined by the regional service planning agency of the State of California Harbor District that oversees local government agencies for the needs of both present and future communities. As stated in the RID Municipal Service Review “Shelter Cove harbor jetty, boat launch ramp, and the fish cleaning station are maintained by the Humboldt Bay Harbor and Recreation District with help from RID.” (Humboldt Local Agency Formation Commission, 2009, p14.)

The Harbor District had pursued grants for critical infrastructure of Shelter Cove since their inception and permitted projects within their jurisdiction. Harbor District approved Mario Machi’s permit application on March 8, 1974 to construct the jetty, which was published in the Times-Standard on March 21, 1974 (Permit 74-2). Mario Machi’s leadership within the fishing community resulted in strong bridging relationships with the District. This appears to have been one of the first interactions between Shelter Cove and the Harbor District. This example shows how one person can create a public-private partnership bridge that leaves a legacy of resources in its wake.

Harbor District continued to pursue many more investments into Shelter Cove fishing infrastructure, and their acquisition and the flow of resources into the fishing

industry was recognized by many community members at that time as shown by the large number of fishing community representatives participating in meetings. Historical interviewees indicated that at least some representatives from the Shelter Cove fishing community stayed engaged in Harbor District activities and helped ensure that resources were being utilized in a way that could most benefit the community. A few civically engaged members of the Shelter Cove community, such as Shirley and Mario Machi along with some fishermen, attended the Harbor District board meetings when Shelter Cove was on the agenda. Attending the meetings required a significant investment of time and money because it was a four-hour round trip by road to and from the county seat in Eureka, CA (H14, 2017).

In 1985, Harbor District obtained \$44,000 from the State Coastal Conservancy “to provide an improved fish cleaning area, grinder pump and ocean outfall line for ocean disposal of fish waste from recreational fishing at Shelter Cove” (State Coastal Conservancy, 1985). The fish cleaning station was built in 1988, and the Harbor District procured the grant, constructed the electrical and waterlines, and they required that RID maintain the fish cleaning station and pay the annual maintenance of \$5,000 (referred to in grant application by Hull, May 13, 2004). Additionally, Machi granted an easement on the Marina property to Resort Improvement District to maintain the facility (State Coastal Conservancy, 1987). Another public and private partnership, Shelter Cove community lobbying, Association representation, and active involvement with the Harbor District likely played a role in the agency’s decision to pursue this project.

Harbor District secured funding for projects in critical infrastructure and improvements at Shelter Cove that continued for decades. This was described in a July 21, 1987 press release by Harbor District. It stated that cumulatively, more than \$660,000 was received by the Harbor District from the California Department of Boating and Waterways for many needed improvements from 1982 to 1987 specific to Shelter Cove including a bluff stabilization project and the fish cleaning station upgrade. This Resolution No. 86-12 described a unanimous vote from the commission. This showed an almost fifteen-year span and more than one half million dollars of resources invested in the infrastructure of the Cove.

Another example of bridging was the active dialogue from fishing community members who felt that they could access leadership at Harbor District. A Shelter Cove fisherman and owner of the Lost Coast Landing Launch and Charter Service came to the Harbor District to ask questions of the CEO David Hull and this was relayed in an interoffice "Memorandum" dated November 23, 1998 to share with the board of commissioners, counsel, treasurer and administrative assistant. David Hull explained "that the \$1.4 million of improvements that the Harbor District had overseen at Shelter Cove was viewed as a major contributor to the growth and success of that area..." among other legal expenses and grant preparation, as well as travel to Sacramento for support (Hull, 1998). This example in the public record showed constituents who traveled to attend a government meeting, spoke on the record about issues that pertained to them, and who received information that they requested. This is one way to build relationships from civic groups to government entities, and this could be used as an example of



bridging for others to follow. This positive result stemmed directly from people who reached across their group to another, and were able to strengthen a relationship which helped their community over many years.

The interoffice memo from Hull in 1998 showed that historically, the Harbor District had been engaged in Shelter Cove and had provided numerous resources, and this engagement helped to maintain important infrastructure for the fishing community. The memo also revealed that Shelter Cove maintained a lobbying presence at the Harbor District, as they sent a liaison to communicate the community's interests to the Harbor District staff. In the memo, the CEO David Hull explained to the staff and their elected officials how a Shelter Cove businessman who was "here representing a 'coalition' of business and fishing interests... has no official capacity but represents a number of people interested in keeping a Harbor District presence at Shelter Cove" (Hull, 1998). The memo indicates that Shelter Cove was invested in keeping the Harbor District engaged in the fishing port. They coordinated and collaborated with their community members to specifically lobby for an outcome and that social organization resulted with resources for their infrastructure.

However, the memo also indicated that the relationship between Shelter Cove and the Harbor District may have been frayed previously. The Shelter Cove fishing businessman relayed that RID "had told him that the HBHRC had said that Shelter Cove was a pain and that we [the Harbor District] wanted to turn the facilities over to the Resort District (RID)..." Hull added "that, in fact, the offer to have the Resort District take over had been made; however, the Resort Board had tabled the issue." (Hull, 1998).

These statements suggest that the Harbor District found working with the Shelter Cove fishing community difficult, and they sought to divest from any involvement in the community.

This sentiment is supported in Harbor District communications. A letter to the Resort District's Directors from Harbor District's counsel in 2007, in reference to the Fish Cleaning Station, states that "the HBHRCD needs to consider the best interests of the entire constituency of the District, and not solely the interests of the residents of Shelter Cove, it is questionable as to whether the District will want to expend the resources that might be necessary to ensure continuation of the fish cleaning station" (Brisso, 2007). While the letter also states that the removal of the fish cleaning station would be a detriment to the community, as it was historically, Brisso ultimately points out that the geographic distance is a logistical problem. The finale was that the counselor asked if RID would like to take "action to provide for the continuation of the fish cleaning station, the Harbor District continues to be willing to work with you, and would transfer the District's entire rights and ownership interest in the fish cleaning station to Shelter Cove Resort Improvement District No.1, if you so desire." (Brisso, 2007, p.2). Essentially, the Harbor District counsel is seeking to give away their rights and responsibility to RID, but ultimately RID declined this offer.

The Harbor District could be an important ally for the fishing community as the overseer of key infrastructure with the ability to procure funding to support community interests. The Harbor District also has staff with experience in port management, which could be an important skill for the fishing community. The fraying of this relationship

shows a decline in community bridging efforts that until recently have left the fishing community fairly isolated in terms of support from local government entities.

*Resort Improvement District (RID)*

RID is a special-purpose district governed by five elected board members that was formed in 1965 to install and to provide electric, water and sewer services to the unincorporated area of Shelter Cove (Figure 15). RID is the only remaining district like this in California after the legislation creating it was repealed in 1975. It began after a previous subdivision failed, beginning with 4,715 lots that were reduced after multiple subsequent annexations (Humboldt Local Agency Formation Commission, 2009). Over time, RID had also managed the golf course, day use airport, green belt, Shelter Cove Fire Department, children's playground, and recreational areas.



Figure 15. Shelter Cove subdivision is managed by Resort Improvement District #1 which includes the airport runway, water, sewer, and electrical services (HLAFC, 2009).

Official support from RID for the fishermen of Shelter Cove was in the form of the rebuilding of the jetty in 2006. The Resolution No. 06-06 stated that RID board of directors was unanimous and “declares its support for alternative #1 (rebuilding the breakwater on the existing footprint) for the Shelter Cove Breakwater Rehabilitation Project” (RID, 2006). The District stated that “Without breakwater improvements safe access to the ocean will be lost, negatively impacting future growth and property values in Shelter Cove” (RID, 2006). This public proclamation helped to strengthen their position of alignment with the fishermen of the area.

Another example of RIDs support of the fishermen of Shelter Cove was through the acknowledgement that the Shelter Cove Boat Launching Facility is beneficial to the entire community. At one time, the fish cleaning station, which is included in this facility, was in danger of being removed from its location by the property owner, and “the present owners of the fish cleaning station property declined to sell the property or grant an easement for the continued existence of the fish cleaning station” (RID, 2007).

Resolution No. 07-08 specifically requested that Harbor District gain control of the property that the fish cleaning station is on, and for the Harbor District to commit to the continuance of it. While RID formally expressed full support of the fishing community’s need for this critical infrastructure, in 2007 Harbor District counsel wrote a Memorandum to RID. Brisso (2007) offered RID the rights and the responsibility of the fish cleaning station in the Memorandum, but RID declined which showed that ultimately they did not think that it was important enough to take on control of that infrastructure by their district.

RID made Resolution 01-11 stating their support for the fishermen and the fishing industry of Shelter Cove. This resolution stated:

Commercial customers represent an important part of the Shelter Cove Resort Improvement District’s customer base which provides income to pay for the costs of operating the utility systems of the community; and Whereas, those commercial customers include various businesses which are directly and indirectly dependent on the use of the fisheries found in the waters around Shelter Cove; and Whereas, at the present time certain governmental agencies are considering adopting regulations that will potentially impact the use of those fisheries...hereby declares its opposition to the adoption of any regulation that would prohibit sport fishing in the waters around Shelter Cove, or any regulation which would prohibit continued fishing by Shelter Cove’s present hook and line commercial fishermen. (Resort Improvement District BOD, 2001).

The resolution was unanimously supported by their governing board

Historically and presently, RID has not been all that involved in management of the Shelter Cove waterfront. In the late 1990s the Harbor District approached RID about taking over management of Shelter Cove waterfront properties but RID refused. Shelter Cove fishermen recalled that during this time the Harbor District and RID had been “leaving each other alone”, “staying out of it”, or “butting heads regarding money” and that they did not appear to have a relationship of working together for the greater good (personal communication with fishermen, 2017). Both of these entities had mission and goals linked to supporting the fishing community, however neither wanted any involvement in the Shelter Cove waterfront. Fishermen stated that much of the interaction between the entities over the management of waterfront infrastructure like the fish cleaning station resembled the child’s game of “Hot Potato”.

*Humboldt County Government*

The County of Humboldt oversees the development of the county, so their support of fishing infrastructure is important to the success of fishing industry projects at Shelter Cove. One such letter of support was from Jimmy Smith of the Humboldt County Board of Supervisors who addressed the chair of California Coastal Conservancy (CCC) and stated “There is universal agreement that modifications can be made to the breakwater that would allow for much safer public access...and continues to add enormously to our rural economy” (Smith, 2003). The recognition at the county level of what the rural port

has brought to the county economy helped to get this project the support from the CCC which ultimately landed the resources to complete the project in 2010.

### *Leadership*

Strong leadership is important for a group to be effective with their choices, and Shelter Cove has had a couple examples of this in their recent history. Interview accounts indicate that Mario Machi was a leader to the community of Shelter Cove. Mario Machi had created an empire of sorts at Shelter Cove with Mario's Marina at the center of the fishing hub where he grew into being an informal leader of the community. Machi was an active part of the fishing community and town of Shelter Cove. Machi's leadership could be inferred by his empire alone: Mario's Marina (Figure 16), fish buying station, Mario's Motel, boat rental, boat launch, mobile units, and restaurant were a major part of the community of Shelter Cove. Machi was a very important member of the community for his involvement in the fishing community, his commitment to its success, and his drive to invest in the community. His home, business and family were all a part of the broader community of Shelter Cove. This is reflected by the community through the statue installed in honor of his military and community service to the fishing community specifically by initiating projects that were beneficial to the fishermen of the area (Figure 17).



Figure 16. Mario Marina sign now rests at his family's home although it was the fishing hub, and part of the empire that he built at Shelter Cove. (Photo: Casali, 2017).

The Shelter Cove Fishing Association formed a foundation of leadership through their governing board who looked out for the interests of the group as a whole through the lobbying for their collective rights. The board members made up of fishermen engaged in this organization lead as a group. Mario Machi was also included in this organization. Community leadership is an important part of civic engagement, and this is evident in the previous fishing community organization.





Figure 17. Statue of community leader Mario Machi in Shelter Cove at Point Delgada (Photo: Dumouchel, 2017).

Mario Machi may have been an informal leader of the community as he did many things for the community of Shelter Cove during his life. By doing this he helped bring resources to the area through bridging to other groups with resources. One of the major projects he pursued was the initial jetty build. He obtained the permit for the build, and he had support from Melvin Clausen (Bureau of Land Management, 1973) who wrote, “Your proposal to build a privately financed jetty is exemplary of the spirit of concern and cooperation between public agencies and private landowners which led to the passage of the King’s Range Act in 1970.” This shows Machi’s concern for the greater good, and it is one of the clearest examples social capital bridging within Shelter Cove’s

history. The community erected a statue of Machi in recognition of his lifelong community service (Figure 17). Machi's fish buying business success was a direct result of the viability of the port, so he pursued things that would benefit the port as a whole.

Machi granted the easement access to RID on the Marina property in return for their maintenance of the fish grinder mechanism until 2006 or the life of the grinder, and the maintenance of the fish cleaning table (California Coastal Conservancy, 1987). Machi found support from a list of government entities that helped to retain resources for the building of the fish cleaning station and maintenance of this essential fishing infrastructure and hub of fishing information and tourism spectacle that included: the Department of Boating and Waterways, the California Coastal Commission, the Regional Water Quality Control Board, the Army Corp of Engineers, the Humboldt County Health Department, California Department of Fish and Wildlife, Harbor District, and Resort Improvement District. Mario Machi had many investments and business enterprises in Shelter Cove, and his success was somewhat reliant on the success of a healthy large fishing fleet. The legacy of his support and his leadership is echoed throughout the public record and a common thread throughout the community history of Shelter Cove.

Shelter Cove had Machi as a strong community leader, and after he died in 1988 the community needed someone to continue in a leadership role. Since there were no others ready or engaged enough to take his place his position, the community was left with a void. The fish buying station continued for a few more years, but his family could not keep it open when fish landings were minimal. Shortly following these events the Machi family sold the Marina property to a private individual who was not from the area,

marking the end of an era and an empire. Also, the sale of Maria's properties and businesses to an individual who was not connected to the community, created a new vulnerability to the long-term viability of the port.

Present: 2010 to 2018

### Bonding

Scholars define bonding as the expansion of awareness beyond yourself and for the greater good, and through bonding ties of "relations between family, friends and neighbors in closed tightly connected networks" trust is built and they make a community more able to adapt to changes (Newman and Dale, 2005). My research shows that Shelter Cove has strong bonding in many aspects of the community. However, analysis of the current state of Shelter Cove suggests that over the last two decades or so, the level of bonding has declined. Interviewees recounted that in 2017 the fishing community did not gather in the way that they used to do.

### Challenges to Bonding.

Shelter Cove has no shortage of civic groups as can be seen in the list of community organizations, including the Pioneers, Shelter Cove Arts and Recreation Foundation (SCARF), Friends of the Lighthouse Committee, Shelter Cove Volunteer Fire Department, and Whale Gulch Volunteer Fire Department, yet there are no formalized fishing organizations. For example, the community rallies around the fire department for their service to a community that is vulnerable to fires due to its wilderness environment

and remote geographic setting. Meanwhile, they do not rally around their fishermen for the service of fresh line caught fish for their community, as they may have done long ago.

The research results suggest that many people from many different roles in the broader community perceive that the community is unified in their support of the fishermen even if the support is not visible. However, there are well known fractures within the fishing community that are so familiar to them that it is not spoken about often. This is apparent when a meeting is planned, and people will not participate if certain members of the fishing community will be in attendance (personal communications, 2017). This tends to bring up negative memories of past fishing meetings where the emotions ran high, and the dialogue digressed into non-constructive participation. Some fishermen are so angry at each other about past events that they barely speak to one another anymore – a feat that is difficult to pull off in such a small town. Researchers and government officials who are conducting activities that benefit the port report that it is difficult to get fishing community members to attend meetings and engage. Despite the perception of the broader community being a well-bonded group there are divisions within the fishing community which are obstacles to increasing their assets in bonding social capital.

Another possible fracture in the community is apparent in the fishing community - commercial and recreational - where tension is underlying between the groups. It is most often noticeable when these two groups of fishermen refer to the regulations for their particular group and they are described as not fair which adds to the segregation. Fishermen voice their disagreement about their respective access to salmon fishing. For

example, salmon season from Horse Mountain to Point Arena is quite different for recreational and commercial fishermen. Each group feels that the other should not get anything more than the other group, which materializes as more fish landed in their view.

In interviews, fishermen expressed a sense of apathy or pessimism with regards to the state of the fishing community. When questioned “what is working well in Shelter Cove?” a fisherman replied “Ain’t much working well in Shelter Cove” (F50, 2017) while approximately eight response out of 43 said “Nothing” is going well in Shelter Cove (FCSP, 2017). When the researcher asked a fisherman: Do you feel that you can talk with local government about issues pertaining to your group? The recreational fisherman replied “People just bitch about everything to the same people” (F50, 2017). An example of the reoccurring thread of despondency among fishermen is illustrated by his sentiment about the port: “This place is pretty hard to get anyone to do anything.” (F50, 2017).

The fisherman’s story from this community was a drama made from many layers of regulations, environmental changes, and personal experiences in the profession that is inherently dangerous. The idiom of “death by one thousand tiny cuts” could be used to describe the community’s experience as the contraction of their fleet paired with the aging of their mates slowly reduced their fishing community to a small and precarious state. To those in this business, the declines and losses in the fishing community have been very personal. Fishermen from Shelter Cove often had trouble communicating the sadness and anger that they felt over how much decline the community has experienced. One fisherman who may feel that way has reverted to signage in his community to

express his ongoing anger (Figure 18 and Figure 19). He gradually adds or changes the text of the signs on the property – but they all reveal messages of pride in the Shelter Cove fishing community and anger at political processes and figures that he believes have contributed to the decline. One sign on his property reads: “I believe in the rights of the individual as God’s law for man and the Mosquito Fleet exemplifies it!” Another sign reads “I swore to the blood and the marrow in my bones as he lay dyin on the table. That I’d teach my sons of the sea that he’d known so they would be able. To take the helm of his johnnie Lee aye sail ‘er through the pass n round Gorda To watch the sunset o’er fallowing sea, and find good fishing in the morning” (Figure 18). Another sign says “No MLPA = Fraud + Facism” and another “Mosquito Fleet stabbed in the back by KMUD corp. radio” where this fishermen may have believed that the community radio station did not give him enough time on the radio to express his opinion (Figure 19).



Figure 18. A Shelter Cove second generation commercial fishermen has resorted to signage in their gear yard in an effort to be heard and understood from those outside of the fishing community (Photo: Casali, 2017).





Figure 19. Another sign from the fisherman who uses signs to express his frustration with the local community radio (Photo: Richmond, 2014).

An ongoing challenge to bonding is the aversion of fishermen to attending meetings. After four years of organizing meetings between fishermen of Shelter Cove and others, I can say from first-hand experience that this is one of the ongoing challenges to academic research, collaboration, coordination, and bonding within the fishing community. One fishermen recounted that “As far as meetings go – most of the fishermen see that as ‘burning fuel’. More meetings means less fish access is the consensus. Although I don’t believe that, and I have participated in many” (F47, 2017). I view the meetings held for the planning process connected to this thesis as a success given that anyone showed up at all (even though FCSP Advisory Committee members



were paid a stipend for their attendance, most did not accept the payment), and that they participated within their own capacity. The secondary fact that these participants came more than once, is additional evidence that they may be seeing value in the group dialogues with academic partnerships. The successes in getting individuals to engage in strategic planning efforts for this project, were important first steps. But, getting individuals required real persistence as well as having someone with connections to the community, myself, organizing the meetings. The experience revealed that the community has a lot of work to develop better relationships and more of a spirit of civic engagement.

The underlying social dynamic in Shelter Cove can be a challenge when trying to organize community meetings. Certain individuals stated that they would not attend meetings if other disruptive individuals were in attendance. At the same time, if someone was excluded with a meeting, they could get angry and develop conspiracy theories about the types of activities that were being discussed in the meetings. There were several times when I, the researcher, was on the receiving end of outbursts of frustration from specific community members.

#### Bright Spots.

Overall, the sport fishermen and the commercial fishermen in the Cove have a healthy relationship when compared to many other ports. Some recreational fishermen think that this relationship stems from the theory that if it weren't for the commercial fishermen then none of this would be possible. One retired commercial fishermen described the local fishermen relationships as: "They know the spot well, they have

relationships with each other, they are generous with others, they have a common awareness of the tenuous nature of fishing out of the Cove safely, etcetera.” (F35, 2017). When fishermen were asked “do you think that the recreational and commercial fishermen are unified?” multiple replies from the interviewees were in agreement that the two groups were indeed unified.

Another participant perceived the relationship between the surfers and the fishermen as a mutually respectful relationship. The two groups that had historically been opposed stemming from conflicts over the construction of the jetty – surfers did not want a larger jetty that would have benefitted the fishing fleet but negatively affected surfing spots. The relationship was described as, “their groups are not separate... there is a lot of sympathy among surfers for fishermen – similar threats: fog, swell, etc. a general respect between those two communities... surfers and the local fishermen share a lot of common experience and knowledge of the ocean” (F35, 2017). This perception of two historically opposed groups are unified today, and many fishermen also surf there.

Although Shelter Cove fishermen are experiencing greying of the fleet, as many ports across the nation are, they do have a couple third generation young captains committed to being part of the industry. The 2013 data show that fishermen in Shelter Cove had an average age of 55 due to lack of new entrants into the fleet (Hackett, et al. 2017). The youngest captains of the fishing community are very energetic and socially connected to the community at large, the FCSP team, the Advisory Committee members, and one local elected representative collectively noted their participation in the industry and the FCSP as a promising sign, and a bright spot of the future for the port.

The fishing community appears to have broad support from the greater community of Shelter Cove and of Southern Humboldt. Many non-fishing members of the greater community made it clear that they want to see everybody go fishing. Shelter Cove "...really cares about the fishing community... [which is a] really good group of people who want to do the right thing" as observed by one elected representative (F11, 2017). The fish cleaning table was a boon for the fishermen where tourist, locals, and other fishermen gather to see what is landed from the Cove. In general, the tourism businesses know the importance of fishing here and the value that it brings.

The Shelter Cove community recognizes the fishing industry value as well. A local commercial rock fisherman who has a first receiver's license to sell directly to customers proudly told us how "good fish customers really appreciate me" (F20, 2017) and this speaks to the fact that fishermen really want to be recognized by their community for the service that they provide. In previous years there was only one restaurant that used two local fishermen for their supply of fresh rock cod, and as of 2018 there are now two new restaurants both of which pursue the local fish when available from these fishermen. The Cove community is very supportive of their fishermen, and due to the lack of police presence the people count on support from each other aligning with the independent demeanor of the group. Fishing is part of the identity of the group as is displayed throughout the interviewee's responses.

#### Fish Cleaning Station.

A somewhat unusual example of bonding social capital are the interactions at the fish cleaning station where people exchange information and stay connected to what is

happening out on the water. The Shelter Cove fish cleaning station is the hub of all fishing activity, and as a result a place where the community comes together (Figure 20). In an interview, one fisherman explained that that the fish cleaning station is “a cultural resource and a point of interest for many people always come to see what people are catching. A conversation starter” (F37, 2017). Most commercial and recreational fishermen use the fish cleaning station due to its location and the service that it provides to the community. For the fishermen who don’t use it, they stop by to check in with the other fishermen to see what they have caught and to greet one another. Most community members recognize that fishing- whether it is commercial, recreational or Commercial Passenger Fishing Vessel (CPFV) related- is part of this small coastal community, and it is what makes Shelter Cove unique.



Figure 20. Shelter Cove Fish Cleaning Station (Casali, 2017).

### Bridging

This analysis examines the present state of bridging networks in the fishing community by reviewing the entities who have been Shelter Cove bridges to resources for many years and continue into the present. These bridges go from the community to the local governments, between the local governments, from the fishing community to the broader fishing association of California, and to the fisheries regulatory processes.

#### Humboldt Bay Harbor Recreation and Conservation District.

The historical groundwork that fosters connections between the fishing community and the Humboldt Bay Harbor Recreation and Conservation District

(HBHRC or Harbor District) has paid off for the fishing community since Harbor District “has been good at getting grants for Shelter Cove” for decades (F3, 2017). Some examples of the community receiving resources from outside groups show that some level of a relationship between this government and the fishing community was developed over the past four decades.

The Harbor District has acquired resources from outside the county which has resulted in built capital in the form of critical fishing infrastructure such as: the jetty retrofit (2010) and the Shelter Cove Fish Cleaning Station Remediation (2016). Without the outside funding for these projects, it would have been unlikely that that these projects would have been built. Harbor District also upgraded some facilities at the port such as the jetty in 2010, the launch facility in 2017-2018, and the fish cleaning facility (ongoing) and due to these past investments they are committed to their continuance.

Despite this fact, the relationship is fractured between the community and the Harbor District. Statements from local government staff displayed that the Shelter Cove community is difficult to work with as they can be vocal and disruptive at meetings, as one elected official stated that in Shelter Cove, “there’s no law” (F11, 2017) and suggesting that the community has a “wild west attitude” (F48, 2017). Additionally, many interviewees from Shelter Cove expressed that they did not think that the Harbor District had much to do with the community of Shelter Cove until their recent management of the Marina property boat launch, boat storage, and fish cleaning station through the lease of the property starting in 2016.

However, the public record shows differently by the amount of funding that the Harbor District have brought to the area and invested in these critical infrastructure projects. California Ocean Protection Council (OPC) disbursed \$228,072 on June 29, 2016 for the purpose of removal of the point source discharge from the fish cleaning station into the Area of Special Biological Significance (ASBS). The acquisition of funding sources from outside of the county from Harbor District has helped to form the foundation of infrastructure that exists today.

In late 2016, Harbor District obtained a lease of the Marina property from property owner David Tolfer-Smollett where a lease option to purchase with first right of refusal if it were to go to sale. It was granted in exchange for the management of the boat launching facility that includes the boat launch, boat storage, and the fish cleaning station. Historically, no one has had the option to manage this Marina property since Machi's sale to Tolfer-Smollet (the owner from abroad) who was inspired to contact Harbor District directly instead of publically advertising or circulating a Request for Proposals. The community was not aware of the potential management change until a public meeting at Shelter Cove RID office in December of 2016. The Harbor District management of the Marina property has helped to rebuild trust between the District and the community. The recent management of the Marina property helped to improve an eroded relationship with the community.

The public's acceptance of the Harbor District involvement is underlined at the public meeting held at Shelter Cove by Harbor District on December 11, 2016. The community majority expressed that they welcomed the new management of the Marina

property by the Harbor District. The attendance of nearly 100 interested parties at the first official meeting from Harbor District in Shelter Cove recorded, and the attendees expressed an unofficial majority of approximately 96 to 4 who were in support of the Harbor District entering into a lease agreement with Marina property owner Tolfer-Smollet to run the boat launching facility starting in 2017.

Contemporary comments suggested that Shelter Cove still feels that the Harbor District would rather not be involved in Shelter Cove, and that they are not invested in helping the community. Some interviewee's perceptions of the Harbor District reflect a lack of trust like: "Harbor District made empty promises." (F47, 2017) And when asked what works well in other ports, one response was: "Support from a Harbor District." (F8, 2017). Another respondent felt that: "The Harbor District needs to work on their end of the deal." (F17, 2018). From these responses alone, the relationship between the fishing community of Shelter Cove and the Harbor District appears to have a fracture.

In 2017, the director of the Harbor District who had developed the projects in Shelter Cove retired and a new director took his place. There are signs that this change in leadership could affect the relationship-building that has been happening for two years. The new hire looked at the efforts underway in Shelter Cove projects with a new perspective, and it appeared that the management of the Marina property would not be a priority for the Harbor District for 2019. At public meeting at Shelter Cove in August, 2018 the new director communicated to the community that the Harbor District would no longer be operation the boat launching facility. This could affect the trust building



between the community and the Harbor District, as the community had felt dropped before.

At the start of this research project it was apparent that the community was not engaged with the local government entities as much as they could be. As a result of the FCSP project and this thesis research, many individuals asked me who to contact and how to contact both their representative at Harbor District, as well as staff at Harbor District to voice their concerns. The engagement from the port and the public staff and representatives has emerged as a result. At a monthly meeting of the Humboldt Bay Board of Commissioners (July 27, 2017), the Commissioners casually bantered about the multitude of angry calls they had received from Shelter Cove community and laughed dismissively despite the fact that getting any calls from the community shows a change in the relationship and increase in participation with elected officials. However, the incident also illustrates that trust and respect may not be strong between either of the groups. While some Shelter Cove fishing community individuals have made phone calls to the Harbor District staff and its Commissioners, the Shelter Cove community does not regularly attend monthly meetings to make sure that this agency looks out for the best interests of the port of Shelter Cove. There were a few Harbor District Board of Commissioners meetings where Shelter Cove community members attended as the result of my relentless encouragement when Shelter Cove issues were on the Harbor District agenda. However, it was a very rare occurrence.

#### Resort Improvement District

While RID has indicated that they support the fishing community, the RID board and their previous general managers have not had made substantial efforts to provide support resources for the industry. When the former General Manager (GM) of RID was asked “What is going well in Shelter Cove?” He responded “I don’t know regarding the fishing community or sports fishing” (F2, 2017). This response suggested that the fishing community was not a priority to him or to RID. The infrastructure needs of the fishing community were recognized by the former GM, yet this local government employee underlined the purpose of RID was for water, sewer, and utility services and that the fishing industry was not within that purpose. However, the RID Municipal Review 2009 lists parks and recreation as part of their services (Humboldt Local Agency Formation Commission, 2009). Additionally, their management of the fish cleaning station since it was built and up until recently in 2016 show that they are in fact involved in the fishing industry even if restricted only to recreational fishing, but clearly they are not able to take on any more liabilities.

The two distinct districts Harbor District and RID (which are governed by two separate boards) were often in contention, as opposed to cooperation, with each other over the responsibilities to do with the fish cleaning station at Shelter Cove. It appears that although there was this bridging relationship from local and regional government providing the flow of resources the relationship between the two local and regional government, but these entities did not display a cooperative working relationship to the public that they represent.

The local fishing community does not have much involvement with RID and neither does RID with the fishing community. The explicit statements of RID not having any involvement in the fishing industry keeps RID out of matters to do with the fishing community. The little involvement that RID had was that the check for the maintenance of the fish cleaning station would pass through RID from Harbor District to pay the people who took care of it until Harbor District began management of the Marina property in December 2016. However, on October 6, 2018 I was invited to speak with a group of community members who were interesting in re-forming a fishing association and two RID representatives were in attendance and asked if someone would come onto an ad-hoc committee on the fish cleaning station that included RID, Harbor District, and one private individual. That day was the beginning of a new bridge in the area of fishing community and local government.

#### Inter-governmental Bridges.

Another example of bridging groups together, was how the local coffee shop owner was elected to the RID board of director's seat. He hoped that he could represent the fishing community and relay to the government entities what a diverse cross section of the community is saying about topics that affect the Shelter Cove community. After this experience as a government representative, he also felt comfortable contacting the Humboldt County Board of Supervisor (BOS) representative for their district as needed to address pressing community issues. He felt that he "can call and talk to Estelle Fennell, Humboldt County Supervisor District 2, as a board member for RID" (F45, 2017). While he felt that the fishing community is not good at reaching out, he relayed that "most feel

their opportunity is not going to make a difference” (F45, 2017). This RID board member has become the moderator for the two groups that do not regularly communicate - fishing community and local government - now he acts as a two way conduit for information to flow both directions into and out of the community. This example of bridging social capital can help government representatives to understand their constituents better and by creating a more cohesive regional group of their community who are more readily in touch with their representatives. This helps everyone in the broader community through two way flow of information, as a result both groups are better informed through their civil engagement.

These previous examples display the possibilities of what could happen with different groups working together for the greater good. Unfortunately, some examples show how much work there is still to do, and others show that progress is being made. When a member of the waterfront who had invested time and money into the community describes their interpretation of what their elected government representatives feel about the area as: “We are out of sight out of mind [for the Harbor District]”, “Shelter Cove is a lost and forgotten place”, and “it feels like we were dropped!” (F38, 2017). These comments from interviews show just how despondent the community members are about the extent to which local government entities are committed to helping their community. These perceptions may be related to the fact that both the County and Harbor District offices are based over two hours away in Eureka. Negative perceptions of the Harbor District could also be linked to the lack of information-sharing and outreach by the

Harbor District about how they had provided resources for the lifetime of the government entity to Shelter Cove. It is apparent that there is room for growth in this area.

Through this research process, a potential bridge was formed between local and regional government by learning how the RID Board of Directors holds a seat for a Humboldt County Supervisor. The interview with the previous RID general manager asked me to relay this important piece of information. He referenced that the county representative has “not done enough to help us here” as there has not been any “picking up the ball and running with it” (FCSP 2017). It was pointed out to me in this interview that within the RID Public Resources Code section 13033-13035, RID holds a seat on their board for a county supervisor who represents their district. The potential synergy of a new bridge formed from the BOS district representative and RID could result into a very beneficial relationship between the small rural community of Shelter Cove and the broader region of Humboldt County in the future. The BOS district representative had expressed interest in pursuing this potential bridge when they also learned about it through this research process. This bridge between local and regional government active in both arenas could help the flow of information as well as fulfilling the needs of the fishing community.

#### Regional Engagement.

Many fishermen interviewed did not identify value in attendance of fishery management meetings at the state or federal scale. Shelter Cove fishermen have not been substantially engaged in fishery politics for decades. After increased fishing regulations

on salmon and rock fisheries left many fishermen of Shelter Cove with limited choices within their fishery portfolio, fishermen experienced an overall sense of despondency.

The result of a regional effort of the Association with PCFFA who lobbied for the California fishermen's collective interests as the salmon and rockfish regulations increased was the retention of Shelter Cove historical fishing grounds. One fishermen who was actively involved in the Pre-Marine Life Protection Act meetings recalls how representation of fishermen from the port of Shelter Cove resulted in the retention of salmon fishing grounds as the Marine Protected Areas (MPA) were being formed. Shelter Cove fishermen were politically active and "Actually we fought for our season and the line (40' 05" line) was moved to the north. It was going to be at Point Delgada and straight west. We got about 5 miles of grounds. All the money left in the fishing Association, we gave it to the 'Federation' [PCFFA]" (H30, 2018). The line referred to was the northern boundary line for fishing for salmon, and their fight pushed the proposed marine protected area north of the ocean access point where the boat launch facility was located. This example of bridging shows cooperation and coordination between the Shelter Cove fishing community and entities in the broader region of California where the Association contributed their resources for the greater good and for the interests of the fishermen of the Cove. There had initially been plans to create an MPA in front of the Shelter Cove community which would have been a devastating blow to their fishing industry. The Association in conjunction with the PCFFA lobbyists were able to stop this from occurring. The nearest MPA is about 1.5 hour motor north at Punta Gorda, so their lobbying efforts were effective in being represented by the regional

fishing association. The present lack of potential bridging relationships with the fishing community shows this is an area for development.

One example from the interviews that showed that some fishermen had had a direct experience where regional engagement resulted in positive outcomes for fishermen. Another commercial fishermen (who participates in multiple ports) expressed that he had attended many Pacific Fisheries Management Council (PFMC) meetings in the past, and after writing many letters and speaking at many meetings in the past he said “You go to these meetings and you think your voice is not heard, but I used to think this and recently I have found it to be helpful. I got my Nearshore permit through networking with other fishermen at the meeting, it was very lucky” (F22, 2017). He found personal value in attending fishery management meetings, as well as another permit which expanded his fishery portfolio. While this experience was positive for this fisherman, it may be due to his participation in other ports primarily, since this experience is an outlier in this body of data. However, his experience may be relayed to others in the port which could encourage them to participate in regional fishery management meetings.

Recently, one of the youngest captains was approached by the last Shelter Cove Fishing Association’s president if he would get the new association together since this fisherman who is near retirement saw positive outcomes in his own experience in the fishing association during the MPA formation. Another fishermen and one of the most politically engaged commercial fishermen in the region expressed that he felt like “decisions are made by people in the room, and if you’re not in the room...” anything can happen (H41, 2018). This helped to spur his own enthusiasm for participation and civic

engagement in the fishing policy arena. This commercial fisherman who attended Marine Life Protection Act meetings, and who also witnessed a lot of mistrust pointed out to the other fishermen “If you don’t represent you then someone else will” (H41, 2018). This could be a catalyst and motivation for other fishermen to attend future regional meeting concerning their interests.

#### Academic Collaboration.

The lack of leadership, no formal social network organization, and a reputation of being difficult to work with may have caused the fishing community to be left out of multiple research projects that had been looking into fishing communities. It is not known specifically why these researchers chose not to include this small rural port in a regional analysis of fishing communities, but it could have discouraged researchers from reaching out, a couple of examples of exclusion from current research are: California’s North Coast Fishing Communities by Pomeroy, et al. (2011) and California Fish and Game Commission Marine Resources Committee Staff Report on California Coastal Fishing Communities Meetings Fish and Game Commission (FGC) (2018).

However, since 2015 the Socioeconomics of North Coast Fisheries in the Context of Marine Protected Area Formation by Hackett, et al. (2017), the FCSP project by Lisa Wise Consulting and Humboldt State University (2018), and this thesis has brought the rural fishing port of Shelter Cove into the literature, and revitalized the conversation within their port. Another collaborative study within the MPA Baseline Monitoring on North Coast California a Baseline Characterization of Nearshore Fish Communities Associated with Rocky Reef Habitats by Mulligan et al. (2017) engaged Shelter Cove



CPFV captains and volunteer anglers to scientifically fish within the MPAs to gather data for the baseline study. Over the past four years this kind of collaboration between the fishing community and researchers has encouraged these participants to consider developing even broader forms of engagement with researchers and policy-makers. The reflection on these experiences and the forethought into other potential synergies could add an important dimension to the bridging social capital and to the future of the port of Shelter Cove.

## DISCUSSION

### Fishing Community Perceptions

This case study of Shelter Cove included an analysis of participants' perceptions of the state of social capital in their fishing community how it has changed overtime, why it has changed, and what actions can be taken to further invest in their social capital for the future of their port. A key finding from this study was the perceptions of the state of social relationships in the community, did not always match the reality uncovered in observations, interviews, and the public record.

At times, participant's perceptions were different from what I uncovered through observations and a review of documents from the public record. For example, many of the interviewees from Shelter Cove showed little or no recognition of the resources the Harbor District had brought to the Cove over the past 45 years including funds to develop and maintain key infrastructure for the port. Perceptions that the Harbor District did not do anything for the Shelter Cove community echoed throughout the interviews appearing as a common thread among the fishing community. Negative perceptions of the Harbor District's role in the community could relate to lack of knowledge or curiosity about the work the Harbor District has done. These negative perceptions have created something of a stand-off between the Harbor District and the community. Community members from Shelter Cove are upset because they feel that the Harbor District does not put any effort into supporting their fishing infrastructure. Meanwhile, the Harbor District, with their history of investment and grant management in the area, perceives that the community is

not grateful for the work that they have done, and all the community does is complain. It is apparent from this analysis that there is work to do from both the Harbor District, as well as the fishing industry of Shelter Cove, in order to establish mutual respect, or something close to it.

The interview participants expressed that presently the different groups within the fishing community such as recreational fishermen and commercial fishermen were distinct groups that kept to themselves, yet they were groups that had mutual respect for each other. Some commercial fishermen felt that the recreational fishermen respected them for making it possible for them to be able to fish today. While this is a hopeful state of relations amongst separate groups, it is not necessarily what is displayed through observations of the community. It is often casually shared in conversation by recreational fishermen that they do not get the respect that the commercial fishermen do. An individual's perception is important to consider since it is part of their own reality, and they perceive that the distinct fishing groups to be united in their community even though there were fractures within the groups of fishermen. Despite this, these two separate groups are in a favorable position to go forward from this perception than having to start to from total opposition.

While the non-fishing community's perception is one of acknowledging that fishing is an important part of the community of Shelter Cove, several examples from the public record and the interview data showed a lack of interest or investment in fishing aspects of the community. Despite the fact that the local government RID has publicly supported the fishing community in a resolution, they have not followed this statement up

with actions or policies that support their commercial and recreational fleet. The fact that the previous GM was not aware of anything to do with the recreational fishing situation illustrates the divide between government and fishermen despite the close proximity of 0.6 mile from RID offices to the boat launching facility at Shelter Cove.

On the surface, members of the fishing community described themselves as possessing a strong social network with tight bonds and an investment in social relationships. But further probing in interviews and an assessment of the activities of the fishing community in recent years, showed that social relationships in the community are delicate and civic engagement by the community is low. In recent years there has been a very limited investment by the fishing community into social capital and engagement as of the end of this research period in the winter of 2018. The fishing community feels very connected to each other from the historical connections that were made such as the Mosquito Fleet or the now disbanded fishing association. Unfortunately, both of the organizations have been disbanded for more than twenty-five years, and they are now relics of the port, so it is necessary to begin a new plan to invest in social capital in the community.

Investment in social capital would provide the initial foundation for bonding and bridging networks to grow and for the community to expand their goals beyond those of the individual (Flora, et al. 2015 and Pawar, 2006) and to prepare a landing pad for the receipt of resources (Bodin, et al. 2006). The needs assessment developed by the FCSP (Lisa Wise Consulting and Humboldt State University, 2018) for the port (and the strategic document that is finalized alongside the final draft of the research for this thesis)

have highlighted areas of future investment which state that a fishing association is the top recommendation for the port of Shelter Cove. A fishing organization or association would be a way of building community cohesion to further strengthen the bonding social capital, if the organization could reach out to other groups for their specialized skills, this would add to the glue that can keep the community together and begin the “spiraling up” where “success builds on success” (Emery and Flora, 2006, p.22). This kind of momentum is exactly what this port needs after the long period of spiraling down where all of the community capitals have declined “resulting in a loss of hope and direction” (Emery and Flora, 2006, p.22).

#### Factors That Strengthened Social Capital of the Port

This research showed that the community appeared to possess strong bridging and bonding capital in their not too distant past. Examples of strong social capital included leadership within the community, reliance on others due to their isolation, and long term relationships are very important to building a successful community. As these examples were cited previously, it is more apparent that some things developed the asset more than others. These examples can be learned from and built upon for the future of their port, or they can be applied to another port in need of social capital asset development.

Leadership is important to give an overall sense of direction to a group. It could be strong by including more than one person to ensure future continuity in the guidance of a community towards their shared goals. It could be considered weak leadership when there is only one person in that position where they are irreplaceable, or where they could

yield too much of the power. A balanced leadership enlisting multiple members could assist in the holistic development of human capital where a multitude of skills could be displayed in the leadership (Sorenson and Epps, 1996). Cultivating a leader or a board to carry out the shared future vision of a community could help to build a community with strong social capital that could foster resilience in times of unforeseen change.

Reliance on others due to the geographic isolation and limited facilities available to them fosters a reciprocal need to have peers, neighbors, and family close by. The independent nature of community members living in isolated regions coupled with the need to have someone to help out when a task is insurmountable to do alone is a constant riddle that people who live remotely must solve. Communities are made of a group of people, and a community that cultivates its members to help their neighbors creates the selflessness and the norms of reciprocity (Putnam, 1995; and Flora, Flora, and Gasteyer 2015).

Long term relationships that are formed in a community add to the trust that is built through the neighbors, family, and peer network. These years of relationship building through the shared future vision within a bonded community solidify the relationship ties and trust needed to keep the community strong at their foundation. This idea underlines the bonding social capital necessary to go forward with investments into the community's social capital assets.

#### Factors That Led to the Decline in Social Capital in the Port

The decline in social capital in Shelter Cove was connected to a decline in several other forms of community capital. At the beginning of this research project, the community, and found itself at the end of a long period of “spiraling down” as described by (SOURCE). The spiraling down affected the entire community and many of the CCF assets were divested. Since the capitals are linked, losses in some areas contributed to losses in others, and this downward trajectory also negatively affected social capital in the community. In Shelter Cove, first environmental capital was undermined when several fish stocks across the West Coast nearly collapsed. The resource declines meant the shortening (and in some cases cancelling) of fishing seasons and the development of strict regulations that caused many fishermen to drop out of the industry. This resulted in the loss of jobs and a loss of financial capital because of fewer landings. Human capital declined as some fishermen could no longer make ends meet so they gave up and moved away or left the industry. The decline in the number of fishermen decreased the political capital of the community as there was no longer a critical mass of fishermen to support advocacy efforts. This was paralleled by a decline in built capital, as there was no longer funds and a critical mass to support public investment in the waterfront. This all contributed to the overall despondency of the group, which eroded their social and cultural capitals.

The story of the loss of social capital in Shelter Cove can be used to determine some red flag warnings for those communities who heed the signs. It didn’t happen all at once, but as the result of one unforeseen change followed by another, and then another.

The dissolution of the Association diminished the conduit of information flow from and to other groups related to fishery management. I see that this lack of a unified group of fishermen further eroded the strength of the community both in their bonding network through the lack of belonging that ensued where “the glue that holds societies together” a group which fortifies a community was lost (Dasgupta and Serageldin, 2001, p.196). This case shows that even as a community declines, it is important to try to maintain community groups like fishing associations going – as they are important contributors to both bridging and bonding capital.

The community had faced many losses of their social capital assets over decades. The decline of the industry that fishing community identified with left members feeling isolated and angry. The disbanding of the fishing association was devastating to the bonding and bridging social capital as no one was promoting the reinvestment into their bonded group, nor guiding the fishermen to organize and unify their voices. The death of Mario Machi highlighted that there was an overreliance on the sole leader, a precarious situation, and no one in the community was prepared to step into that role and further magnified the need to focus on rebuilding the social capital assets of the port.

#### Changes in Social Capital Have Affected the Port’s Viability

The fishery participants held onto the independent spirit of the fishermen before them, but they may have left behind the lessons that could have been learned by the examples of the previous leadership such as Machi or of the Association. However, all



was not lost, as these examples are still applicable to use as examples to build up the state of social capital in Shelter Cove fishing community today.

The fishing industry's decline could be equated with the drastic increase of fishing regulations in the 1990s or—"death by a thousand tiny cuts"- (Brook, et al. 2008). While it seems a dramatic reference, it does correspond to a litany of reasons why many fishermen's demeanor reflects one of demise. An undercurrent of doom and gloom was echoed from many fishermen who relayed that there was nothing that could be done, and it seemed like many fishermen had given up on having a voice in the industry. This case study merely repeats a story that has been told many times, but in this case it is one fishing community that has not pivoted into preparing themselves for their future.

Even with these changes in social capital that were observed in Shelter Cove over time, I see multiple rays of light peering through the foggy coastline where fishermen, their community, and their families can create new pathways for themselves and others to follow into a new way of fishing that can work for them and also be sustainable. Some of these potential pathways are outlined at the end of this discussion section.

#### Port Investments to Further Social Capital into the Future and Ensure Viability

Shelter Cove could transform their historical relationships into current collaborative relationships with local government and regional fishing organizations. They could do this by initiating their own and continuing an ongoing investment into their social capital in their community in the form of: the establishment of a fishermen's association; inspiring new community leaders; and encouraging two-way consultation

between the fishing community and fishery managers or local government representatives.

### Bonding

#### Fishing Association.

The formation of a fishing association would be a great place to start their investment of time, money, and energy because this group is already a bonded group they would be strengthening the group further through this formalization process. It would also position them to be able to receive grant funds for pursuits important to their cause. This kind of investment would help the foundation of their social capital base of which they can branch off from to connect with other groups. An example of funding that could help the idea of forming a new fishing association to get off of the ground and cover start-up costs is from the Fisheries Innovation Fund. Their program aligns with some of the needs of the fishing community such as: economic development, rebuilding of fish stocks, fishery conservation and management, sustaining fishermen, and promoting community. Additionally, since the Shelter Cove will have their own FCSP this could reinforce some of these needs through the public assessment.

#### Cultivating New Community Leaders.

Since the loss of Mario Machi there has been no replacement of a community leader, yet the example of how that could look is available in the recent history of the port. Encouragement of highly engaged residents or fishery industry people could assist in the creation of a new association, as well as collaboration with local government or

fishery managers and this may develop some new energy around the topic of fishing in general. An invitation to become a leader is not necessary, but inspiration to the cause of the fishing industry of the port may be enough to get a new personality that may resonate more with the Cove residents and the Cove fishermen of today.

### Bridging

#### Encouragement of Two Way Consultation Between Industry Leaders with Local Government or Fishery Managers.

Consultation between fishing industry and fishery managers or local government could assist in clear information sharing in the port. This could be initiated by any involved parties who could invite the other parties involved to sit down and have a mature conversation where all parties can speak in a respectable forum. Interview accounts revealed that fishing community members did not obtain complete or accurate information about how government entities were involved in the management of their port. The result was more “water cooler” conversations where gossip and negative views were regularly shared and nothing was done to follow up on getting the information accurately. This could easily be remedied by scheduling a meeting with the involved parties with clear objectives decided ahead of time in an agenda, and those items would then be recorded for the public to assimilate appropriately.

#### Non-profit Formation and Engagement in Policy Training.

The fishing community (or the future fishing association) could do some outreach to bolster their existing group, and pursue training to add skills where they need them for

their benefit such as non-profit formation skills or fisheries management leaders. Some participants could get training on non-profit management from Humboldt Area Foundation, an organization that supports non-profits with technical training, consultation, or grants additional engagement of fishing industry support people who can attend meetings and relay information to and from the fishermen while they continue to fish.

Some fishermen could be trained to be the next leaders in fishery management through educational webinars or workshops. The recruitment of upcoming fishermen, or young fishing vessel captains to carry on the industry for the port maybe interested in alternatives to complement their experience in the fishing industry. Interested fishermen could learn about alternative fishing methods by taking some classes online at Fishery Solutions Center of Environmental Defense Fund (EDF, 2018) in these topics: Introduction to Fisheries Management, Territorial Use Rights for Fishing, and Data-Limited Fisheries Management. Another source for education in fisheries is the Monterey Bay Fisheries Trust who is a part of the Marine Resource Education Program West (MREPW, 2018). These brief training modules can build on their experience with fishing and through a three day workshop they can broaden their understanding, increase their involvement in both the science and the management of fisheries.

#### Collaborative Meetings with Other Ports and Associations to Learn From.

The future fishing association could help to establish networks where they can connect with the larger regional fishing association as they had done in the past with

PCFFA. The newly formed fishing association could receive a lot of support via information and service through the PCFFA like information on current issues that affect all of the West Coast fishermen such as: marketing, domoic acid testing, and lost gear retrieval, legislation, and groundfishing collectives. This would open up a conduit for information to flow both ways from the fishermen of Shelter Cove, as well as from the PCFFA. Membership with the regional group would put them in a more informed position in the industry, make them easier to be contacted as a group, and this would inform their decisions more completely. Ultimately, this would be transformative to the entire group of fishermen by expanding their network of the fleet on the west coast, and as a result expanding their opportunities.

Through the interactions with other fishermen from different ports, the fishermen of Shelter Cove could consider tools that they have not pursued previously and learn from what works well in other ports. It is possible that different fishing communities have developed tools to deal with the increase in regulations, or other setbacks and they could introduce Shelter Cove fishermen to unfamiliar alternatives that may be beneficial to them. For example, the port of Monterey has gone through major changes that may parallel those of the Cove. Monterey Bay Fisheries Trust as documented by Lisa Wise Consulting (2013), California Groundfish Collective reported by Kauer, et al. (2016), Morro Bay Community Quota Fund who developed plans to acquire groundfish trawl permits as described by Lisa Wise Consulting (2014), develop markets, provide business support services, cultivate local leadership, build the demand for sustainably caught fish, and lease quota to fishermen from their port. The new organization could be modeled

after these examples to suit the smaller rural port's future goals. This is one idea that Shelter Cove fishing industry could pursue and may be able to expand the hook and line quota for fishermen from the port of Shelter Cove.

The community could actively pursue collaborative fisheries research partnerships similar to the Mulligan et al. (2017) MPA Baseline study. There are many opportunities for fishermen to collaborate with researchers if fishermen have networks that can reach to the researchers with projects. Yochum, et al. (2011) write about how effective collaborative research is for obtaining data in many different types of partnerships with fishermen, nongovernmental organizations, and universities the paper goes much further to outline the methodological framework to do so. These projects show “the ability of collaborative research projects to facilitate communication and trust between scientists and fishermen” (Yochum, et al. 2011). During the RFP process of the MPA Baseline Monitoring for the North Coast, young captains were ready and willing to be trained to tag and release fish in order to provide more fishery data for managers (personal communication, 2015). It has been documented in Ordonez-Gauger, et al. (2017) that there is room for improvement of trust between fishermen and researchers, but “including participation in and of itself may not be enough to make stakeholders satisfied with the process” (Ordonez-Gauger, et al. 2017). Participation in research is only part of building trust with fishermen stakeholders, and Ordonez-Gauger et al. (2017) noted how when trust is lost from another project it becomes an obstacle for researchers in the future. All of the components are there for these types of projects, and both the port needs to be able

to be contacted, as well as researchers need to reach out to the port and their industry in order to partner together.

#### Building Intergovernmental Groups and Task Forces.

The rural fishing community could benefit from the pursuit of more social capital bridges in the form of ties from this fishing community to other groups and networks in other locations, as well as those with others skill sets. Some of these include regional stakeholder groups that collaborate with fishery managers, like the California Ocean Protection Council (OPC) Dungeness Crab Task Force and Dungeness Crab Fishing Gear Working Group, and the PFMC Groundfish Advisory Group. This could help to strengthen bonds within the regional fishing community, as well as advocate for the fisheries that they are active in resulting in a civically engaged network which leads to “social trust that facilitate(s) coordination and cooperation for mutual benefit” (Putnam, 1995). Also, this would develop and encourage more dialogue including their voice into the decisions that need to be made to continue fishing in any capacity at this port.

#### Acquiring Social Capital Assets

Finally, the Shelter Cove FCSP (Lisa Wise Consulting and Humboldt State University, 2018) project that was conducted and finalized in parallel with this thesis produced a tool for the rural port of Shelter Cove to use to their direct advantage. Although they did not pursue this plan completely on their own, their active participation in it has created a communication tool that was distilled from their conversations and their direct engagement in the bottom-up planning process. Items like securing the access point to the ocean, developing a reliable tractor service, or remedying the fish cleaning

station to become legal are only a few recommendations where the community, local leaders, fishing association, or local government can use the plan and follow the steps or use the plan as a reference for funding sources. This strategic document will work best if held by those who helped developed it because they will be most invested in the process and the outcome, and they can speak out with conviction that these recommendations are in fact the things that they believe are needed in their port.

Investment into both bonding and bridging social capital through some of these suggested actions could grow these assets through the growth of their social network. The benefit of seeing what works for other California communities, as well as many other coastal ports in the nation, could help the community consider if these other models are the right fit for them, or if they could modify them to fit their unique situation. The added benefit of having a fresh strategic document to guide leaders to pursue their goals that they relayed through the planning process puts the community in a favorable position to grow these social capital assets and springboard from them into the future.



## CONCLUSIONS

This thesis documents the decline of social capital in the Shelter Cove fishing community. Interviews and participant observation at the beginning of this research period showed a community that was beset with infighting, apathy, and lack of engagement in the political sphere. While the community had been supportive of efforts to develop a strategic plan in the form of an FCSP, when the project was funded, it became very difficult to get fishermen to attend meetings and participate in interviews. While the project team recommended the formation of a fishing organization, they had doubts about whether the community would be able to pull it off.

On October 3, 2018, as I was just beginning to finish this thesis, I was invited by a few fishermen to come down to the Cove for a meeting. I entered the room and there were more than 40 people from the community there. I had never seen so many fishermen in a single place. There were individuals that I may not have seen before and there were some fishermen in attendance who rarely engage. The group that called the meeting had the air of a mission about them. Engaged in a productive conversation about the future of their port, they seemed called into action, and people of the community were on board. It appeared as if something had been unleashed in the community – a desire or need to connect, organize, and make things happen.

Over the course of the next two months, a committed group of fishermen and their families began to meet once a week and do the work to develop a functioning fishing

organization. Some crucial community members saw the need for supplying a launch service for their community, businesses, and fleet by the beginning of the calendar year (in three months) when the Harbor District had decided to end their launch service for the area. This was the catalyst that drove the individuals to form and solidify in order to solve this current problem. Their mission was determined. They formed a board. They met every week as a group, and they scheduled meetings with local officials. They conducted a public meeting. They filed non-profit status with the State of California, and they created a fishing organization called Shelter Cove Fishing Preservation, Inc. It may be due to the shining of light on an area that has not been examined for many years, but this group organizing so quickly in response to the needs of their community is amazing. It shows that the elements of social capital -- including trust, shared values, and norms of reciprocity -- were always present in the community, just waiting to be unleashed. The community showed that self-organization results in a solidified group of peers who are ready to take action on their list of priorities for the greater good of their community.

This progress is not due to one specific action, but it may be due to the culmination of timing, situations, and a newly found awareness that the previous trajectory was not working well for the community. It is an ongoing investment into the assets of this community that will shape how prepared they are for unforeseen changes which only time will tell. As someone who has been watching the community with an analytic eye, it is apparent that a sea change is underway which may have arrived at the right time.



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## APPENDICES

## APPENDIX A

## APPENDIX A: Fishing Association Start-up Proposal

March 31, 2018

California Sea Grant

Resilient Coastal Communities and  
Economies Program Jim Eckman

University of California San Diego

9500 Gilman Dr #0232

La Jolla 92093-0232 USA

Dear Mr. Eckman,

I am submitting this grant request in the amount of \$9,757.75 to help reestablish a Shelter Cove Fishing Association in this small port of northern California. After continued outreach with the community, it is apparent that they want to reestablish a fishing association. This start up assistance of consultant service fees will make it possible for the community to go forward with this plan. Once fully executed, this project will open the door for fishermen and community members to work together to help access resources for their community. It will also help to strengthen their voice as a group to become active in the broader focus of the regional fishing community. This community has been left out of many important management meetings as a result of not having a unified entity, so the establishment of a fishing

association would bring this community into the much needed broader conversation about their fisheries management on the north coast of California.

My direct experience working with this fishing community and other fishing communities in the north coast of California on multiple projects with Humboldt State University and Sponsored Programs Foundation validate my competency to achieve the goals set forth by this project.

Thank you for your consideration,

Laura Casali

904 Grant Ave. Arcata, CA 95521 (707)496-2373 [irs35@humboldt.edu](mailto:irs35@humboldt.edu)

Laura Casali Shelter Cove Fishing Association Project March 31, 2018

### Cover Sheet

<b>Applicant Name (PI) and Contact Information</b>	<b>Laura Casali</b>		
	<b>Address</b>	<b>904 Grant Ave. Arcata, CA 95521</b>	
	<b>Phone</b>	<b>(707) 496-2373</b>	
	<b>Email</b>	<b>irs35@humboldt.edu</b>	
<b>Project Title</b>	<b>Shelter Cove Fishing Association Project</b>		
<b>Organization</b>	<b>Name</b>	<b>Humboldt State University</b>	
	<b>Address</b>	<b>1 Harpst Street Arcata, CA 95521</b>	
	<b>Phone</b>	<b>(707)826-3011</b>	
	<b>Email</b>	<b>irs35@humboldt.edu</b>	
<b>Amount Requested</b>	<b>\$9,757.75</b>	<b>Project Start Date</b>	<b>1/01/19</b>
		<b>Project Duration</b>	<b>12 months</b>

**Abstract**

Masters Candidate in Environment and Natural Resource Science found through research project Fishing Community Sustainability Project funded by NOAA Saltonstall-Kennedy Grant that a fishing association was needed for the fishing community of Shelter Cove, CA. The small rural port of Shelter Cove on the north coast of California is pursuing the reestablishment of their fishing association. Humboldt State University (HSU) has done outreach in the northern ports since 2014, and through those conversations with the fishermen determined that the community could benefit from being involved at the regional level regarding fisheries management, and at the local level regarding accessing resources for their community. The grant request of

\$9,757.75 will be the catalyst to restart their formal social network, and to cover the start-up costs for the establishment of a non-profit entity by employing a lawyer and a bookkeeper to set the frame work for the fishing association's non-profit status. This entity will result in stronger bonds within their community, ease communication with other regional groups and agencies, and aid in lobbying for issues that will directly affect their livelihood. The future board of this fishing association will continue to run the entity independently through membership dues and donations for its future viability. The revival of this organization exemplifies positive economic development that will help to strengthen ties regionally to other organizations that could help develop solutions for the future such as marketing options for their catch.

**Project Description**

Title: Shelter Cove Fishing Association Project of Shelter Cove, CA

**Statement of the Problem and Specific Aims:**

The Shelter Cove Fishing Association Project aims to reestablish an active fishing association. This will develop social capital through the bridging and bonding of fishermen in Shelter Cove by: creating a unified voice, clarifying their shared goals, establishing a non-profit entity, starting a bank account to receive future grants funds, advocating for the fishermen's needs to government, and for the ongoing communication with other regional fishermen's associations to strengthen their network of fishermen. The Shelter Cove fishermen and their local community will directly benefit if they are able to obtain access to resources for their fishing community which will help to create a sustainable future for their industry.

The small rural fishing community of Shelter Cove has found themselves not at the table, but on the menu when topics pivotal to the rules and regulations important to their livelihood are at stake. This in part due to the lack of a social organization to represent their fishing community and advocate for themselves. Historically, the fishermen had a successful association, but it dissolved in the early 1990s due to the extensive regulations put into place that they helped to fight regionally with their funds. The Shelter Cove Fishing Association Project aims to reestablish an active fishing association to develop social capital through bridging of groups, and to have access to resources for their struggling fishing community to propel them through the future.

The fishing community of Shelter Cove can start a fishing association to reestablish a social network for fishermen in their small anchorage that will result in the development of social capital. A group of core commercial and recreational fishermen will be invited to a casual meeting to explore the idea of starting a new fishing association.

The first couple of meetings held will be to establish the basic setup and guidelines for the group to follow for the year. Examples of two other fishing

associations will be available to use as a guide. Inquiries to see who is willing to sit on their board of directors, what the name of the association will be, and what their mission statement will be. Meetings will be scheduled quarterly, a meeting location set, and contact information exchanged.

Professional services will be considered by the potential officers of the association and the board of directors. A lawyer specializing in 501c3 (non-profit) filing will be approached and an estimate of their professional fees will be given in writing to the group. Also, a professional bookkeeper will be contacted and an estimate of their services for one year will also be submitted to the association in writing. Both of these estimates of professional services will be used for grant proposals to cover the costs for the first year of the association.

The group will use all of these materials to write a grant for the first year of professional fees to get their organization started. After the grant is funded, the 501c3 filing can be completed. Next, they can open a bank account, establish a post office box, create an email address and schedule the bookkeeper's services for the first year. The association can go forward with meetings and proceed as a reputable non-profit fishing association entity.

## **Literature Review**

### History

Fishing associations (FAs) have been around for as long as people have been fishing, if not formally, but as fishermen gather to share stories of the experiences that they have had on the water with other fishermen. They exist in many ports as casual social circles who recognize each other as fishermen, have personal relationships with each other, or participate in regional fishery meetings (Maya et al. 2016). Most ports have an established or more formal social network of members who meet regularly, pay

association dues, and work as a group to retain market prices are fair for their catch. They have worked as a group to advocate for retention of their rights to fish their traditional fishing grounds. A FA is an instrument that serves the fishing community as their shared voice.

#### How it has changed

As the needs of fishermen have changed, so have the goals of the typical FA. Not only do they negotiate for the price of their catch to the wholesalers, but they advocate for the regulations to retain a small percentage of the total annual catch in the fishery. Today, the rules of each fishery have changed and keep changing due to the pressure on the common pool resource, changing environmental conditions, and reduced stock assessments. Currently, there are fisheries that are co-managed by scientists, non-profits, and the fishermen which creates more trust between scientists and fishermen, and more accountability of the fishermen of their by-catch.

Co-management of the fishery between these unlikely partners has created a bridge of social network where resources are more easily attained. Kauer et al. describe how California Groundfish Collective shares information to “maximize conservation and economic opportunities and retain local access to fish” that is minimizing risks of catching overfished species through plans designed to avoid catching these species (2015). Scientists are able to gather more data for less cost and time. Fishermen are directly involved in data collection which builds trust in the research and invests them into the process of management.

#### **Broader Implications:**

##### Leadership

Self-governance can result when there is a lack of institutional framework (Ho et al. 2016, Basurto et al. 2013), and when there is a need for

organization to conduct business efficiently. As fishermen in small scale fisheries find that the costs of permits and other tasks are more affordable when shared by a group of fishermen, it is an incentive for individuals to organize together (Basurto et al. 2013)

#### Co-management

There are many outcomes from the establishment of a fishing association for the small rural fishing port that could result in the acquisition of resources for the area. Ho et al. (2016) explore how community leadership can result in successful resource management through the mobilization and influence towards shared goals. This example of co-management spurred by donor funding resulted in a fishermen association governing board that managed a part of a lagoon, and together with many other fishermen's associations managed the entire area.

#### Quota allocation

Fishing Community Sustainability Plans are a mandate of the Magnuson Stevens Act in order to pursue allocation of fishing rights or catch share programs (NMFS, 2007). Community Fishermen Associations (CFAs) were created after catch share programs had failed to deliver the quotas for some regions fisheries. Donkersloot (2016) explains that this iteration of FAs shared goals of retaining a percentage of the quota in a community for perpetuity and having the opportunity to increase that over time by leasing more quota was a benefit that fishermen saw as a viable option. These groups were able to explore additional goals that were apparent after the bust and boom cycles of the industry including the greying of the fleet. California Groundfish Collective (CGC) formerly known as California Risk Pool, was developed in 2010 by a partnership with The Nature Conservancy (TNC) to establish "more responsibility and more control" in the ports involved in the



collective (Kaufman, 2016). Another framework called Regional Fishery Management Organizations primary function is to allocate more fishing opportunities to fishermen in their membership while not exploiting the target fishery stock (Molenaar, 2003)

### **Resources**

The list of resources that can be acquired through the establishment of FAs is long. Not only can quota allocation be a result of resources secured through an FA, but education, economic development, poverty alleviation, local oversight of the resource, as well as ecological conservation (Basurto et al. 2013).

### **Methods**

The establishment of a fishing association (FA) for Shelter Cove will engage its members, and this will help to further strengthen bonding ties within the fishing community. It will result in the bridging of participants to other groups outside of their community, and it will result in resources acquired for this group. The creating of social capital, or the glue that binds a community together, is one of the primary goals of the establishment of the association. This goal will be reached through the strengthening of bonding and bridging through the inception of the fishing association.

After these first steps are completed as described below in the table and the timeline, the fishing association will conduct regular: quarterly meetings, monthly bank deposits, and semi-annual newsletters. Annually they will file taxes with the services provided by their bookkeeper. If this project receives grant funding, it will support the establishment of the non-profit and their first 12 months of bookkeeping services. An estimation of 25-50 members could bring in \$50/per year per member, and in one year the membership dues would bring in \$1,250- 2,500. This membership goal could be easily reached by engaging the commercial fishermen, and the recreational fishermen of the area.

As they grow their membership, they will become self-sufficient through membership dues, donations, and the future acquisition of grant resources to support other goals of the group.

The beginning of this project starts with a casual meeting of fishing community members to determine their interest in starting a fishing association for their community. The first meeting steps involve the initial contact of the community 2 weeks ahead of the meeting date.

Preparation for the first meeting will include: planning of food and venue logistics, printing of example fishing association structures, creating sign-up sheets for member's information and a newsletter mailing list. The first perspective meeting will allow 2 hours for the event and 2 hours for preparation for the meeting.

The second meeting steps involve meeting location logistics, and creating a workshop style dialogue to determine the following for the organization: naming the organization, devising a mission statement, creating a board meeting schedule, and setting the annual membership dues. This meeting would last 3 hours due to the mission statement development.

The third meeting steps will involve the meeting planning logistics, as in the previous meeting steps. Additionally, the professional services will need to be determined and estimates requested from the lawyer and bookkeeper. The lawyer will proceed with preparation of the non-profit filing to receive a federal identification number, and the legal name of the organization.

The final steps will be to open a bank account with the federal identification number and legal name obtained by the non-profit status filing. The membership dues will be deposited monthly after opening the account, and as needed by the treasurer. Twice a year the secretary will write a newsletter to the membership, and to other related associations describing their quarterly

meetings, issues important to the association, and other information sharing related to their fisheries of interest for their region. The end of the first year will include filing of tax forms with the help of the bookkeeping professional services, and this will set the association with a financial basis for their future.

The ongoing quarterly meetings will follow an agenda with matters of interest to the non-profit business matters, and those of interest to the association. As the non-profit becomes a legal entity, it will allow for more time in meetings to be used for outreach with the larger regional association to be informed on issues pertaining to their fisheries of interest.

These steps to establish the basic non-profit business will set the foundation for the fisherman association to strengthen bonds within their fishing community, and for them to create bridges into other fishing groups that will help to acquire needed resources. This social organization will assist them to have ongoing communication between local government, fishery management, and other regional fishermen associations. These steps will be the building blocks for the Shelter Cove fishing community to develop their social capital which will help to fortify them for the future of fishing in their port.

### **Timeline of Shelter Cove Fishing Association Project**

<b>First meeting steps: month 1</b>
1. Determine a meeting location and reserve it
2. Public notice inviting participation
3. Fishermen invited to meeting
4. Provide light refreshments and snacks potluck style
5. Initial perspective meeting
6. Review other examples of FAs & decide on FA non-profit structure
7. Choose governing board members

8. Start an email address for correspondence
<b>Second meeting steps: month 3</b>
1. Determine and reserve a meeting location
2. Organize light refreshments and snacks potluck style
3. Choose a name for the organization
4. Create and write mission statement
5. Create a board meeting schedule
6. Determine annual membership fees
7. Start a post office box for mail
<b>Third meeting steps: month 4</b>
1. Choose lawyer for non-profit paperwork & get an estimate for their services
2. Choose bookkeeper for accounting & get an estimate for their services
3. Hold quarterly meetings
4. Take meeting notes and file for public or private record keeping
5. Reach out to obtain membership and dues
<b>Final and ongoing steps: month 6-12</b>
1. Open a bank account & deposit dues monthly
2. Write a newsletter semi-annually (months 6 and 12)
3. File taxes annually (April)
4. Continue quarterly board meetings (months 12, 15, 18, 21, ...)

### Summary

Fishermen's associations are not a new concept, and there are many ways for fishermen to organize themselves with many different benefits to individuals and the group. Through the organization of a social network some crucial

elements to success are developed such as: leadership, empowerment to co-manage the resource and collaborate, pursue quota allocation for their port, and receive resources to assist in their success. These kind of tools would help the small rural port of Shelter Cove continue on a pathway to a sustainable future through the revitalization of their historical fishing association.

Laura Casali Shelter Cove Fishing Association Project March 31, 2018

## Budget

**PROPOSAL TITLE: SHELTER COVE FISHING ASSOCIATION**

**PROJECT PRINCIPAL INVESTIGATOR: LAURA CASALI**

			FUNDS REQUESTED
<b>A. Salaries</b>	<b>Salary (Rate)</b>	<b>Total Salary (per year)</b>	x
PI	\$25/hour	\$1,200	x
Co-PI(s)	0	0	x
Other personnel	0	0	x
<b>A. TOTAL SALARIES</b>			\$1,200
<b>B. Fringe Benefits (15% of total salary)</b>			\$180
<b>C. Equipment (Only for items that are <i>individually</i> over \$500)</b>			0
<b>D. Travel</b>	Domestic	0	x
	Foreign	0	x
<b>D. TOTAL TRAVEL COSTS</b>			0
<b>E. Participant Support</b>	<i>Total # of Participants</i>	25-50	x
	Stipends		x
	Travel		x
	Subsistence		x
	Other		x
	<b>E. TOTAL PARTICIPANT COSTS</b>		
<b>F. Other Direct Costs</b>	Supplies	\$105	x
	Publication	0	x
	Consultants	\$7,000	x
	Computers	0	x
	Other	0	x
	<b>F. TOTAL OTHER DIRECT COSTS</b>		
<b>G. TOTAL DIRECT COSTS (ADD LINES A TO F)</b>			<b>\$8,485.00</b>
<b>H. INDIRECT COSTS (USE 15% RATE FOR TOTAL ON LINE G)</b>			<b>\$1,272.75</b>
<b>I. TOTAL (DIRECT AND INDIRECT COSTS: G + H)</b>			<b>\$9,757.75</b>
<b>J. AMOUNT REQUESTED</b>			<b>\$9,757.75</b>
<b>K. Other Support (other grants, matching funds or in-kind support)</b>			\$800.00

## Laura Casali Shelter Cove Fishing Association Project March 31, 2018

### Budget Narrative

#### Salaries

Shelter Cove Fishing Association will have salary cost for the principal investigator only. This will cover the meeting preparation of supplemental material and meeting logistics including outreach. The principal investigator will receive an hourly wage of \$25.00 per hour. It will take 12 hours of preparation for the initial meeting at \$25/hour totaling \$300. The subsequent 3 quarterly meetings that will take 12 hours of preparation and organization equaling 36 hours at \$25/hour totaling \$900. The total cost for salary will be \$1,200.

The framework of the fishing association non-profit will have a board of directors and membership of the association, so most tasks will be done by the board of directors free of charge, and the professional services will be contracted to independent consultants.

#### Fringe Benefits

Fringe benefits of 15% associated with the principal investigator's salary cost of \$1,200 will be \$180.

#### Direct Costs

Costs in the form of supplies for the initial/quarterly meetings and fees for consultant contracted services. These direct costs will be supplemental information to share with the board of directors and participants, and for the board of director information packets for the membership for each quarterly meeting. These will be paper copies of relevant information such as current financials to share with the board and the membership. Printed material will be provided for the participants. Copy services will be used \$0.10/page at 300 copies totaling

\$30.00 for the initial meeting. Quarterly meetings will need to have Agendas and financial statements will be provided at each meeting to be available for each of the board of directors, and for some of the participants. The three quarterly meetings will total 25 board packets including: agendas, financial statements, and association business totaling 20 pages at

\$0.10/copy totaling \$50.00 at three quarterly meetings totaling \$75.00. The total for the cost of supplies will be \$105.

Consultant services will be contracted for both a lawyer to prepare the non-profit filing status, and a bookkeeper to prepare the quarterly bookkeeping and annual tax preparation for filing. The estimated cost for lawyer non-profit filing services and fees will be \$5,000. The estimated cost for bookkeeping services for quarterly reports for the board of directors and the year-end filing will be \$2,000. The total direct costs for consultant services will be \$7,000. The total direct costs including supplies and consultant fees will be \$7,105.

#### Indirect Costs

The meeting room space will be the Shelter Cove Community Clubhouse which will be provided by the local government Resort Improvement District at no charge to the fishing association resulting in \$800 of in-kind costs for this project. The indirect cost of 15% on the total other direct costs of \$7,105 will be an additional \$1,272.75.

#### Total grant request

The total grant request for the Shelter Cove Fishing Association Revitalization from California Sea Grant: Resilient Coastal Communities and Economies Program is \$9,757.75.



Laura Casali Shelter Cove Fishing Association Project March 31, 2018

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Laura Casali Shelter Cove Fishing Association Project March 31, 2018

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## **JOB**

Shelter Cove Fishing Association Developer

## **Education**

MS Candidate in Environment and Natural Resources Science, Humboldt State University, Arcata, CA 3.8 G.P.A. Expected graduation December, 2018.

BS Oceanography, Humboldt State University, Arcata, CA G.P.A. 3.0. Graduation May, 2012.

## **Scholarship**

Eureka Rotary Wolford-Hegy Spring 2017

## **Research Experience**

- June 2018 to present. Research Consultant, Strategic Earth Consulting, Los Angeles, CA.
- January 2017 to present. Research Associate, Fishing Community Sustainability Plan, Humboldt State University, Sponsored Programs Foundation Arcata, CA.
- May 2014-November 2016. Research Associate Socioeconomic Human Dimensions Project with Humboldt State University, Sponsored Programs Foundation Arcata, CA.
- May 2013-January 2014. Technical Associate Sanctuary Forest Inc. (Non-profit) Mattole River, Whitethorn, CA.
- December 2012-May 2013. Water Monitoring Volunteer Sanctuary Forest Inc. (Non-profit) on Mattole River, Whitethorn, CA.
- Fall 2011- December 2013 Research Assistant Ocean Acidification Project *R/V Coral Sea* Humboldt State University, Sponsored Programs Foundation. Arcata, CA.

- Summer 2011-April 2012 Fisheries Oceanography Assistant Volunteer Pacific Coast Ocean Observing System with the National Marine Fisheries *R/V Coral Sea* Humboldt State University, Sponsored Programs Foundation, Arcata, CA.
- January 2010 - January 2011. Water Sampling Student Assistant Eel River Particulate Organic Carbon (POC) Project Humboldt State University, Sponsored Programs Foundation. Arcata, CA
- Fall 2009-Fall 2010. Student Assistant Humboldt State University, Sponsored Programs Foundation, Arcata, CA. Pacific Gas & Electric (P G & E) Monitoring Project Eureka, CA.

### **Professional Experience**

- March 2018. Association of Environmental Professionals: Advanced CEQA Workshop. Eureka, CA.
- April 2017. Cal-Neva American Fisheries Conference student presenter: Fishing Community Sustainability Plan. Eureka, CA.
- March 2017. Association of Environmental Professionals: Advanced CEQA Workshop. Eureka, CA.
- November 2014-November 2016. Non-profit board member Sanctuary Forest. Whitethorn, CA.
- November 2015 fundraising training. Wrote and received grant. Organized and participated in a one day workshop by fundraising trainer Melissa Hooven.
- June 2013 Event Planner California Ocean Science Trust (COST)
- July 2010-February 2012. Non-profit board member NorCal Women's Camp. Garberville, CA.

### **Professional Associations**

- American Geophysical Union
- Association of Environmental Professionals
- Cal-Neva American Fisheries Society
- Earth Science Women's Network

## **Internship**

- Humboldt State University Service Learning Partner with Planwest Partners Consulting Arcata, CA. Spring, 2017.

## **Publications**

- Contributing author and field staff. Hackett, Steven C, L. Richmond and C. Chen. 2017. Socioeconomics of North Coast Fisheries in the Context of Marine Protected Area Formation.
- MPA Baseline Program No. R/MPA-36. California Sea Grant / Ocean Science Trust. 313 pp. <https://caseagrant.ucsd.edu/news/north-coast-marine-protected-areas-project-summaries#human-uses>

## APPENDIX B

## APPENDIX B: Additional Historical Semi-structured Questions

**17 April 2018: Proposed Modification of IRB # 15-052****Socioeconomic Research and the Development of Fishing Community Sustainability****Plans for the ports of Eureka and Shelter Cove****ADDITIONAL SEMI-STRUCTURED INTERVIEW QUESTIONS**

Below is a list of follow-up questions to be added to list of semi-structured interview questions submitted with the previous IRB application. Interviews will be semi-structured and the order and flow of the questions can vary based on the responses. Below are some of the broad questions or topics anticipated to be covered in the follow-up interviews.

**Topic: Follow-up About Port Strengths and Weaknesses:**

- (1) Can you provide some follow-up information about some of the strengths and/or weaknesses of the port that you identified in your previous interview with us?
- (2) Why did you identify that as a strength/or weakness?
- (3) Can you explain the history of that factor and why you believe that it came to become a strength or weakness of the port?
- (4) How as that factor changed over time and how has that change affected the greater community?
- (5) How do you see that factor changing into the future? Why?

**Topic: Small Boat (Mosquito) Fleet in Shelter Cove**

1. Anything you remember about the small boat or mosquito fleet? a. Where did fishermen fishing out of the cove live?
  - b. Did the Mosquito Fleet fishermen fish as a group?
  - c. Share information?
  - d. Share gear?
2. How would you describe personal relationships between different members of the Mosquito Fleet – did they get along? Did they spend time together outside of fishing?
3. What helped to keep this group together (cohesive)?
4. Anything you can remember about the HBHRCD's involvement in Shelter Cove (HBHRCD)?
  - a. What was the relationship with HBHRCD like in the past?
5. Anything you can remember about Resort Improvement District (RID) and their involvement in the fishing community?
6. What was RID and HBHRCDs relationship like in the past?

**Topic: Fishing Association of Shelter Cove**

1. Did it have a name?
2. How did it form?
3. How did the meetings go?
4. About how many people were in it?
5. Who were they?
6. Are any of them still around?

7. Why did it stop?
8. What would you say were its successes?
9. Failures?

**Topic: Pre-Marine Life Protection Act meetings**

1. Did you participate in these meetings?
  - a. Why or why not?
  - b. Who did?
  - c. Do you think they did a good job representing your interests?

**Topic: Pacific Coast Federation of Fishermen Association (PCFFA)**

2. How has your organization worked with Shelter Cove in the past? a. What is it like working with Shelter Cove fishermen?
3. How have your interactions with fishermen from Shelter Cove changed over time?
4. To what extent did the Shelter Cove fishermen of the 1990s interact with advocating for regulation changes near their port and in the fisheries that they participated in then?
5. Would your organization consider working with them in the future?