AN ABSTRACT OF THE PROJECT OF

Erin R. Wilson for the degree of Master of Science in Marine Resource Management presented on December 2, 2014

Title: Investigating the Benefits and Challenges of Community Fishing Associations

Abstract approved:

______________________________
Flaxen Conway

The Magnuson Stevens Act (MSA) 2007 added Limited Access Privilege Programs (LAPP) in order to provide assistance to fishing communities and community-based associations in order to receive quota allocation. Community fishing associations (CFAs) are a type of program that falls under the LAPP. The MSA emphasizes several eligibility criteria to qualify for this type of program, including being a defined fishing community and having a historical presence in the various fisheries. Many fishing communities meet these criteria, however they have yet to be federally recognized as an organization that can receive a part of the quota allocation. The purpose of this research is to investigate the benefits and obstacles of CFA implementation, further address the question of how to define a fishing community, and to analyze the overall applicability of these types of programs (to ports, fisheries, etc.).

Ethnography and participant observation were used to obtain a variety of experiences and perceptions from members of CFAs and others who hold various roles in fishing communities and/or work with the fishing community, financial
sectors, and fisheries management agencies. Results indicate the benefits of a CFA include diversifying a portfolio, business training, and sustainability and conservation practices in the various fisheries. Yet they also indicate that CFAs are not applicable to all fisheries, and demonstrate that there are many fears and misunderstandings regarding the applicability. CFAs need a defined community in order to comply with MSA standards, and usually cannot offer enough incentives to make establishing a CFA worthwhile. Lack of funding, confusion in the language of what a CFA is and can offer, accountability, and agency involvement seem to be important factors that can add hesitance to a group of people considering establishing this type of LAPP. More research on, and defined guidelines about CFA creation, implementation, and quota allocation is needed.
Investigating the Benefits and Challenges of Community Fishing Associations

by
Erin R. Wilson

A PROJECT REPORT

submitted to

Oregon State University

in partial fulfillment of
the requirements for the
degree of

Master of Science

Presented December 2, 2014
Commencement June 2015
Master of Science project of Erin Wilson presented on December 2, 2014

APPROVED:

________________________________________________________________________

Major Professor, representing Marine Resource Management

________________________________________________________________________

Dean of the College of Earth, Ocean, and Atmospheric Sciences

I understand that my project will become part of the permanent collection of Oregon State University libraries. My signature below authorizes release of my project to any reader upon request.

________________________________________________________________________

Erin Wilson, Author
ACKNOWLEDGEMENTS

I would like to thank Flaxen Conway for her endless support, motivation, and guidance. Thank you so very much for always being in ‘my corner’ and keeping me on track amidst a time of so many distractions. You truly are an inspiration, and I would not be here without you. You are so very wonderful.

I would like to thank my committee members, Court Smith and Caren Braby, for helping me look at this research through different lenses, and taking the time to assist me with this project.

I would also like to thank the staff at ODFW, specifically Gway Kirchner, for the opportunity to work on the initial stages of this project, and for all your help throughout my research.

Finally, I want to thank all my amazing friends and family for your endless support and love. I especially want to thank my husband Zachary for helping me keep my eye on the prize, entertaining our baby boy so I could be progressive with this research, and for always keeping me grounded and balanced. You are my tower of strength.

Love.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Chapter 1: Introduction</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overview of Project</td>
<td>1</td>
</tr>
<tr>
<td>How I got involved and Project Timeline</td>
<td>1</td>
</tr>
<tr>
<td>Structure of this Document</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter 2: Background and Rationale</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is a CFA and Drivers for Formation</td>
<td>8</td>
</tr>
<tr>
<td>Fisheries Management and CFAs</td>
<td>9</td>
</tr>
<tr>
<td>Problems with IFQs</td>
<td>12</td>
</tr>
<tr>
<td>Communities and Quota</td>
<td>14</td>
</tr>
<tr>
<td>Defining a Fishing Community</td>
<td>15</td>
</tr>
<tr>
<td>Confusion with the Language</td>
<td>18</td>
</tr>
<tr>
<td>Social Capital and Reasons to Group</td>
<td>20</td>
</tr>
<tr>
<td>Funding CFAs</td>
<td>21</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter 3: Methods</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Collection and Analysis</td>
<td>23</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter 4: Results and Discussion</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Themes</td>
<td>26</td>
</tr>
</tbody>
</table>

<p>| Theme 1 - Community, and How to Define a Fishing Community | 26   |
| Theme 2 – Quota Allocation | 29   |
| Theme 3 – Economic Challenges in the Commercial Fishing Industry | 35   |
| Theme 4 – Motivations to Join Associations | 38   |</p>
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theme 5 – Financial Support</td>
<td>41</td>
</tr>
<tr>
<td>Theme 6 – General Fears and Misunderstandings Regarding CFAs</td>
<td>44</td>
</tr>
<tr>
<td>Drivers for CFAs</td>
<td>51</td>
</tr>
<tr>
<td>Chapter 5: Conclusion</td>
<td>56</td>
</tr>
<tr>
<td>Lessons Learned</td>
<td>57</td>
</tr>
<tr>
<td>How Do CFAs Move Forward?</td>
<td>58</td>
</tr>
<tr>
<td>Recommendations for Future Studies</td>
<td>61</td>
</tr>
<tr>
<td>References Cited</td>
<td>63</td>
</tr>
<tr>
<td>Appendices</td>
<td></td>
</tr>
<tr>
<td>Appendix A Community Fishing Associations:</td>
<td></td>
</tr>
<tr>
<td>A review of current and state guidelines, existing programs in the</td>
<td></td>
</tr>
<tr>
<td>nation, and initial perspectives from the Oregon fishing industry</td>
<td>67</td>
</tr>
<tr>
<td>Appendix B Eligibility Requirements for Fishing Communities (FC) and</td>
<td></td>
</tr>
<tr>
<td>Regional Fishing Associations (RFAs), MSA § 303A</td>
<td>93</td>
</tr>
<tr>
<td>Appendix C Interview guide for the various audience groups regarding</td>
<td></td>
</tr>
<tr>
<td>CFAs</td>
<td>95</td>
</tr>
</tbody>
</table>
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Diagram of How CFAs Fit into Fisheries Management</td>
<td>12</td>
</tr>
<tr>
<td>2. Overall Response on Agency Involvement from the Interviews</td>
<td>49</td>
</tr>
<tr>
<td>Table</td>
<td>Page</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>1. Various Definitions of a Fishing Community</td>
<td>7</td>
</tr>
<tr>
<td>2. Proposed Definitions of a CFA from Communities Interviewed</td>
<td>45</td>
</tr>
</tbody>
</table>

LIST OF TABLES
Chapter 1
Introduction

OVERVIEW OF PROJECT

The commercial fishing industry has experienced many changes over the last 20 years, and for the fishermen, many of these changes have had a significant negative impact. Overfishing and resource depletion have led to stricter fishery regulations and higher costs to participate in the fisheries. Too many fishermen dependent on these limited resources for revenue has resulted in economic instability and increased competition for resources with larger ports. In smaller ports, the effects of these changes are even more significant.

Quota allocation and methods for distribution have led to disagreement between some fishery managers, commercial fishermen and between fishing communities. Fishermen need to be able to harvest enough fish to provide a substantial income, while fishery managers need to ensure that stocks are kept at healthy levels. Due to the decline in fishery resources, fishery managers have experimented with ways to promote privatization of fishing rights, or rationalization programs, that limit quota allocation and access in order to maintain ecological sustainability and reduce economic inefficiencies (Olson 2011). Catch share programs are examples of how fishery managers limit that access, allocating specific portions of quota is to individuals, cooperatives, communities, or other entities. ¹These programs have been met with conflicting points of view. Catch share programs have

been attributed with increased economic efficiency and healthier fish stocks, as well as arguments of unfair quota distribution and allocation.

Due to the challenges that the industry faces, some in the fishing community are turning their interest towards community-based management, and other types of ‘community-first’ organizations to ameliorate the stresses of the commercial fishing industry. One example of community collaboration in commercial fishing is seafood or fishing cooperatives. Cooperatives are formed when a group of quota owners, or owners of vessels, arrive at a contractual agreement to share resources, rules, and enforcement mechanisms (Alessi et al. 2014). The Pacific Whiting Conservation Cooperative (PWCC) is an example of a cooperative that formed from four catcher/processor companies in order to maximize their investment in the Pacific whiting industry and to confront the issue of bycatch (Sylvia et al. 2014).

Commercial fishermen also partner with scientists in cooperative fisheries research (CFR). This type of program enables commercial fishermen the opportunity to earn income by collaborating with scientists, non-governmental organizations, universities and state resource agencies on various research projects (Conway and Pomeroy 2011).

One of the more recent community collaboration strategies includes finding ways for the fishing community itself to hold quota. Community Fishing Associations (CFAs) have formed, in part, to address this strategy in some geographic locations. There is a challenge with the use of “CFA” in defining the term “community” in a CFA. In addition, its government oversight is unclear. For example, according to a definition proposed by the fishing industry, a CFA is a community-based organization
that is allowed to hold fishing permits and quota on behalf of a defined community (Randall and Grader 2009). Another definition states that a CFA may be a voluntary association, a partnership, or a non-profit entity established under the federal laws to hold limited access privileges and distribute said privileges to licensed fishermen within the geographic community that the CFA represents (Ecotrust 2005). CFAs could be based on a geographical context, a community of interest or community of place, or all of the above. CFAs appear to fall under the National Oceanic and Atmospheric Administration (NOAA) catch share policy, a policy that allocates a specific portion of the total allowable catch to individuals, communities, cooperatives or other eligible entities. Neither of these definitions have the clarity or legal enforceability to constrain what CFAs can or cannot be (or do), but they both provide insight into what CFAs might be as they are implemented across the country.

Without a restrictive and legally meaningful definition, CFAs can serve a number of purposes for a number of different communities, depending on the goals and interests of the participants. For example, a CFA may be structured around an individual port and composed of fishermen, processors and representatives of associated businesses within that port (Randall and Grader 2009). According to one definition, the overall goal of a CFA is to enhance the economic benefits within the local community, while also achieving sustainable harvest levels. Other possible goals of a CFA include, but are not limited to, privileges for local access and fishermen, leasing programs for quota and or permits, and potentially anchor access to fish in that community.
Since 2010, CFAs have been receiving interest from communities across the nation. Many groups call themselves CFAs, however none are formally recognized under the Magnuson Stevens Fishery Conservation Act (MSA), which is the primary federal law that regulates marine fisheries in the US. The challenges facing some of the current CFAs are largely due to funding, the lack of guidelines, or limited knowledge of potential benefits--or even more likely the uncertainty of the overall purpose of a CFA among the various fishing communities and supporting agencies. This confusion surrounding CFAs and the lack of established guidelines has created several questions. My research question investigates the benefits and challenges of CFAs? Is there less risk and more privileges when fishermen collaborate together, or is it the opposite? What are the motivations for fishermen to participate in CFAs?

Under these questions, I investigated four broad areas of interest:

1. Definition of a fishing community.
2. Definition and goals of CFAs. The applicability of the concept for the commercial fishing industry and coastal communities, and how CFAs might sustain economies and resources.
3. The relationship between CFAs and quota, and potential guidelines from state and federal agencies.
4. Financial support for CFAs.

I conducted a review of current federal and state guidelines. I conducted ethnographic (semi-structured) interviews (Auerbach and Silverstein 2003) with fishermen, financial lenders, and fisheries managers to gain insights into all four of areas of
interest. The objective of this research was to eliminate some of the confusion surrounding CFAs, and to capture the various perceptions on these issues. This research potentially provides guidance to interested fishing communities, fishery management, academics, and financial supporters on establishing a CFA that complies with the federal guidelines.

**HOW I GOT INVOLVED AND PROJECT TIMELINE**

The Oregon Department of Fish and Wildlife (ODFW) received interest from some members of the Oregon commercial fishing community in developing a concept for CFAs in Oregon. There was relatively little published in the literature and in management guidelines about CFAs. Therefore, ODFW wanted to investigate CFAs and to understand if they could be successful in Oregon. More importantly, they were interested in an investigation of any federal or state policies and guidelines that might inform their rule making related to this topic. In 2012, ODFW approached the Marine Resource Management Program at Oregon State University for information and assistance in investigating this issue further.

In the Summer of 2012, I conducted a literature review on state and federal legislation related to CFAs. Soon afterwards, I began conducting research to investigate CFAs across the nation in order to understand more about the successes and the challenges associated with these types of programs. At the same time, I introduced this study and gathered observational data regarding initial impressions and perspectives from five fishing community organizations along the Oregon Coast via brief and interactive presentation at their regular meetings.
At ODFW’s request on December 7, 2012, we delivered a report of the initial findings (Appendix A). The initial findings suggested that the topic of CFAs is very confusing and misunderstood among several of Oregon’s fishing communities, and revealed that there was much to learn about the overall applicability and implementation process for establishing CFAs in Oregon.

The initial findings spurred a more in-depth investigation to identify the benefits and costs of these types of programs, and to understand more about the successes and challenges for CFA implementation thus far. Discrepancies in the language of these programs, quota allocation, motivations and benefits, financial possibilities, and confusion in the definition and what constitutes a “fishing community” all validated the need for more research to understand and provide clarity on the realities of these community-structured programs. From Fall of 2013 to Summer of 2014, I gathered data via ethnographic interviews. This research provides good preliminary information on this emerging form of community-based management. This research also highlights conceptual gaps between the fishing community and the fishery management agencies and, hopefully, provides information that could update and assist communities and state and federal agencies with CFA implementation.

**STRUCTURE OF THIS DOCUMENT**

This paper provides a review of the past and most recent programs in fisheries management that relate to CFAs. The first chapter provides background, including formal definitions of fishing community, the concept of social capital and reasons why people in occupations decide to group, and how community associations receive
funding. The next chapter explains the methods used to obtain and analyze my data, as well as some of the limitations of this study. The final chapters share results from the study and discuss the predominant themes of my findings, including the benefits and challenges associated with CFA implementation and recommendations for future studies.
Chapter 2
Background and Rationale

WHAT IS A COMMUNITY FISHING ASSOCIATION (CFA) AND DRIVERS FOR FORMATION?

When this research began, there was no clear, formal definition on what constitutes a CFA, and several questions or challenges associated with considering this type of community association. Why would a community or group join or start a CFA (the drivers for CFA formation)? This is important because fishermen are known to be extremely independent and this independence is one of the biggest draws for fishermen to join this industry (St. Martin 2001). So how does that culture of independence relate to the motivation to join together for a CFA?

According to fishermen, commercial fishing is a very tough business to make a living in. Fishermen always face the challenges of where to fish, when to fish and what to fish for. They also struggle with how they will afford to be present in this industry. Many fishing communities in Oregon, like others (Carouthers et al. 2010), are finding that they are losing their fleet through aging and attrition, and fewer new entrants are fishing due to high costs of vessels, licenses, permits and even fuel (Olson 2011, Clay and Olson 2008). The cost of quota, and the way it is allocated adds additional challenges for this industry (Guyader and Thébaud, 2001). Finding ways to reduce these costs, and share the burden of successfully sustaining a fishing business, could offer solutions for commercial fishermen to remain economically viable.
Several fishing communities are trying to find ways to preserve their fishing heritage, and re-establish the economic viability and coastal infrastructure (Wiber et al. 2003). One of these ways is to create a CFA, and the CFA concept is currently being developed by some regional fishery management councils as a potential mechanism to support fishing communities (Ecotrust 2011). In order to better understand CFAs, it is important to understand the umbrella concept of Limited Access Privilege Programs (LAPP).

**FISHERIES MANAGEMENT AND CFAS**

Until the end of the 20th century, most US fisheries were managed under a system that allowed free or open access (Anderson et al. 2008). Aside from having a license and suitable fishing gear, there were few limits. In profitable fisheries, this led to ever-increasing numbers of participants and put more pressure on the fishery. Seeing the problems with the open access, fisheries managers tried to regulate the fishing activities by methods such as input and output controls. Examples of these types of management tools include limiting available fishing areas, setting seasonal access, setting total allowable catches (TACs), gear restrictions, and trip limits on landings. Ultimately, these management measures created incentives for fishermen to develop alternate methods and types of gear to increase their individual catch (i.e. make them more effective than other fishermen). This, in turn, caused fishery management to implement stricter regulations to keep harvest and fishery resources at sustainable levels. This has also been referred to as ‘the race to fish’ (Anderson et al. 2008, Hilborn et al. 2005). Fishers race against each other to get their share before limits are reached, or the season is closed (Griffith 2008).
Management began to control TAC or effort by limiting the number of participants through limited access privilege programs (LAPPs). LAPPs are defined in the amended Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006 (MSA), and are managed as a subset of NOAA’s catch share policy. Catch share is “a generic term used to describe fishery management programs that allocate a specific percentage of the total allowable fishery catch or a specific fishing area to individuals, cooperatives, communities, or other entities” (http://www.nmfs.noaa.gov/sfa/management/catch_shares/about/documents/noaa_cs_policy.pdf). Catch shares have been described as an effective tool depending on the actual number of permits relative to safe harvest limits and other types of management controls (Anderson et al. 2008). The amended MSA specifies three types of LAPPs: individual fishing quotas (IFQs), community quotas, and quota held by regional fishery associations (RFAs).

The initial LAPP tool used by managers was IFQs. IFQs grant the privilege to individual fishermen to catch a specified portion of the TAC. The idea with IFQs is to remove the motivation for fishermen to fish harder and faster than other fishery participants in order to achieve a greater portion of the landed fish. IFQs give them the assurance of a specified share of the TAC. Fishermen were able to work for their share of the catch, and no longer had to worry about things like optimal weather or prime business conditions (Griffith 2008). IFQs were created to restore efficiency in fisheries by ensuring a fixed share to harvesters (Guyader and Thébaud 2001).

In 2007, the concepts of fishing community (FC) and RFAs were added to the
MSA to provide further assistance to fishing communities and community-based organizations to acquire and uphold limited access privileges in LAPP fisheries (Stoll and Holliday 2014). The main difference between a FC and a RFA is when allocation can occur. FC entities are eligible to receive privileges during the initial allocation process, whereas RFAs are not eligible to receive an initial allocation, but may acquire such privileges by member contribution or by way of transfer from a limited access privilege possessor (MSA Section 303(c) (3) and (4). Overall, the eligibility criteria and participation parameters defined in the MSA are similar for both types of entities (Stoll and Holliday 2014).

Limited access privileges can be given to a broad range of entities as long as they meet the eligibility requirements. These entities could include partnerships, corporations, co-operatives, and fishermen's organizations. CFAs are consistent with the LAPP provision in the MSA (Anderson et al. 2008), although the language does not specifically use that terminology.
PROBLEMS WITH IFQs

It is important to understand some of the challenges with this type of management and how they may be connected to the interest in and formation of CFAs. Fishery managers began to explore programs that promoted privatization or rationalization of fishing rights as a result of unsustainable fishing practices, including both over-exploitation of resources and economic inefficiencies created by overinvestment (Olson 2011). Catch share programs were designed to eliminate overfishing and create more sustainability to our marine resources and the economies that depend on them.2 However, these plans to limit entry and allocate catch rights to a restricted number of participants have been met with strong opposition (Guyader and Thébaud 2001).

---

2 http://www.nmfs.noaa.gov/sfa/domes_fish/catsshare/docs/noaa_cs_policy.pdf
One critique of these types of programs (i.e. IFQs, ITQs, limited entry) is that of imbalanced distribution of fishing rights and adverse impacts from distribution. These programs are said to take a public resource and transfer it into private ownership by allocating a percentage of the quota of the total amount of fish that can be caught in a year and allowing these quota to be leased, bought and sold. This allocation of quota allows recipients to harvest anywhere within the management area (St. Martin 2001). In many cases, privatization efforts effectively decreased the number of vessels participating in a fishery (consolidation), and increased economic efficiency and stewardship. Many of these changes, however are not always distributed equally, and gains have been accrued primarily to permit-holders and boat owners already in the fishery (Olson 2011). These problems of distribution are evident in the surf clam and the ocean quahog fisheries. The surf clam and the ocean quahog fisheries were the first federally regulated fisheries to adopt ITQs in the US (Schreiber 2001). The allocation was said to favor large vessels with lots of capital, causing independent boat owners to lay off their crew and lease their quota shares in order to stay current in their boat mortgages (Moore 1992).

Other fisheries have reported problems with distribution impacts as well. Carothers et al. (2010) highlighted some of the problems with IFQs, stating the result was a disproportionate loss of fishing rights in many of the small, remote communities in Alaska. Although the original motivating factor to keep fishing rights in Alaska was successful, the analysis showed an unanticipated migration trend of permits away from Native villages. This was in part because in order to reduce the number of participants in the fishery, individuals or “exiters,” as they have been
called, were offered a payout funded by remaining participants in the fishery to exit out, which appealed to many of the Native fishers. This is in juxtaposition to the alternative of chaotic fishing seasons or government buyback programs (Carothers et al. 2010). The end result was that trying to get too many people out of the fishery created another problem of quota loss from small or indigenous communities.

Other authors suggested that the persons who will benefit from ITQs are not the local communities, but rather corporations or boat owners who will consolidate ownership of quotas and transform the industry (St. Martin 2001; Guyader and Thébaud 2001). Olson (2011) looked at several case studies regarding the impacts of privatization in various regions around the world. While not all of the impacts were negative, many of the case studies showed favoring trends in large-scale operations, impacts to community sustainability, and higher leasing costs.

COMMUNITIES AND QUOTA

Individuals or groups can own quota according to the rules developed by the MSA. Access has been based on buying an individual license, buying into a cooperative, or being a legal resident of a community (Clay and Olsen 2008). CFAs represent an alternative to individual quota allocation. A CFA is structured around a defined community; and if that community is able to meet eligibility requirements described in the MSA (Appendix B), the community can be entitled to quota allocation.

Many communities feel that they are entitled to quota allocation because of
the fact that they are historically a fishing community, and can meet all the eligibility requirements of the MSA. Quota belonging to a community may be allocated in perpetuity. This raises the question of how to handle the fact that fish are a moving resource and may not be accessible to that community in perpetuity (Clay and Olsen 2008). Questions arise in who would have (or be denied) the right to participate in the harvesting of this resource.

All of these allocation complexities result in livelihood issues for various fishing communities. For example, inshore fishermen rarely argue for an increased allocation because it will maximize wealth generation but because it would allow them and their entire community to survive economically (Wiber et al. 2004).

**DEFINING A FISHING COMMUNITY**

There is a lack of clarity and a broad definition of a fishing community. This implores the question of how one defines a fishing community, and whether it is the *legal* definition.

The MSA contains a mandate (National Standard 8) that states “fishery conservation must take into account the importance of fishery resources to fishing communities in order to A) provide for the sustained participation of such communities, and B) to the extent practicable, minimize adverse economic impacts on such communities” (16 U.S.C. §1851(2)(8)). The literature suggests that an alternative to the privatization of fisheries is represented in community-based approaches (St. Martin 2006). One of the main purposes of establishing community
associations according to MSA guidelines is to receive quota on behalf of a defined community. However, no communities have yet to receive this type of allocation in part because of the difficulty in operationalizing the definition of a fishing community. That means, functionally, that community quota holding is constrained by the limits (e.g. quota caps) that are in place for individuals. This brings up the issue of offering exclusivity to a public resource.

Fish are considered a public trust resource until landed. Therefore, offering incentives for group collaboration can cause conflict within the commercial fishing industry due to the fact that fish is considered public property. In other words, the incentives that can be offered at a management level for group or community collaboration are weak and not much different than what an individual is entitled to.

Problems with defining a fishing community, aside from trying to write spatially based legislation around a moving natural resource, is the lack of distinct boundaries (i.e. there is a land component and a sea component). This makes defining a fishing community particularly challenging because you cannot fence the ocean and many fishermen are often very mobile. There is also variance in the descriptions of many of the proposed definitions as listed in Table 1.
### Table 1. Various Definitions of a Fishing Community

<table>
<thead>
<tr>
<th>DEFINITION</th>
<th>SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>“The fishing community is a community of interest that spans over several communities of place. A fishing community may consist of many communities based on gear type, fishery, geography, and values.”</td>
<td>Pacific Fishery Management Council 2009</td>
</tr>
<tr>
<td>“a community which is substantially dependent on or substantially engaged in the harvest or processing of fishery resources to meet social and economic needs, and includes fishing vessel owners, operators, and crew and United States fish processors that are based in such community.”</td>
<td>The Magnuson-Stevens Fisheries and Conservation Management Act</td>
</tr>
<tr>
<td>“A fishing community is a social or economic group whose members reside in a specific location</td>
<td>National Marine Fisheries Service (NMFS)</td>
</tr>
</tbody>
</table>

Ultimately, fishing communities must be characterized before they can be assessed, or otherwise incorporated into science and management (St. Martin 2006). There are strong cultural elements present, and various social and economic parameters that are dependent on these communities. A fishing community can be a community of place (i.e. geographically defined) or a community of interest (Conway et al. 2002). Schreiber (2001) proposes that using a geographical definition of community, although problematic politically, can potentially benefit fisheries management in two ways. First, by restoring access to and benefits from a fishery; second, by excluding outside participation, thus limiting access. Other research on fishing communities suggests that only fisheries management that takes into
consideration ‘places of people’ will achieve long-term sustainability of the resource and its dependent communities (Pauly 1999). The MSA defines a ‘fishing community’ as “dependent on or substantially engaged in the harvest or processing of fishery resources to meet social and economic needs,” but the question then arises of how do you measure dependency? Hall-Arber et al. (2001) suggest that measuring fishing community dependence is a complex process that should take into account several parameters, including fishing history, infrastructure, specialization, social institutions, gentrification trends, and economic traits. Clay and Olson 2007 state that the definition of a fishing community should also include the complex ecological and social relationships that are created within such a community.

In many definitions, fishing communities are composed of a variety of fishing vessels, gear types, and a dependence upon a mix of marine resources and fishing practices over time (St. Martin 2006). In addition to the fishermen, a fishing community also includes the families of fishermen, the processors, the stores that sell bait and supplies, the fuel docks, and the other associated infrastructure that is dependent upon fishing for their economic viability. Research in New England suggests that fishermen themselves define fishing communities by the number of boats, infrastructure present and fishermen or businesses that support fishing (Olson and Clay 2007). The MSA Section 303 (b)(6), which addresses limited entry, requires examination of historical and current involvement in fishing, as well as social and cultural factors in order to be considered a defined community (Clay and Olsen 2008). Fishing communities can also overlap with other communities, having one supported by another (Stoll and Holliday 2014).
Community and community processes are emerging in fisheries management regardless of the problems described above in defining the term fishing community. In order to truly define a fishing community, the social, political and economic relationships must also be examined. In addition to the ecological characteristics, information sharing and the social interaction that occurs both on land and at sea shape fishing practices, which is critical in thinking about fishing communities (Clay and Olson, 2008). Due to the broadness of this topic, and the complexity involved when defining a fishing community, coordination from federal and state agencies is needed.

CONFUSION WITH THE LANGUAGE

Although a CFA falls under the LAPP provision, the term CFA is not listed in the MSA. CFA is a term that the Pacific Fishery Management Council adopted for use in the Pacific Coast Groundfish Limited Entry Trawl Fishery (Stoll and Holliday 2014; PFMC 2010). The MSA describes the rights of a FC or a RFA, with the difference being in the way quota is allocated. The similarities of these types of programs add confusion to the topic, and contribute to the lack of success for implementation. Fishing communities, regional fishing associations, and community fishing associations are all essentially trying to gain quota allocation on behalf of a defined community, however the terminology poses a dilemma to governing councils and fishing community members (Stoll and Holliday 2014).
SOCIAL CAPITAL AND REASONS TO GROUP

Social organizations and relationships are evident in many fishing communities across the nation. Examples include Oregon’s Port Orford Ocean Resource Team (POORT), San Diego Fishermen’s Working Group, and Maine Coast Fisherman’s Association. These independent organizations, as well as several others, are also members in the Community Fisheries Network (CFN), which is a non-profit group of community-based organizations that share the common goal of long-term sustainability of commercial fishing communities. 3

In regards to CFAs, there are many questions on why fishermen would group. The literature indicates that social relationships or groups add value to fishing communities and can significantly affect the use of fishing resources. Commercial fishing is a very independent profession, however many fishermen form associations for 1) information sharing, 2) to reduce costs associated with the industry, and 3) to reduce collective action dilemmas (Isham 2000). Isham (2000) explains that regular and frequent interactions in social settings lead to the development of institutions that can act as constraints, thus lowering the incentives of individual agents to “free ride”. These components, and the social capital that is established from developing relationships, can facilitate the co-operation between individuals and groups, and highlight how they can be beneficial. Schiff (1992) defines social capital as “the set of elements of the social structure that affect relations among people and are inputs or arguments of the production and/or utility function.”

3 http://www.communityfisheriesnetwork.org/index.html
These reasons of grouping also suggest that social capital is valuable. This is because it enables fishermen to harvest a given catch with lower costs while increasing the likelihood the resource will be sustained in the future (Graftin 2005). A paper by Madeline Hall-Arber et al. (2001) suggests that different forms of capital such as social capital, may maintain production units such as fishing crew and households, and allow for recruitment of new community members into the various fisheries.

**FUNDING CFAS**

Finding financial backing could also be beneficial in a group setting in that it may allow members to share the tasks of grant writing, writing business plans, and understanding compliance of regulations. Yet financial backing and funding a CFA is another complicated issue. Non-profit agencies, such as Ecotrust (2011), have recommended that federal and state financing programs formulate a funding initiative for CFAs that include both public and private finance mechanisms.

An example of a potential funder includes the U.S. Economic Development Administration (EDA). The EDA solicits applications for the economic development assistance programs, which are “designed to leverage existing regional assets and support the implementation of economic development strategies that advance new ideas and creative approaches to advance economic prosperity in distressed communities.”

---

4 [http://www.eda.gov/funding-opportunities/index.htm](http://www.eda.gov/funding-opportunities/index.htm)
financial backing for community programs such as CFAs, however these opportunities are not specifically directed at fisheries. Another possible funding prospect could be the Fisheries Innovation Fund (FIF). The National Fish and Wildlife Foundation (NFWF) launched a grant program in 2010 to support fishermen and their communities while also rebuilding fish stocks. To date, the FIF has awarded $5.5 million to various projects across the nation. The purposes of this fund include (a) establishing or advancing regional or community fishing associations and community supported fisheries, (b) designing and creating harvest and quota systems that support small-scale fishermen, (c) providing business training and technical assistance to fishermen; and instill new monitoring tools that reduce bycatch.⁵

Other funding mechanisms involve more local support and private investors. All CFAs are not set up the same, and different associations can offer different incentives and financial support to their community members. Although there are a number of grants and federally funded programs that could provide aid to CFAs, the group or association would still have to have the wherewithal to apply for these types of opportunities. This creates two over-arching questions. First, is it beneficial for fishermen to approach lending agencies in groups? Second, can they qualify for loans or receive capital for quota as an established organization? This topic was researched in greater detail in my project.

⁵ http://www.nfwf.org/fisheriesfund
Chapter 3
Methods

DATA COLLECTION AND ANALYSIS

This research combined several different qualitative research methods to gather data applicable to CFAs. A literature review of the federal and state legal statues was conducted to develop legal context. An ethnographic approach - combining observation and semi-structured interviews (Auerbach and Silverstein 2003) was used to gather new data.

Observations were gathered at five meetings held in Oregon coastal communities by various groups involved in commercial fishing. I contacted the five groups and requested to be added to their meeting agenda. At these meetings, I delivered a brief overview of the project, described the motivations and goals of my research and outlined a general timeline of project deliverables. Brief presentations about the project, followed by the solicitation of feedback and perspectives, were intended to provide outreach to the various coastal communities about the research, while in return, providing valuable feedback on the understanding, and lack thereof, about CFAs.

Semi-structured interviews provide guidance regarding topics to be covered (see interview protocol in Appendix C), and allowed for flexibility for the participants to answer any unplanned questions (Auerbach and Silverstein 2003; Berg 2008). For this study, a total of 13 interviews were conducted in person or over the phone. Interviews were conducted with members of intended populations to obtain the perspectives of the fishing community, people who work with the fishing community,
the financial or lending community, state and federal fisheries managers or policy
makers, and, people who work for non-profits or academics who are currently
connected with CFAs, permit banks or fisheries trust organizations.

It should be noted that several interviewees belonged to more than one
category (e.g. they worked for an agency or non-profit and they were also a
fisherman). Many of the same questions were asked to every community, however
there was some variance in the questions asked among the different groups in order to
better understand the individual nuances of connection to CFAs (see Appendix B).
Interviews were gathered from multiple regions including Oregon, California, Alaska,
New England and British Colombia. I interviewed a few of the local banks that work
with fishermen in the state of Oregon, as well as larger institutions that have more
freedom with their lending abilities. I also questioned the established ‘CFAs’ about
their financial backing to receive information on the various funding mechanisms.
Data were coded and a content analysis was conducted in accordance with standard
social science protocols (Berg 2008; Auerbach and Silverstein 2003) using NVivo
software.

Results are reported in such a way that the actual interviewees remain
anonymous (identified by the community they most closely represent [e.g. fishing
community, financial community, or agency community]). Direct quotes are included
to add richness to the results.

My interviews were limited to regions where CFAs exist, or received by
referral from various members of the fishing community. I would have liked to have
more representation from different state agencies, as well as from other regions of the United States (e.g. the southeast or southern regions).
Chapter 4
Results and Discussion

Data gathering and analysis yielded many repeating themes and subthemes, many of which support the various drivers of CFAs. Each theme and subtheme is discussed individually, followed by the drivers for CFAs and overall lessons learned from this research.

The main themes that emerged from this research are: 1) how to define a fishing community; 2) quota allocation; 3) economic challenges within the commercial fishing industry; 4) motivations to join associations; 5) financial support for CFAs and 6) general fears or misunderstandings regarding CFAs. These predominant themes are all related to the original proposed question of what are the overall benefits and obstacles of creating and implementing CFAs.

THEMES

Theme 1: How to Define a Fishing Community

Over and over again, this research indicated that one of the main purposes for setting up a CFA was to support the fishing community. But how do you define a community around a moving resource? This came up during the meetings and the interviews. Research participants indicated that this is an area that needs more attention in order for CFAs to be successful, which is in conjunction with the literature on social capital and defining a community (Isham 2000, Olson 2011, St. Martin 2001).
Many of the groups who call themselves CFAs refer to a geographic location for their definition of community. For example, Cape Cod Fisheries Trust (CCFT) established eligibility criteria that you have to be a resident of Cape Cod for 5 years before you can qualify for the benefits offered by their organization. Other CFAs also have similar geographical eligibility for their *community*, including regions of California (e.g. Morro Bay).

That being said, this study indicated that strictly using a place-based definition can limit the inclusion of various members and restrict the flexibility of the community or any community-based association. The interviewees agreed that the definition of community should be as broad as possible, and include many different dimensions in the definition depending on the context for which the community is being defined.

Many members contribute to the success of a fishing community; it is not just the fishermen, but also the families, the processors, the people running the hoist, and selling the gear. Being too narrow in the definition of a fishing community could eliminate a lot of social support, structure and people who are dependent on commercial fishing in their communities, and thus the social capital would weaken or decline.

*I think the definition should have something to do with geographical location of course, but I think it should also include anyone who has made an investment in the fishing business, which could include restaurant owners, people in academia, etc.* (Fishing Community).

---

6 https://ccft.fishhub.org
When it comes to defining fishing communities, there is merit in a place-based definition. But there also are some critical limitations, especially when it comes to figuring out or thinking about different tools for coordinating action at some level and things along those lines. For example, when fisheries are managed, they're not managed necessarily on a specific place. They're often managed on a common set of interests or a common set of activities, because fish move and because fisheries, in terms of production and distribution, are really dynamic spatially too. (Fishing Community).

Responses indicate that it is not only important to be clear with the goals intended by defining a community, but to also understand the context of the community that you are trying to define. Whether referring to different vessel sizes, regions that are dependent on the resource, or various fisheries, diversity should be taken into account when defining a community. For example, one interviewee commented on several problems pertaining to the lack of understanding between large-scale industrial fleets and small-scale fisheries, which only complicates the problem of grouping them together based on geography. The same issue pertains to defining a fishing community based on gear and/or the same fishery. One region in particular reported problems with the generalized way data were gathered to define a specific fishing community, and then how those same data were used to define other communities in different regions. Many respondents believe that the Councils should be ultimately responsible for the definition of a community. This is congruent with the literature (Stoll and Holliday 2014; Clay and Olson 2008).

Several interviewees stated that they support having agency involvement regarding the management process of CFAs, and the federal and state agencies should be involved with eligibility criteria and the overall guidelines to make the implementation of CFAs easier for interested community members.
In order to create an MSA fishing community, you really need to go through some sort of process that involves the Councils. I think until there’s a consensus within the Councils that they even want to bring up the issue. It’s interesting to speculate, but I don’t think you can really say what would be the ultimately right definition. (Agency Community).

**Theme 2: Quota allocation**

Every time the topic of CFAs came up at meetings or interviews--any conversation regarding the potential benefits, challenges, goals or overall applicability of these types of associations--it always lead back to quota and the way it is allocated. Many people are confused about CFAs, and because there is no true definition on what constitutes a CFA, quota becomes the main topic of interest.

Because the topic of quota came up repeatedly, I asked the interviewees to share with me their opinion on how quota is currently allocated. The general response was that it is an unfair, arbitrary system, with high costs, and has a tendency to favor those with the most capital. These responses came from various members of the fishing community, most of which who own quota, commercial fish, or have family members that are involved in the industry.

The results of this research are supported by the literature that has stated several problems with limited entry and ITQ programs (Copes 1986; Carothers et. al 2010; Olson 2011). A general perception from the interviewees in the fishing community feel that programs such as ITQs have more negative impacts than benefits, and increased quota access is one of the primary drivers for CFA implementation. The main points were the way quota is allocated (including individual and the lack of community allocation), the high price of quota and regulations, and privatization. There were also specific examples regarding the
challenges in the different methods of quota distribution from various regions across the nation.

**Quota allocation and the problems with the ITQ system.** Quota allocation is an incredibly complex system, and there are various programs within the different fisheries that give evidence to the complexity. Allocation can be based on landings, based on effort, or auctioned off. There are fishery wide quotas, individual quotas, and community quotas. The results of this research emphasize these problems with quota allocation; specifically the way quota is distributed based on the historical catch of individual permits. The way quota is allocated, as well as the increased regulations, was said to limit the flexibility in commercial fishing, as well as discouraging new entrants into the profession.

The interviews indicate that many people feel that individual quotas are just another way of reallocating social and economic benefits associated with the various fisheries, and thus stressed caution when considering a group association such as a CFA. Several interviewees responded that whether quota was allocated to an individual or a community, the same problems with distribution could be evident.

*When it comes to issuing individual quotas, it’s in a sense saying, “Here you can have your piece and go off and do with it what you will, and you can trade it in the marketplace, but your only commitment is to your quota share; you just have to abide by the rules that pertain to your quota share, and everybody else, with lack of a better way to put it, everybody else be damned.”* (Fishing Community)

*The problem with quota systems is that you’ve created an entitlement to a subset of a fishery, and you’ve awarded the quota to certain amount of people who happen to fish for a small amount of time. CFAs are supposed to be a response to that, so you take to buying the quota or reallocating the quota to communities mostly so they can get a better outcome to that community. But if all you do is just rearrange the deck chairs on the Titanic and just hand it*
over to a new set of entitled individuals, you really haven’t changed anything.
(Fishing Community)

The high price of quota. Results revealed that there are incredibly high prices associated with quota. It’s one of the biggest expenditures in commercial fishing, and it can have very serious implications for the fishing community. Most interviewees commented on the high price of quota, saying that the price is so unaffordable that financing it is no longer an option. Another perception from the interviewees was that regulations and stock assessments add complication to the allocation issue by decreasing the total amount of fish that are allowed to be caught or purchased.

When you spend half a million dollars to go buy a bunch of rock cod quota, or say halibut quota up in Alaska, and the quota keeps getting cut and cut and cut, you owe that money to banks and you got to go catch your quota. The biomass keeps going down and down, and the quota gets smaller and smaller, pretty soon you can’t make your payments. It’s a stupid way to manage fisheries. (Fishing Community)

Issues of distribution. The high prices of quota give rise to another issue in commercial fishing - distribution. Interviewees report that because of the high price of quota, only people with large amounts of capital can afford to purchase quota. Large capital usually equals large vessels, which makes it very difficult for smaller vessels or smaller-scaled fishermen to compete. This is in agreement with the literature (Olson 2011).

A big advantage or a reason individual fishing quota is issued to individuals, issued in perpetuity, made tradable, is so that individuals can buy and sell them. The economic logic to that was for resource revenue, or to make a profit. I think we’ve seen a lot of outcomes to that where those people with the most access to capital can purchase them. (Fishing Community)
**Quota distribution and efficiency of the different quota programs.** In order to better comprehend the ways a CFA could potentially receive quota allocation, I wanted to understand more about these different programs from the interviewees’ perspective. Interviewees talked about the various quota allocation programs in their region. For example, there is the Community Development Quota (CDQ) and the Community Quota Entity (CQE) programs in Alaska, the Sector Program in New England, and the West Coast Groundfish IFQ program, to name a few.

All of the different methods of quota allocation come with their own set of problems, and some of the interviewed population gave examples of these challenges. The results reflect the opinions of people who participate in these various quota programs, revealing both positive and negative feedback on the way quota is allocated in their fishing community:

*New England.* In New England, the interviewees reported on a version of a catch share program based on “sectors.” In this program, sectors--groups of people --operate like an ITQ, but it is the sector that receives quota and this is allocated directly to individuals based on their ten-year history of fishing from 1995-2005. The quota is treated individually; it’s bought/sold and traded individually.

*We just started our first catch share program in 2010, and already we’re seeing the type of consolidation that’s happening in so many ITQ programs, where the access and the rights to fish are all going in the direction of large-scale companies, towards businesses that don’t actually fish with their boots on the boat, but rather invest in fishing boats and permits as a business model. (Fishing Community)*
Interviewees reported problems with competition, stating that independent and owner/operator fishermen are having difficulty trying to compete with larger business and maintain affordable access to quota. This is consistent with the literature presented on IFQs (Guyader and Thébaud 2001; Olson 2011; Carouthers et al. 2010).

Alaska. In Alaska, there are the CDQ and CQE programs, which allocates quota to regional groups. This allocation is not allocated directly to communities, but to groups that represent them. According to interviewees from this region, there used to be a lot of oversight both at the federal and state level, which still exists to some extent, but just much less now. These programs were said to be successful, however concern was expressed in how the ITQs were tied to specific locations.

“What happens if the fish that they’re fishing are no longer there?”
(Agency Community)

The agency perspective on these types of programs is that they are not really about fishing, but rather “community economic development”. A “fairness debate” was also mentioned, referring to regions that were assigned quota that historically never fished for those species before.

West Coast Groundfish IFQ Program. This quota program is focused on mutli-species and various types of gear. Some of the interviewees reported that the regulating agencies eliminated the fixed gear and allocated about 90% of the fishery to the bottom trawlers, again using historical catch as a way to distribute the quota. Feelings of frustration were expressed due to the fact that
additional permits were required, and the allocation seemed arbitrary and unfair. The perception from most of the interviewees that participate in this quota system was that the amount of quota has been continually reduced over the last 15 years.

*On the West Coast for us to access drag quota, which is 90% of the rock cod, we have to have trawl permits on every boat that accesses the quota, which is crazy because we’re not going dragging, we’re going hook and line fishing. We also didn’t understand why 90% of the rock cod was going to be given to 175 drag boats when they were the ones that caused the overfishing in the first place.* (Fishing Community)

Study participants indicated that many feel the process of quota allocation needs improvement. Many of the interviewees feel that there are definite problems with the current way quota is allocated, however no better solutions or methods were proposed. Many, including the state and federal agencies, agreed that there are lots of valid issues or challenges with methods of allocation (i.e., basing it on historical catch) but also suggested there would be problems with any other method. The interviews illustrated that certain parameters are necessary in quota allocation, but the current system is very arbitrary and confusing.

CFAs were one proposed solution to these issues with quota allocation. It was assumed that if quota is awarded to communities rather than individuals, more benefits such as access to the resources and increased economic viability would result.

*If you could get where the communities owned 30% or 50% of the quota, then they could use that to facilitate new entry into the fisheries, and they could also give the retiring fishermen a place to sell to when he wants to retire, and then they can redistribute whatever share needs to be distributed back into the individual ownership.* (Fishing Community)
Theme 3: Economic Challenges within the commercial fishing industry

In order to understand the obstacles involved with CFA creation and implementation, it is important to understand the overall challenges fishermen and fishing communities face in the commercial fishing industry. Quota allocation and access is definitely one of the predominant challenges in commercial fishing, however there are many more problems that people in this business endure. The responses indicate that there are 3 main challenges: regulations, economics, and marketing. Other challenges mentioned were new entry into the various fisheries, climate change, and lack of understanding and communication.

Regulations. According to the results of this research, regulations at both the state and federal level appear to be the biggest challenge in commercial fishing. Whether it is fishermen having to encounter the high prices of quota and permits, having to comply with the numerous systems for quota allocation, or having to cope with inaccurate or perceived inaccurate stock assessments, participants in meetings and interviews expressed that the fishing community is definitely challenged by these regulations in fishery management.

Even people working within the agencies shared that regulations are getting more and more complicated. Perspectives on regulations revealed that the various agencies are being more conservative due to expensive lawsuits that have come about in the various fisheries. The results also indicate that because of problems with stock assessments and as a result of these regulations, many fishing communities are losing more and more fishermen.
Other people, especially smaller boats, have traditionally fished a wide number of fisheries, both within the year and across years, depending on how things work. As we’ve created more and more limited access and catch shares, people have fewer and fewer options of different things to do if one fishery suddenly crashes, or suddenly a new assessment comes in and says, “Oh we’ve thought things were going well, but suddenly they’re not. We’re going to drop your quota.” (Agency Community)

Economics. Problems with the economy have been seen in almost every type of industry and unfortunately commercial fishing is no exception. The price of seafood is expensive for both the consumers and the fishermen, which complicates the process of earning a decent living. This research revealed the effects of the economic downturn in commercial fishing, which are evident throughout the fishing community and the supporting infrastructure. Interviewees commented that if it’s bad for the fishermen, it’s also bad for the person selling supplies, fuel or boats; when one suffers, they all suffer.

The rising costs of quota and permits also contribute to the economic hardships. Financial problems are apparent with the combination of high costs of participating in a fishery and the increasing regulations on the total allowable catch or access issues.

In 1995, the halibut fishery and the prices of quota were really quite high, $25-30/lb. for halibut quota, and then the biomass of halibut has gone down, and the allowable catch has gone down increasingly. So if you were a person that purchased halibut quota a few years ago, you’re in a lot of economic hardship because you’re not able to catch as much halibut as you thought you would have been when you bought the quota 2 or 3 years ago. (Fishing Community)

Marketing. The third biggest challenge reported by participants in this research is marketing. Comments expressed in meetings and interviews shared that not only is it extremely difficult to catch a quality product, but fishermen also have to
figure out ways of getting that product to the market for a profit. This is an extremely difficult task due to the fact that the overhead in commercial fishing (e.g. fuel, permits, costs of quota, etc.) is very high, and often, fishermen are not getting paid a price that reflects these costs in fishing. Some of the fishermen refer to this as *fishing in the red*. This negative cycle within the industry exists because when fishermen are getting paid low prices for their fish, it forces them to catch high volumes, which can be detrimental to the resource. This result is reflected in the literature (Copes 1986).

*I just talked to a guy that needed quota to go fish. He leased in cod at a $1.40, and then when he got to the docks and landed the cod, he was only paid $1.70. If you do the math and the overhead of fuel and ice, he actually didn’t make any money. We’re hearing that story actually come up more and more. (Fishing Community)*

*The way it is, or the way it has been, there is no reward for bringing in a quality product. What the product is sold for to the end consumer, you have no way of making sure that you’re compensated based on that. I think that’s a big problem because the only way we can increase the amount of money we make is by catching more fish under that system. (Fishing Community)*

CFAs were suggested by several members of the fishing community as a solution that could alleviate some of the challenges with marketing their product. One of the current CFAs reported that their association enables fishermen to market their product at a local and sustainable level, allowing the fishermen to extend their product out to more people, and benefit from the different fisheries that the members fish in.

*We try to keep as much of it around the neighborhood that we can. Sometimes production is too good, so we have to sell to some other bigger buyers. These bigger guys have semis, and truck our catch down to L.A., up to Seattle, and other places on the West Coast. (Fishing Community)*
**Other.** Other challenges reported included the moving of the resource due to a rise in ocean temperatures and other grave outcomes associated with climate change. This included depleted fish stocks and the lack of the resource in general. A few people reported that there is an overall lack of understanding, or a disconnect between the fishing industry, society and policy makers; saying it is hard to receive support. Finally, the interviews conveyed that the perception is that there is little representation on management policies or decisions involving the fishing community, and several reported that they have no say in what’s going on and that their needs are not being heard or met:

*There is a disconnect within our fisheries. I think this disconnect means that there are a lot of things flying around the policy process that don’t accurately represent reality, and I think fishing members can contribute to that in some extent as well, which I think is a problem in that they’re not representing things accurately.* (Fishing Community)

**Theme 4: Motivations to Join Associations**

Because fishing is a very independent profession and community collaboration is one of the bases behind CFAs, I was curious to investigate some of the reasons that fishermen have, or would, consider forming a group. For example, are there financial incentives? Is it cheaper? Is there less risk?

Research results are in agreement with the literature showing that group collaboration is a very prominent theme and offer some benefits to a commercial fishermen and/or a fishing community (Isham 2000; Graftin 2005). There are however, significant challenges associated with grouping within the fishing industry and this creates obstacles for CFA success.
Many reasons for grouping are in response to the challenges in commercial fishing, specifically the different regulations and programs in fishery management. Research participants spoke to how the high prices of quota and the individual quota system are causing fishermen and their communities to collaborate in their efforts. Fishermen are beginning to share the costs associated with the various fisheries, as well as pool their quota shares together. Interviewees suggest that by joining forces, the rules of competition change, making the race to fish less important.

*We felt that catch shares were set up on a have/have not situation in the community. It made people feel like that they had to get grabby and fight for their own pile instead of doing anything for the good of the community, and that seemed like a really bad idea. So we set this CFA up. (Fishing Community)*

Fishermen and fishing communities also group for the potential benefits of group collaboration. For example, the interviews revealed that forming groups is a great outlet for communication, both socially and politically. Data from this study suggests that group collaboration is said to give fishermen a voice when it comes to policy decisions, and being a part of different groups or associations creates more engagement for fishing communities at both the state and federal levels; this is in accordance with the literature (St. Martin 2006).

Grouping in fishing communities creates relationships of support and offers different methods of sharing access to a limited resource. Some of the interviewees feel that because of the large nature of the fisheries and the resources, it is more effective to use these resources in a group of people rather than one entity or individual alone.
I think there’s the opportunity to build social capital that can be useful in a variety of other ways, not only in solving problems -- like how do we ensure that there is working waterfront to use and stuff like that -- but also to build shared understanding of the nature of the resource system that it’s working in. (Fishing Community)

**Grouping and CFAs.** Many different reasons were given as potential benefits to create this type of group collaboration. Many of the responses were similar regarding the overall reasons for fishermen to group, but also highlight the specific benefits of existing CFAs. The benefits conveyed include a subsidized rate to quota access, business training, portfolio diversification and a sense of ownership within the fishery.

*I have reliable access to affordable quota. I wouldn’t be able to purchase my boat without it. I mean banks know that a boat is worthless to a fisherman if he doesn’t have anything to catch with it. It wouldn’t have worked for them if I said I was just going to be acquiring it on the open market because you can’t do a business plan on that.* (Fishing Community)

CFAs are often described as tools to move forward as a community and as a way to increase sustainability to the resource and overall economic viability. Because of the difficulty of working with a moving resource, and the challenges associated with marketing those landed resources, interviewees from the fishing community feel that there are definite advantages of creating institutions that facilitate people coming together and figuring out how to establish a proactive process.

Finally, people also look to organizations such as CFAs to find support with regulation and to gain a sense of power that is hard to achieve as an individual. A CFA, which is designed to address fishery regulation issues, may have an impact on the community far beyond fisheries.
One of the things that I think desperately needs to happen, and is starting to happen, and in part CFAs provide an opportunity for this, is that fishermen and communities are saying 'if only we could go back to the good old days. Some of them are starting to pull their heads out of the sand, some of them never had their heads in the sand, thank goodness, and are starting to say, “How do we actually move forward, what do we want our fisheries to look like, what do we want our communities to look like?” (Fishing Community)

If people can come together through these CFAs and start working on, let’s say dealing with trawl quota, in the course of that, not only are they having the opportunity to address common problems related specifically to that, but it’s this social capital thing. They build these working relationships. They solve problems in one arena and that empowers them, or gives them other resources to be able to address challenges in other arenas. (Fishing Community)

Theme 5: Financial support

This research brought to light ways organizations such as CFAs receive funding; and concerns about the initial funding process and about how a CFA would remain financially viable. Comments shared in the meetings revealed that there was concern with who would pay for the process of establishing a CFA, in addition to who would manage the finances after.

The interviews revealed more details to this concern; with some interviewees speaking about how incredibly difficult it is to find financial backing for community associations, especially when it pertains to communities and fisheries.

The local lending perspective. Many of the smaller, local banks reported that the forming of an association, or asking for loans on behalf of a group, is not more beneficial than an individual loan application. The reason reported was that this is because whoever signs for a loan is ultimately responsible for the debt, regardless of any group affiliation or membership in an organization. That being said, these smaller lenders admitted that experience does play a huge part in the lending process, and
someone with more experience in commercial fishing would have an easier time finding financial backing than a novice. The only way a group would benefit in the eyes of these local lenders is if the association did a “lead a guy up the river” situation, where someone with experience in commercial fishing instructed or helped a less experienced person through the application process.

*The person signing on the dotted line is giving their blood oath that they’re going to pay this loan back. It’s income, it’s collateral and history in the field we go off of.* (Financial Community)

It was also reported that the state and federal regulating agencies are getting stricter with the safety and soundness test, which is essentially how these agencies audit the lending practices of the various financial institutions. They want to see that the customer has the ability to put their request into a formal, structured application. This however can be difficult for many commercial fishermen who lack that type of business training.

*The fishermen used to give us what we call the ‘napkin projections’ and we would put it into an Excel format and formalize the documents. Most fishermen know exactly what it costs for them to do business; what dollars per pound they’re going to get, what permit they need to get. It’s really crazy how much they can do in their heads! But you can’t get them to write it down, and that is becoming a problem with the regulators.* (Financial Community)

**The larger lender’s perspective.** There was, however, a completely different take from the local banks on lending to groups or fishermen’s organizations. The California Fishery Fund reported that they were originally set up to lend to associations, almost exclusively to fishing associations. They reported several advantages of fishermen working together as opposed to them remaining independent, including receiving better prices for their fish, better coordination with
buyers, and better marketing techniques to get their product out there, all of which look beneficial from a lending perspective. These lenders see fishermen who participate in some sort of collective group more positively because it gives insight to their character; a big part of lending.

*I think when you see people work together, and don’t necessarily have to but they see the benefit of working together and they are building trust among their group, then I think that’s a real positive for a lender to see. If I know the fisherman is part of an association, it means that other fishermen respect him; they’re willing to work together with him or her.* (Financial Community)

**Non-profit funding options.** Many of the community fishing groups have various business frameworks to receive money for their cause. Several groups in California have partnered with non-profit agencies for a large part of their funding. An example is the city of Morro Bay teaming up with The Nature Conservancy (TNC). In 2004-05, The Nature Conservancy bought limited-entry trawl permits that were based in the Morro Bay area, and four Morro Bay trawl vessels from fishermen in Morro Bay’s own buyout program. In return central coast trawl fishermen worked cooperatively on a plan to create trawl essential fish habitat designations on 3.8 million acres of ocean in the Central Coast. The permits and quota shares were then leased out to the community of Morro Bay, more specifically the Morro Bay Community Quota Fund (MBCQF).

*TNC put forth a large part of the capital, however additional funding came from local cable companies, as well as support from the city itself in terms of offices and staff.* (Fishing Community)

The San Francisco Community Fishing Association (SFCFA), another CFA in California, reported that they had received grant writing help from non-profit

---

7 [http://www.morrobaycommunityquotafund.org](http://www.morrobaycommunityquotafund.org)
agencies, but most of the start-up capital came from a grant funded by the Ocean Protection Council (OPC).

_Private Investors._ In Cape Cod, Massachusetts, the Cape Cod Fisheries Trust (CCFT) is a CFA. The CCFT purchases quota on the public market and then offers it to their members at a subsidized rate\(^8\). This type of CFA requires a large amount of initial capital to begin, and can create large amounts of debt to the organization.

The Cape Cod Fisheries Trust reports that most of their funding came from donations from community members, as well as financing from banks and “socially responsible lenders.” The association had some start-up funds to hire consultants and lawyers to help formulate a business plan, and then proceeded to find investors for that plan.

_The association is run as a business. We lend capital to buy quota in order to deliver socioeconomic and conservation outcomes._ (Fishing Community)

_Other funding options._ Fellowship money that was used to restore economic viability and federal funding given to regions in need of economic development were other means of financial backing for CFAs. This is in accordance with the literature available for grants and funding opportunities for fishing communities.

**Theme 6: General fears and misunderstandings regarding CFAs**

The interviews and the observations at the meetings revealed several components to CFAs that people really don’t understand. These misunderstandings include:

- What a CFA is and the overall purpose

---

\(^8\) [http://www.cchfa.org/trust/](http://www.cchfa.org/trust/)
- Where does the quota come from
- Does a CFA have to be centered around quota
- Are CFAs applicable to all fisheries and/or ports
- Overall accountability
- Agency involvement

**What is a CFA and what is the overall purpose?** One of the main complications with CFAs is that no one can agree on what they actually are. The definition of a CFA varied among interviewees in the various fishing and agency communities, and this furthers the confusion on the topic and poses a barrier to the development of these types of community programs.

Organizations are sprouting up all across the nation that consider themselves to be CFAs. There are also several other terms – RFAs, permit banks, co-ops, and CSFs (community supported fisheries) – associated with CFAs that have similar goals, and this adds to the confusion. Table 2 illustrates the various definitions of a CFA proposed by the community population.

<table>
<thead>
<tr>
<th>Proposed Definition</th>
<th>Community Interviewed</th>
</tr>
</thead>
<tbody>
<tr>
<td>“CFAs are about a community, very specifically only one community, however that ends up being defined (e.g. town boundary, community profiles, etc.). An RFA is much more flexible. You can have a lot of different individuals from all over your state, or some other region. You can even have one or more CFAs doing a RFA. An RFA can contain all kinds of different people.”</td>
<td>Federal Agency Community</td>
</tr>
<tr>
<td>“A CFA is really a group of people that get together, share a common goal, and make binding agreements with how they're going to proceed.”</td>
<td>State Agency Community</td>
</tr>
</tbody>
</table>
That could be securing funding for infrastructure, it could be doing some sort of risk-pooling, it could be to have an organized voice in management; you could put it together for a lot of things.”

“CFA is a made-up term. It was invented by a group of people here on the west coast, and so there is a lot of confusion on what it really is. As part of the West Coast Groundfish IFQ program, they started talking about this CFA term, and it was actually kind of a combination of a fishing community and a RFA.”

“In the MSA, there are two things: the fishing community and a regional fishing association. They both serve the same function except a fishing community could be eligible for initial allocation, and RFAs aren’t. For all intents and purposes, they are the same, but then you also have a community fishing association which were designed to be basically the same as a fishing community.”

“People are taking CFAs and making it all kinds of things, and it’s really losing its meaning. If people want to create an entity structured around something other than quota and be successful at it, then that’s great; but call it something else.”

**Where does the quota come from?** Many of the fishing communities -- especially individuals that are not a part of a CFA-- are concerned about where the quota comes from. Many think that a community allocation would take quota from individual fishermen, and there is still confusion on how the total quota would be divided among individuals and a community.

*If you give the community 10% of the quota, you will be taking it from the fishermen and therefore there is no net benefit to the community.* (Fishing Community)
Due to the fact that there is no federally defined community that has received quota, it is difficult to see how the allocation process would be distributed fairly. More research on this topic is necessary.

**Does a CFA have to be centered around quota?** Because of the lack of a clear definition of what a CFA is, many questions came up pertaining to the structure and applicability of a CFA. Questions included: Would a CFA be an IFQ? Does the MSA allow for CFAs without catch share programs in place? Could you have a CFA without having a quota system?

The answer to such questions depend on what definition of a CFA is being used. Following what was reported already related to language confusion, many think a CFA has to be centered around quota, while others believe it could be structured around infrastructure or a common set of goals.

There are no federally recognized CFAs, but does there have to be? The research shows that several successful associations across the nation have been created based on fishing communities with a variety of different goals and business structures that do not pertain to quota. For example, SFCFA is a group of commercial fishermen in the bay area that have created their association around infrastructure. They used money from grants to purchase items that would directly benefit their community and their members, such as an ice machine, a hoist, fork trucks and bait.

**Are CFAs applicable to all fisheries and Ports?** Many study participants within the fishing community stated that they do not think CFAs, or similar programs, would be applicable to all fisheries. For example, several fishermen stated that a CFA would not work for any fishery without a stock assessment (e.g. crab). Several fishing
community interviewees stated that CFAs could potentially be a good idea for small ports, but not such a good idea for larger ports with complex and diverse fisheries that are not on a quota system.

**Overall accountability.** Many interviewees from the fishing community expressed questions regarding the management process and the overall accountability of a CFA. Several wanted to know who will pay for the process of a CFA, and who will be in charge of it. From the financial community perspective, the person to be held responsible is the person who ultimately signs for the loan.

Of course, there is the question of who is potentially responsible if regulations are not followed. Could an association offer safety from legal processes and infractions of regulations? Further clarification from the Councils regarding accountability is needed in order for CFAs to be a successful program.

*One thing, I know a number of people have felt estranged by considering the fact that if you have a CFA for a fishery that has particular areas where you can and cannot fish, then the way it reads right now, many lawyers feel that if one person in your CFA accidentally went over a line, e.g. 3 feet one night without realizing it, the whole CFA could be disbanded automatically. That kind of one accidental infraction of the rule by one person has led people to think, “Why would I want to be a part of that?” (Agency Community)*

**Agency Involvement.** The state of Oregon investigated a potential rule-making policy that could be applicable to CFAs in order to offer guidelines to interested communities. Due to this interest from the State to create structure with this type of association, I investigated whether or not the fishing communities, and the people who work with and/or are involved in the fishing community, consider agency involvement to be beneficial.
Figure 2 displays the overall responses from all interviewed with regard to agency involvement. The other category includes responses regarding agency and government, but did not include opinions on whether or not they should be involved with the CFA process.

![Agency Involvement Chart](chart.png)

Figure 2. Overall Response on Agency Involvement from the Interviews

Research results highlighted some of the potential benefits and problems with agency involvement, and brought to light an overall area of concern with CFA implementation. The data showed that there is a divided response to agency involvement. One of the benefits to agency involvement is that structure could offer consistency to CFA implementation. A governance structure could potentially be helpful by creating guidelines that would have CFAs set up in a systematic way.

Other responses highlighted that having a formal structure and process is essential for delivering fishermen’s opinions into the policy procedures, and that it
should be the role of the state and federal agencies to define CFAs so that the purposes and benefits are clear, as well as the limitations.

Many CFAs are essentially focused around quota, and because of this notion, most of the interviewees shared beliefs that it is the government’s responsibility to not only protect this public resource, but to protect people’s access to the resource as well. Many agreed that because the agencies are ultimately responsible for managing the allocation and the rights and access to the fisheries, the agencies need to be involved.

*These are public trust resources, so if the State or the Feds have the responsibility of ensuring the protection of the public trusts and ensuring public trust interest is upheld in the management of these resources, that kind of makes sense, in other words the State or the Feds getting involved.* (Fishing Community)

Interviewees also mentioned quite a few cons regarding agency involvement. One repeated response was that having agency involvement would ultimately lead to further regulation and this could impede the fishermen’s ability to move forward with their CFA plans. Concerns about how current management plans, and having further agency involvement, would only complicate current, successful programs.

*Somebody is going to make up a bunch of new rules that I am not going by, then I’m going to have to change the way I do business, and it’s taken me 3 years to figure out how business works for us.* (Fishing Community)

*Full-fledged framework into regulation could potentially hamper what could be done with CFAs.* (Agency Community)

Another potential problem with agency involvement is that previous management methods and actions have created a great deal of mistrust and doubt among much of the fishing community. Problems with fisheries management were
mentioned repeatedly in the interviews and meetings, and many thought that ultimately the community should be in charge of their own CFA. Fishermen stated that there is a greater chance of one entity controlling the association if it was managed at a state or national level, while others stated that the local authority would be best due to the fact that not everyone has access to their state or federal representative. Lastly, it was noted that there is a significant difference between political decision-making and the ways of running a CFA, and “the government shouldn’t be in the business of running businesses.” (Fishing Community)

DRIVERS FOR CFAs

One of my original questions was why would the fishing community and/or state and federal agencies want CFAs? What is the impetus or the drivers for CFAs? The results of this research reveal six main drivers or motivations associated with CFAs and moving forward with this type of community-structured idea. These drivers are: (1) retaining fishing capacity and access within a community; (2) diversity within the fleet (small vs. large vessels, limit privatization); (3) increase cohesion among the fleet; (4) to gain access to quota; (5) to decrease costs of doing business within the various fisheries; and (6) that the community is primarily driving the push for CFA implementation. The various themes learned from this research support these drivers, and have various benefits and challenges associated with each.

(1) Retaining fishing capacity and access within a fishing community. Many fishing communities are banding together to preserve historic fishing practices and looking at different ways to keep access to resources within their community. Many of the established CFAs use a geographical definition in order to keep the fishing
privileges local. Several of these associations have had success in developing their associations around infrastructure, investing in quota and leasing it out to community members of a defined geographic location, or forming permit banks that enables fishermen to diversify their portfolio. Groups have formed and call themselves CFAs, however none have received any quota allocation on behalf of a defined community. The difficulty of defining a fishing community adds complexity to this situation.

(2) Diversity within the fleet (small vs. large vessels, limit privatization). IFQs and methods of quota allocation have resulted in negative consequences for small vessel owners. Many of the interviewees complained about unfair distribution, the current way quota is allocated, and programs like the IFQs, however these practices of quota distribution were created to compensate for over-fishing and unsustainable harvest levels. Quota allocation based on historical participation makes it difficult for new entrants to get into the industry, and people or corporations with the most capital are able to get the most quota, making it incredibly difficult for small vessel owners to compete. Research results indicate that small vessel owners and fishermen are working together to ameliorate these distribution problems, and turning their focus towards programs such as CFAs.

This research indicates that there are differences in opinion regarding quota distribution and allocation, and the results reveal lots of confusion on the topic. Catch share programs and LAPPs were put in place to limit the overexploitation of our fishery resources. Current ways of allocating quota received a lot of criticism in this research, but the results revealed that the main grievance was unfair distribution (i.e. people with the most capital receive the most quota). These issues bring up the
question of who should have the right to fish? Should the fisheries be privatized, or should the resource be public property?

The debates of privatization and reducing fishing effort are complicated issues for both commercial fishermen and fishery managers, and methods of quota allocation, whether to an individual or a community, must take into account that fish are a limited resource.

(3) Increase cohesion among the fleet. Forming groups or CFAs can potentially increase different forms of communication and cooperation among commercial fishermen. Much of the fishing community interviewed in this research indicated that working together as a unit reduces competition in the fisheries, which could ultimately lead to more economic benefits for themselves and their local communities. Many of the interviewees admitted that fishermen that work together are more progressive in policy decisions, and CFAs could give them “a voice” that they would not achieve individually.

(4) Access to quota. The catch share program has subsets called the Limited Access Privilege Program (LAPPs). A challenge with this type of program is that quota share in a LAPP is generally based on historical participation and the amount of landings in a fishery during a specified time period, which makes it difficult to receive federal recognition or to gain access to different quotas. A benefit to the LAPP is that it ultimately reduces the race to fish. The MSA includes fishing communities in its definition for quota allocation as long as eligibility requirements are met, which supports future CFA implementation and other community-based
programs. Many CFAs are still hopeful that they will receive a community quota allocation, and have structured their associations in accordance with the MSA.

Members of the fishing community are often confused on where the quota comes from, and many feel that a CFA has to be centered on quota. The benefit of this type of allocation creates a more involved attitude of participation, grouping and cooperation. It also supports a more diversified portfolio, thus creating a more sustainable practice of fishing (i.e. when a fishery is bad, fishermen can switch to a different species).

(5) **Decrease cost of doing business.** Reducing the impact of regulations and decreasing the cost of business was revealed as an important driver for CFAs. Being able to share the financial burden of commercial fishing (the fees of licenses, permits, and quota) can help a fishermen maintain economic viability and secure his/her place in the industry. The results indicate that decreasing business costs can “free up income” that can help commercial fishermen achieve vessel ownership, as well as encouraging new entrants into the commercial fishing profession.

(6) **Community driven.** The results of this research show that CFAs are mostly community driven. Fishing communities are looking for solutions to the challenges in commercial fishing and fisheries management. There is no clear definition or guidelines for CFA development and implementation, however several associations have been started that refer to themselves as a CFA. This lack of definition offers flexibility to community members for their associations, which has both positive and negative attributes.
This research indicates that there needs to be an established territory/community in order for CFAs to be successful. Defining a fishing community is especially challenging because it focuses on a moving resource and has no actual defined boundaries. Many people contribute to the success of a fishing community, including people who do not fish, thus making it even more challenging on how to define it. The lack of a clearly defined community can impede federal recognition and quota allocation. The vagueness of defining a community can also offer benefits by enabling more flexibility for fishermen to group or form an association, and give communities the opportunity to move forward with their specific goals. In other words, CFAs can currently be structured around a geographical location, similar gear, a specific fishery, etc.
Chapter 5
Conclusion

This research investigated the overall benefits, challenges and drivers that are associated with implementing CFAs. The overall goals were to understand the applicability of CFAs, as well as to identify how CFAs could, or could not, be used by community members and fishery managers. The results provide insight into the diverse perspectives and opinions regarding this type of management plan from the people who are members of the commercial fishing industry, state and federal agencies, or financial communities. CFAs are a very new topic in fishery management and within commercial fishing communities. At this point, many of the established CFAs are more or less an experiment, and little data is available regarding their long-term success.

This research revealed that the potential benefits are extensive and could create new opportunities for collaboration between fishing communities, commercial fishermen and management. The broad set of challenges with CFA implementation have been revealed extensively in this research, but the benefits are a little more ambiguous. Part of the reason for this is because it is unclear what the benefits are, and if there can be benefits without costs. For example, it is uncertain if a community quota allocation would decrease an individual’s share or if there would be a separate quota share solely for defined communities? Is a benefit to one person on this issue a cost to another? This benefit-cost issue also pertains to defining a fishing community. The benefits could be more evident for some community members, but come at a great cost to those who are not included.
LESSONS LEARNED

At the beginning of this research, CFAs were a foreign concept. Ambiguity on what a CFA is, who can benefit, and the overall goals of a CFA maintained the confusion. As the research progressed, it became clear that the simple notion of community involvement with our commercial fishing industry was way more complex and challenging than I ever imagined. Originally, I hypothesized that the primary reason for the lack of success with CFA implementation was due to lack of funding. It turns out that financial funding is only a small piece of the puzzle, and that there are several limitations and obstacles with creating these types of programs. The challenges are numerous and the benefits are vague. It is evident at this stage of the project that if CFAs were a straightforward topic in fisheries management, then CFAs would be common in many of our fishing communities.

The motivations, or drivers, for forming CFAs highlighted in this research could potentially offer guidelines for future interest in CFAs or similar programs. For example, commercial fishermen who have the capital to buy quota may not want, or need, to form an association for additional quota access. Fishermen may already have the tools, knowledge and capital to be successful on their own without having to rely on group collaboration for to receive benefits or profits from the commercial fishing industry.

The drivers found in this research add transparency to a misunderstood topic. By understanding the motivations of CFAs, interested fishing communities are able to figure out how to structure their associations around their specific goals. For example,
if a community wants to receive additional access to quota and retain the benefits of commercial fishing at a local level, then perhaps forming a CFA would be a plausible way of achieving that goal. If a group or corporation wants to figure out the most efficient way of harvesting fish in the commercial fishing industry, then forming a CFA that focuses on distribution of benefits to a community, rather than working towards the goal of overall efficiency, may not be the best idea.

**HOW DO CFAs MOVE FORWARD?**

Many changes are happening within our fisheries and the commercial fishing industry. Places where fishing used to be the dominant profession are struggling and losing fishermen. Fish are constantly moving, creating more competition to attain the resource, and more complex challenges for fishery managers to conserve and fairly distribute rights to the various fisheries. Programs such as the ITQ, IFQ and other limited entry access privilege programs were originally created to reduce the impact to our fisheries, however managers, commercial fishermen and other members of the fishing community are now facing unplanned consequences of unfair distribution of resources due to high costs of quota and permits. Smaller vessels are facing increasingly difficult challenges trying to compete; whereas larger vessels and big corporations are purchasing most of the quota because of the high prices.

Community-based programs in general were created and included in the revised MSA to serve as an alternative to the individual quota system. The intended purpose of these types of programs is to alleviate some of the unfair distribution evident in IFQs, however no community has yet to be successful in the eyes of the federal agencies that govern our national fisheries. Although many members of the
agency and fishing communities agree that community-based programs is the next step in fishery management, it is an incredibly difficult task to create, define, implement and manage. Many problems are evident from the results of this research, as well as the corresponding literature, to why these types of programs have not been more successful.

Even though there are no federally recognized CFAs, there are fishing communities that have been successful on many levels at forming community-structured organizations that they call CFAs. These CFAs have increased social and moral relationships, rebuilt infrastructure, retained commercial fishing benefits at local levels, and maintained viable harvest levels in the various fisheries.

Because of all the changes happening in commercial fishing and with fishery management, it is important to study and investigate other types of programs that could re-instate sustainability in our fisheries and to the commercial fishing industry. Currently, CFAs are more or less an experiment; an experiment for the fishing communities, for the managers, and for the funders. The outcomes of these experiments cannot be known and therefore proposes a risk for all involved.

The idea of having group collaboration within commercial fishing sounds great on paper. It drums up a sort of egalitarian concept, where fishermen share and trade their resources, fishing methods enhance conservation and sustainability for the marine ecosystem, and the dependent communities benefit from the harvest sounds like the perfect scenario. Unfortunately, the success of CFAs within fishing communities will be hindered without clear guidelines of what constitutes a community, as well as strong incentives for this type of assemblage.
Creating this type of community cooperation doesn’t have to be ‘just a good idea on paper’. After all, there are provisions written in federal law that award allocation rights to communities. Community quota allocations could potentially solve some of the problems related to the individual quota system, and bring about more benefits to the community as a whole, rather than just individual fisherman.

Defining a fishing community or a CFA, and working with the federal and state agencies on ways to do so, is critical for this form of management to progress. This research highlighted many of these problems federal agencies have in trying to define a fishing community, including land and sea-based components, extensive members and contributors involved in fishing communities, and problems with geographical definitions. Defining communities can be difficult in any profession, but especially fishing communities due to the fact that there are no clearly defined boundaries in the ocean. Because fishermen deal with a moving resource, they often find themselves travelling from different geographic locations to secure their catch, which only adds complexity to the problem.

There is progression on how to define a fishing community that is currently taking place within our federal agencies. In a technical memorandum for NOAA, Stoll and Holliday (2014) outline some proposed guidelines on defining a fishing community or a RFA, eligibility criteria and created a hypothetical timeline to get these types of entities included in either new or existing fishery management plans (FMPs). This paper creates guidelines for CFAs, as well as taking into account the complexity and diversity of fisheries management.
The ultimate goal of fishery management, as well as within the commercial fishing industry, should be to harvest resources at sustainable levels while ensuring the economic viability and livelihood of our fishing communities. Management plans cannot simply address conserving the fishery resources without also considering how fishing communities are dependent on them (National Standard 8: 50 C.F.R. § 600.345). Communities interested in associations like CFAs need to be proactive, and present the appropriate governing agencies with proposals or business plans that are tailored to their goals or needs.

There needs to be more open dialogue between the commercial fishing industry and fishery managers to ensure the benefits of our marine resources are received fairly and sustainably. This is no easy task, however as changes in our fisheries and management plans are inevitable, a shift towards community cooperation within our commercial fishing industry should be explored.

**RECOMMENDATIONS FOR FUTURE STUDIES**

CFAs are a relatively new topic in fisheries management, and thus very little literature on CFAs exists. There is information on similar programs, but most of the community structured program data is limited. Future studies would benefit by investigating similar programs in various regions, and following up with the success, or lack thereof, of current CFAs. As policies and management change, more information could be gathered on the changes in quota allocation and community-structured programs such as CFAs. More research on how CFAs, and similar programs, are structured in other regions could be beneficial, as well as how other fishing regions define their communities.
References Cited


Magnuson-Stevens Act: Limited Access Privilege Programs 16 U.S.C. 1853a Section 303A (a), (b), (c)

Magnuson-Stevens Act: Fishing Communities and Regional Fishing Associations. 16 U.S.C. 1853a (3), (4)


Olson, J. (2011). Understanding and contextualizing social impacts from the


Resources

Community Fisheries Network
http://www.communityfisheriesnetwork.org/index.html

National Fish and Wildlife Foundation; Fisheries Innovation Fund.
http://www.nfwf.org/fisheriesfund

National Standard 8; 50 C.F.R. § 600.345

NOAA Catch Share Policy

APPENDIX A

Community Fishing Associations:

A review of current federal and state guidelines, existing programs in the nation, and initial perspectives from the Oregon fishing industry

A report for the Oregon Department of Fish and Wildlife
Introduction

Community Fishing Associations as an option for fisheries management is a relatively new concept for the commercial fishing industry. There have been several communities across the nation that have shown an interest in this option (including one in Oregon), but only a few who have established a Community Fishing Association (CFA). Despite this interest, there is common understanding or definition on what constitutes a CFA. Confusion regarding CFAs is not limited to fishing communities. Rather, there is confusion within agencies as well with regard to the actual definition of CFAs, eligibility, possible benefits, and even the overall purpose of a CFA.

In conducting this research we

- Reviewed current federal and state rules to determine the appropriate way to define CFAs in state regulations in such a way to also meet the federal criteria,
- Investigated CFAs across the nation for lessons learned, and
- Initiated initial outreach and engagement related to the topic of CFAs with the commercial fishing industry in Oregon.

The goal of this report is to provide insight and clarity to the concept of CFAs, to propose criteria for establishing rulemaking regarding CFAs in Oregon, and to present possible ways for CFA collaboration within the fishing community for sustainable fishery management according to Federal and State guidelines.

On a side but related note, there is presently a lot of confusion between CFAs and community-supported fisheries (CSF). A CSF is a marketing tool used to distribute fish among local buyers and consumers. For example, similar to community-supported agriculture, consumers pay a certain amount of money per quarter and receive seafood on a predetermined increment (e.g. weekly, bi-weekly, monthly, etc.). “Port Clyde Fresh Catch” is an example of a CSF. In this instance, consumers subscribe to the CSF and receive headed and gutted fish delivered through a network of local churches (Randall and Grader 2009). Although both programs are trying to create sustainability for both the fisheries and the fishermen, they are quite different.

What is a Community Fishing Association (CFA)? There are many different examples of community management across the nation. The Cape Cod Fisheries Trust and Morro Bay Community Quota Fund are both CFAs. The Community Quota Entity and Community Development Quota are not CFAs.

A CFA is a community-based organization that is allowed to hold fishing permits and quota on behalf of a defined community (Randall and Grader 2009). This type of program falls under the...
National Oceanic and Atmospheric Administration (NOAA) catch share policy that allocates a specific portion of the total allowable catch to individuals, communities, cooperatives or other eligible entity. In most cases, a CFA will be structured around an individual port and will be composed of fishermen, processors and representatives of associated businesses within that port (Randall and Grader 2009). The goals of CFAs vary across the different fishing regions since no fishing community is exactly the same. Generally, the overall goal of a CFA is to enhance the economic benefits within the local community, while also achieving sustainable harvest levels. Other possible goals of a CFA might include, but are not limited to, privileges for local access and fishermen, leasing programs for quota and/or permits, and potentially anchor access to fish in that community.
A Brief Overview of Fishery Management and Limited Access Programs

In order to better understand CFAs, it is important to understand the central theme of Limited Access Privilege (LAP) programs. Until the end of the 20th century, most U.S. fisheries were managed under a system that allowed free or open access (Anderson et al. 2008). Aside from having a permit and suitable fishing gear, there were few limits. In profitable fisheries, this led to ever-increasing numbers of participants and put increasing pressure on the fishery. Seeing the problems with the open access, fisheries managers tried to regulate the fishing activities by methods of input and output controls. Examples of these types of controls were gear restrictions, limiting available fishing areas or seasons, setting total allowable catches (TACs), and trip limits for individual fishermen. Ultimately, these restrictions from management created incentives for fishermen to develop different types of gear and invent different methods that permit them to catch more fish. This, in turn, caused fishery management to implement stricter regulations to keep harvest and fishery resources at sustainable levels. This has also been referred to as ‘the race to fish’ (Anderson et al. 2008).

Management began to control TAC or effort by limiting the number of participants through limited access programs. In some cases, this was an effective tool depending on the actual number of permits relative to safe harvest limits and other types of management controls (Anderson et al. 2008). Managers then initiated the practice of individual fishing quotas (IFQs) where an individual fisherman is granted the privilege to catch a specified portion of the TAC. The idea with IFQs is to remove the motivation for fishermen to fish harder and faster by giving them the assurance of a specified share of the TAC.

The amended Magnuson - Stevens Act (Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006) specifies three types of LAPs: individual fishing quotas, community quotas, and quota held by regional fishery associations (RFAs). Although the MSA only mentions these three types of LAPs, LAPs can be given to a broad range of entities as long as they meet the eligibility requirements. These entities could include partnerships, corporations, cooperatives, and fishermen’s organizations. CFAs currently fall under the LAP provision in the MSA (Anderson et al. 2008).
**Federal Guidelines for a CFA**

The amended (2006) Magnuson-Stevens Act presents guidelines that must be met in order to start a CFA in a community. The MSA allows for the creation of CFAs under two different categories—fishing communities and regional fishing associations—within the Limited Access Privilege Programs provision of the Act (Randall et al. 2009).

Section 303A of the MSA states current policies and regulations concerning LAPs. Listed below are four broad guidelines (please refer to the MSA for the full disclosure):

1. Specify the goals of their program;
2. Consist of residents who conduct commercial or recreational fishing, processing, or fishery-dependent support businesses within the Council’s management area;
3. Develop a community and sustainability plan; and
4. Establish procedures to ensure fair and equitable initial allocations, including consideration of
   (i) current and historical harvests,
   (ii) employment in the harvesting and processing sectors,
   (iii) investments in, and dependence upon, the fishery, and
   (iv) the current and historical participation of fishing communities.

Although the federal mandates have yet to be amended to address CFAs specifically, it is important that the supporting state agencies and fisheries management councils (Councils) abide by these rules. In addition to these federal guidelines, state agencies should propose a set of criteria and regulations of their own to not only add clarity to this new form of management, but to also protect the fisheries and their local resources.

**Snapshot of CFAs Across the Nation**

From August to December 2012, we conducted an initial review of CFAs across the nation. Our objective was to investigate other communities’ policies and procedures for developing CFAs with the hope of identifying rules, strategies, or opportunities that the state of Oregon could use to get something into law regarding CFAs.
It appears that several small fishing towns have shown an interest (and some have even tried to) in establishing CFAs in order to support local infrastructure and businesses. However, it appears that several have run into ‘dead ends’ due to the novelty of this possible management strategy. There are currently two communities in the nation that have moved from concept to practice: Cape Cod Fisheries Trust in Massachusetts; Community Quota Fund in California. There is one community in Oregon–Port Orford–who is interested and ready to launch a pilot program. We conducted interviews with all three programs.

For each interview we asked the following questions:

- What is the definition of community that you have or will operate your CFA under?
- What were the reasons your community decided to put a CFA in place?
- What were/would be the steps of the process of setting up your CFA?
- What federal and/or state guidelines/rules informed the creation of your CFA?
- How did/does/will your CFA get and give quota?
- Who/what organization manages the CFA and your CFA process?
- What are the benefits and downsides of the CFA?
- What recommendations do you have for other states/communities regarding setting up and operating a successful CFA?

Our research brought to light the fact that at this point in time no CFA program is exactly the same, and although Oregon could be facing similar challenges, guidelines from other regions may not be entirely applicable. Yet it is important to learn from others, so we’ve reported our results for each location under the following categories:

1. Brief overview of the program
2. Definition of community
3. The reasons for, and process of, setting up and managing the CFA
4. Guidelines (could be considered for rulemaking)
5. Getting and giving quota
6. Benefits and downsides
7. Recommendations

**Cape Cod Fisheries Trust (CCFT), Cape Cod, Massachusetts**

**1. Overview:**
The CCFT is working to preserve Cape Cod’s fishing industry by purchasing commercial permits in order to secure additional fishing opportunities for the struggling local fleet. Self-employed Cape Cod fishermen then lease these opportunities from the Trust and agree to harvest the catch with small boats and traditional gear (http://www.ccchf a.org/trust/). Commercial fishing permits were acquired and a “Quota Bank” was developed to lease quota back to fishermen at affordable rates. In return for a permit
, fishermen are required to follow predetermined sustainable fishing guidelines. The quota bank is capitalized with an investment from the Ford Foundation, other private money, and local bank loans. The CCFT holds permits for many of the target and by-catch species that are the lifeblood of fishing families on the Lower Cape. The Community Development Partnership (CDP) manages the leasing of the quota and the technical business assistance available to the fisherman for the CCFT.
2. **Definition of Community:** Residents of Cape Cod that have resided there for at least 5 years geographically define CCFT and their community.

3. **The reasons for, and process of, setting up and managing the CFA:** CCFT set up their CFA to help the local fleet, and create ways of sustaining their community's economy. The CCFT had start up funds to create a business plan with lawyers, financial advisors and consultants. The CFA is run as a business, with its own financials, and was set up accordingly. The first step involved creating a business plan and a "ten year cash flow" for that projected business. The next step involved finding investors for their business plan. The CDP and a board of directors manage the leases and the process of the CFFT.

4. **Guidelines:**
   Federal regulations exist on certain fisheries and receiving quota, however no new management or permission had to be issued in the case of the CCFT. Their process, or business plan, was kept "transparent to the federal agencies," however the regional guidelines were limited.

5. **Getting and giving quota:**
   The quota is bought on the open market. It is then leased to CCFT members at reduced rates, based on strict eligibility criteria. Members are still able to hold separate quota in other fisheries or aside from their CCFT quota. If the quota held by the CCFT is not all used or caught, it will be leased on the open market to ensure the revenues are met to pay their debt.

6. **Benefits (and downsides) of the CFA:**
   - Access to the quota at a subsidized rate
   - Quarterly financial support on the fishermen's personal business plans to assist in buying quota on their own.
   - Technical assistance and training to the fishermen, including training in QuickBooks, assistance finding bookkeepers and accountants to better improve individual business plans.
   - An application process that is analogous to a loan, which better prepares members for acquiring personal financial backing and better investments for the fishermen.
7. Recommendations for other states/communities:
   • **Have a clear structure and, early on, have fishermen’s input on the structure of the CFA.** "There needs to be formal structure and process for delivering fishermen’s opinions into the process."
   • **Include a financial investment from the fishermen.** In the CCFT, none of the fishermen actually made a financial investment "on the front end" of the process, and this lack of investment by the members can create an image of entitlement in the CFA, or a perception of getting something for free.

**The Morro Bay Community Quota Fund (MBCQF), Morro Bay, California**

1. **Overview:** Although Morro Bay fishermen target several types of fish, the landings from the groundfish sector, by small boat fishermen, have been critical to ensure the port, and its infrastructure, remain economically viable. Morro Bay has historically had one of the largest groundfish landings in California. Due to constriction of trawl operations and certain species in the groundfish complex being declared overfished, and the consolidation of markets, the commercial fishing industry and local infrastructure began to decline. “In 2001, the fishery was in a state of emergency. We previously had 3 fuel docks in Morro Bay and in 2005 the last one threatened to close. That was the wake up call for the city to start getting involved.” The MBCQF is a public benefit nonprofit corporation intended to permanently secure fishing privileges historically associated with the Central Coast. The long term goal of the CQF is to ensure a financially stable and environmentally sustainable Morro Bay fishery, built upon local stewardship of groundfish resources, sufficient fishing activity to support marine dependent infrastructure and services in Morro Bay, and provide for the next generation of smaller boat fishermen. Under its broader “triple bottom line” mission (social, economic and environmental) the MBCQF will also engage in collaborative research to improve scientific knowledge and support local fisheries. (http://www.morrobaycommunityquotafund.org).

2. **Definition of Community:**
   The city of Morro Bay is their defined community. The primary focus in their community is the groundfish fishery. Even though the fish are a moving resource, most of the landings are done in Morro Bay.

3. **Reasons for, and process of, setting up and managing the CFA:** Primarily economic and cultural; not environmental (although that is considered). The CFA was set up in response to state of the trawl fishery, West Coast Groundfish ITQ system, and concern of how the transferability of quota would force consolidation of the existing fishery to fewer, larger vessels in the strongest market ports. Therefore, to count the consolidation and additional costs of this type of management system, the city of Morro Bay created an association that would preserve their historic fishing culture and secure resources in the community. **Members in the MBCQF are selected based on experience, financial and operational capability to execute the trawl fishery, and a suitable business plan that outlines their goals of developing an equitable business.** Financial support primarily comes from grants (cabl
e and fiber optic companies) and NGO partners (The Nature Conservancy[TNC]). The city of Morro Bay manages the process and provides staff, offices, supplies, etc. Although the commercial fishermen do not financially support this organization, “they offer significant moral support which is very important in the overall process.”

4. Guidelines:
There were no guidelines, other than the community objectives outlined in the MSA.

5. Getting and giving quota: In 2004-05, TNC bought seven limited entry trawl permits that were based in the Morro Bay area, and four Morro Bay trawl vessels from fishermen in Morro Bay’s own buyout program. In return central coast trawl fishermen worked cooperatively on a plan to create trawl essential fish habitat designations on 3.8 million acres of ocean in the Central Coast. The permits and quota shares were then leased out to the community of Morro Bay, more specifically the MBCQF(http://www.morrobaycommunityquotafund.org). The city of Morro Bay “acted as a catalyst,” and was not actively involved in the leasing of the permits. The quota and permits are leased to the organization.

6. Benefits (and downsides) of the CFA:
- Increased landings
- “Developed leadership for the fishermen and a positive momentum for the community”
- (Really hard work, and “lots of 2 steps backward days”)

7. Recommendations to other communities/states?
• States should help to coordinate these types of programs

• More collaboration on coordinating efforts. “Several environmental groups exist that raise money for similar projects. There needs to be more collaboration on coordinating with these groups so our efforts and these projects would benefit local communities more.”

Port Orford Ocean Resource Team (POORT), Port Orford, OR

1. Overview:
Port Orford is a small fishing town on the southern Oregon Coast. Due to an aging fleet, fishing restrictions, and an expensive industry for new entrants, Port Orford has faced tremendous economic hardship among their fishing community. In order to preserve their fishing community and local infrastructure, The Port Orford Ocean Resource Team (POORT) has developed a business plan for a CFA within their community. The principle idea with this CFA is to establish a leasing program that would lease commercial fishing permits/quota at more affordable rates for qualifying fishermen. There is a Fishermen’s Board, which is comprised of fishermen, local city officials and community members. Port Orford is adamant about creating change within their community, and they have followed the few federal guidelines available to create a community based management plan in their town. Similar to Cape Cod and Morro Bay, POORT has created eligibility criteria, a sustainable business plan and has defined specific goals of their proposed CFA, which are all in accordance with the MSA.
The main goals of this CFA, according to the Port Orford Sustainability Plan (2011) are to:
• Strengthen the Port Orford fishing economy
• Create bankable fishing businesses
• Increase profits for captains
• Ensure fair wages for crew
• Diversify fishing business
• Support sustainable fishing practices

2. Definition of Community: The community of Port Orford, Oregon.

3. Reasons for, and process of, setting up and managing the CFA: The main reasons for establishing a CFA are the aging of the fleet, no access to trawl quota, to anchor or fishing resources to the community, to preserve the port’s community, economic viability and infrastructure, and to assist new entrants into the fishery. Port Orford has created a business plan, a community sustainability plan, and a five-year plan of goals and objectives. Although their CFA is not yet in place, POORT is doing everything in its power to finalize a CFA in their town of Port Orford. POORT has created eligibility criteria and hopes to establish a lease program similar to that of Cape Cod Fisheries Trust, thereby enabling fishermen to lease quota at affordable rates.


5. Getting and giving quota: This is not established yet.

6. Benefits and downsides: N/A

7. Recommendations: N/A due to the fact that Port Orford’s CFA has yet to be officially established. However, POORT was able to reveal the following obstacles that they have encountered in their efforts to set up a CFA:
• There are currently no State guidelines for the establishment of community-based management programs.
• Problems in the actual language of the laws and regulations hinder the ability to receive quota. Specifically, commercial fishing permits must be owned by an individual. Oregon law does not allow “communities” to own fishing permits or quota.
• Permit transferability require minimum/maximum length requirements¹: Most of the vessels in Port Orford are 42 feet or less.
• All commercial fishing permits must be attached to a specific fishing vessel.
• POORT would like to see more commercial and limited access permits issued.
**Initial Stakeholder Outreach and Engagement in Oregon**
The goal of the initial stakeholder (fishing community) outreach and engagement was to share the concept of this study with them and to get their unbiased feedback regarding the concept and their interest in the rule-making process. This initial stage of stakeholder outreach and engagement was conducted with various existing stakeholder groups throughout the Oregon coast from August 15th, 2012 to November 19th, 2012. It was conducted with Fishermen Involved in Natural Energy (FINE), Fisherman’s Advisory Committee of Tillamook (FACT), Oregon Dungeness Crab Commission (ODCC), Port Orford Ocean Resource Team (POORT), and the Oregon Salmon Commission (OSC). Two additional group visits were scheduled—the Oregon Trawl Commission (OTC) and the Southern Oregon Ocean Resource Council (SOORC)—but the meetings got cancelled.

Because this outreach and engagement was conducted at the beginning of the research, the only thing that was “presented” in these sessions was a quick introduction of CFAs and the reason for the research. The majority of the time was spent listening to those present. This initial outreach and engagement gleaned information, perspectives, and concerns on what a CFA is and how it might affect their community and interests with regards to quota allocation and overall availability to the resource.

Several general themes arose from a content analysis of research notes taken during this first stage of public outreach and engagement. Due to the relatively new subject matter for most stakeholders present, many expressed several questions about CFAs, and some were not sure what the overall benefits or setbacks of CFAs or how they would be applicable to their fishing community. It is important for the State to address these issues to not only ensure better guidelines for their rule-making procedure, but to also identify new or optimal strategies for fisheries management. Themes are listed below:

---

1 Permits may be transferred between vessels where both vessels fall within any one of the following categories:
(a) Vessels less than or equal to 30 feet;
(b) Vessels greater than 30 feet and less than or equal to 42 feet; or
(c) Vessels greater than 42 feet. No vessel permit may be transferred to a vessel more than five feet longer than the vessel from which the permit is being transferred. ORS 508.822
1. What fisheries would a CFA be applicable to?
Since some of the fisheries in the state of Oregon are not on a quota system (e.g. crab and shrimp), several questions arose concerning if this system would be fisheriespecific.

2. Where would the quota come from...and who can get it? Since most of the quota is federally allocated, stakeholders expressed concern about how a community would hold quota, and where it would come from:
   • Where does the quota come from? Would it come from previously allocated allowances?
   • Would there be rules and regulations of who could/could not purchase quota?
   • How will the state ensure that the entire quota gets fished? What’s to guarantee that partners, non-profits, financially supported individuals don’t buy up the entire quota and just “sit on it”?²
   • What about fisheries or regions with no quota system?

3. What are the benefits of a CFA?
Questions arose as to how a CFA would be beneficial. Participants wanted to see thereasons to incorporate CFAs into the management system, and what the overall goals would be. Could there be a benefit between this system and local fisheries infrastructure?

4. How is a ‘community’ defined?
This concern, as well as the concern of a quota system, is probably the mostreoccurring theme from all of the stakeholder meetings. Due to the fact that there is such a broad definition of a ‘fishing community,’ and that these definitions are primarily place-based, participants were very interested in how the State would define a community. Many shared that the fishing community is a community of...

² Several concerns/comments came up regarding the partnership with TNC in Morro Bay: “TNC bought up all the quota and then didn’t fish it.” “It’s not a non-profit partner, but a multi-million dollar business!” “Fishermen can’t lease their quota because they can’t match what TNC offered them.” and “TNC came in bought up all the quota, and then the infrastructure went away.” Our research found that even in Morro Bay, the idea of the potential loss of landings from the trawl permits purchased by TNC (if they were relocated or made inactive) was seen as a potential threat and could be quite devastating to what was left of the marine dependent infrastructure in Morro Bay. Several local citizens (in Morro Bay and Oregon) expressed concern on what the goals and intentions of TNC was, and if those goals would indeed benefit the local fishermen and community. Research results found TNC did buy up several trawl permits, however all of them were released to local fishermen, reused in garswitching projects or leased on the open market. “They (TNC) did idle on the permits at first, but we objected. To give them (TNC) credit, they listened to our concerns early on and worked with through the process.” Overtime, the city of Morro Bay has established a collaborative, working relationship with TNC. In fact, TNC is the primary financial supporter of the CFA, and according to local fishermen, “offered ways of monet...
ary support that the state of California could not offer."
interest that spans over sB%;Vmunities of place. “Fish are a moving resource,” which only raised more questions in who would have (or be denied) the right to participate in the harvesting of this resource.

- Would a community be defined by zip code?
- Could a ‘community member’ still be allowed to fish outside of their zip code or place of residence?
- Would only community members be allowed to fish in certain areas, or their ‘defined community’?
- Where would the line be drawn if communities received a quota?
- Fish move and are a public resource. How could this be made fair when, for example, it’s a migrating species?
- “How is the State going to divide up our coastline?”

5. Where else has this worked and why?
It was clear that there many participants wanted to know more about if and where this has been taking place and its success. Did it bring/make more jobs? Is this NGO driven? Who pays for this, and who manages it?

6. Is there a need for another management tool?
There was expressed concern about adding extra layers of management. “There is nothing wrong with the current management. If anything we are over-managed.” Some wondered if programs similar to CFAs are already in place (e.g. coops), and feel that this is a “redundant” concept.

**Suggestions for the State**
After reviewing current federal and state rules, investigating CFAs across the nation, and conducting initial outreach and engagement with the commercial fishing industry in Oregon, it was clear that there are limited clearly articulated guidelines when it comes to CFAs. There is, therefore, opportunity for the State to help set guidelines and clearly articulate steps that can be taken to establish a CFA in Oregon.

Any rules provided by the State should incorporate the four broad guidelines laid out in the federal regulations: specify the goals of their program; consist of residents who conduct commercial or recreational fishing, processing, or fishery-dependent support businesses within the Council’s management area; develop a community and sustainability plan; and establish procedures to ensure fair and equitable initial allocations. If the State were to do this, it would increase compliance with federal agencies and offer structured parameters for interested communities.

State guidelines (based on the MSA) could also require any community interested in establishing a CFA to create a document to describe and guide their CFA. This document should contain a business plan that lists the principles of the interested commun...
ity, provide transparency to both state and financial regulatory agencies, and provide a legal framework for the organization. It should also emphasize economic dependence on the fishery, current and historical harvests, as well as the potential benefits to the community. In addition to this business plan, the document should contain the following components:
I. Purpose of the Organization
Although this might vary a bit between communities, the document should clearly articulate the purpose of the organization. These should be in alignment with the overall goals of any CFA. Example goals might be:

- Ensuring the benefits of the CFA are spread through the community
- Encourage new entrants into the fishing community
- If working on a quota system, make sure all quota is fished.
- Work sustainably within the fisheries and the community.
- Create a cooperative mechanism that improves economic viability.

The goals of a CFA need to be applicable to the community, and thus be composed by the interested party. The State, however, should include a section of ‘clearly stated goals’ as part of its guidelines for interested communities. This will offer transparency to between their program, the various regulatory agencies, and the members of the organization.

II. Define the Community
This is likely one of the first obstacles any state would need to address in establishing guidelines for establishing a CFA, and it is potentially the most difficult. This is due to the fact that there are broad definitions of a fishing community. The State will need to ensure that their overall definition is applicable for all fishing communities, while also allowing flexibility that is tailored to fit local needs.

The MSA 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, and includes fishing vessel owners, operators, and crew and United States fish processors that are based in such community” (MSA 16 U.S.C. 1802 §3 16).
Whether the community is geographical, fishery specific or gear specific, the CFAs should offer incentives to the members without creating exclusivity on a public resource. The State should require that the document submitted by the CFA should contain a clearly stated definition of the community (for that CFA), as well as the criteria used to support that definition.

III. Financial Structure
This section of the document needs well-defined protocols to protect the organization and explain the overall financial soundness of the association. This portion of the document should include operational procedures, by-laws, and highlight the potential financial investors and stakeholders. Evidence of an equitable business plan, potential cash flow and other funding strategies should also be included.

IV. Sustainability Plan
This section is required by the MSA and would also protect the State’s interest in the fishery. The sustainability plan portion of the document needs to explain how the CFA will promote fishery conservation, harvest fish in a sustainable manner (i.e. limiting bycatch), and promote economic and ecological wellbeing. This portion should also include the gear that will be used and the potential social and community benefits. The sustainability plan should be highlighted in the business plan, but also part of the overall document to ensure compliance with the federal mandates.

V. Rights of the Members, Rights of the Organization and AntiTrust Laws
The document should outline the rights of the interested members and the organization to provide legal protection for all interested parties. The business plan should include a very detailed description of all the rights of the invested members, including repayment on debts, compensation, exiting and entering the program or association, and privilege to the fishery. The organization also needs to be clear in outlining potential reasons for the revocation of membership, expectations of members and implications of management.

VI. Participation Criteria
The document should include the eligibility of interested members and define the community by geographic region, interested fishery, etc. Participation criteria should be mostly composed by the organization and will vary with the different communities, however detailed conditions need to be required by the State. The MSA requires that the cultural and social framework be relative to the community, the harvesters be United States citizens, and fish be processed by United States vessels on United States soil (MSA 303A (D) (E)).

VII. Provisions for Monitoring
The document should include provisions for monitoring, as this is another way that
the organization can provide transparency to regulatory agencies. Ensuring that the CFA will provide plans for review and monitoring of their initial goals is part of the compliance with federal guidelines (MSA 303A. (G)) The State could mandate review of the relevant management plan and goals of the CFA at least every five years—and more often in the early stages of the program—to ensure appropriate measures and outcomes are being met.
There have been other proposed suggestions in ways that the State could offer assistance to CFAs. These suggestions include risk pools, a 'dummy vessel' that could hold quota, and finding flexibility within current regulations (e.g. permit transferability, landing permits, etc.). Although some of these ideas might hold merit within a CFA, none of them were part of current CFAs in the nation and more research is needed to support whether or not these notions would be applicable in the state of Oregon. Based on our initial review of currently operating CFAs in the nation (CCFT and MBCQF), the idea of a 'dummy vessel' was not preferred or utilized because these associations want their CFA to be run as a business and the CFA expects that, eventually, members will have the tools and financial means to create their own businesses. Ownership of a vessel is included in some of the CFA eligibility criteria, and is an example of the tools needed for independence. The idea and potential benefit of risk pools and permit flexibility was mentioned but the issue of exclusivity might then become an issue to non-members. The flexibility would need to be offered to all permit holders and fishermen who are not involved in the CFA. Incentives for community members to participate might be beneficial and are necessary for involvement, however it was reflected that there is a dance between incentives and exclusivity.

Lastly, this research brought into the light a strong belief that if the State wants to create guidelines that help organizations that want to establish a CFA, they will have to clearly define “fishing community.” In both the initial public outreach and engagement in Oregon, and the interviews from CFA programs in the nation, the importance of defining community came up over and over again. Fish are a moving resource, and many fishermen travel with their target species. Therefore, the members of the defined community should be the ones benefiting from the CFA.

This may be more challenging than it initially sounds. For example, both CCFT and MBCFQ defined their community by zip code of the fishermen bringing in the landings. Yet in Morro Bay, the community was defined by region since most of the landings were there, regardless of the fact that the fish was caught some place else. Although exclusivity cannot be offered on a public resource (i.e. fish), a CFA with a clearly defined community could offer incentives to encourage entrants. For example, CCFT buys permits and quota and then leases them to the CFA members at a price that is below market value. There is a geographic criterion to the CFA in Cape Cod; applicants must have lived in Cape Cod for at least 5 years to be applicable for the below market lease prices.
Conclusion

In conclusion, CFAs can provide potential benefits to communities. The most successful examples of these types of programs treat this form of management as business, and have developed plans and criteria suitable for any business plan. Financial backing for CFAs can come from a variety of different sources, including NGOs, the community of interest (commercial fishing), grants, federal funding, etc. The goals of CFAs can vary significantly. The overall goal of the CFAs studied in this research was to provide methods and incentives for their local fishermen (and fishing communities) to remain active and economically viable within the fishing industry. Incentives include, but are not limited to, the ability to lease quota at a subsidized rate, alternate practices with various fishing gears, a diversified portfolio of permits and quota, financial training and advice, and potential business plans for the fisherman to eventually purchase his/her own quota.

Misconceptions regarding CFAs were mentioned at the initial stage of outreach and engagement, specifically the fear of quota allocation and whether or not it would all be fished. Based on the research, the quota in both of the CCFT and MBCFQ was either leased back at a below market rate within the community or sold on the open market. The definition of ‘community’ was also a significant point of interest, and whether or not the ‘community’ would receive exclusivity or privileges based on geographic place. Both CCFT and MBCFQ define their communities by location. Both CCFT and MBCFQ offer incentives for eligible members, however, no exclusivity was granted to these various associations, and non-participating residents or fishermen still had access to quota, permits, and regional fishing grounds.

CFAs are not perfect for every community, and like any management or business strategy this type of program comes with its own set of obstacles. These obstacles include lack of incentive from individual members, large debt within the organization, and the need for financial support.

State and federal agencies should offer guidelines for communities interested in establishing a CFA. Structure and coordination within the legislation could provide parameters and a legal framework for potential CFAs, offering protection to all parties involved. Language within any State guidelines should be written to include ‘communities’ rather than ‘individuals’ as mandated by the MSA. State guidelines (based on the MSA) could also require any community interested in establishing a CFA to create a document to describe and guide their CFA. This document should contain a business plan that lists the principles of the interested community, provide transparency to both state and financial regulatory agencies, provide a legal framework for the organization, and emphasize economic dependence on the fishery, current and historical harvests, as well as the potential benefits to the community. The document should also contain components listed above. Finally, there should be a regular review and monitoring of these CFAs, and all management, in order to make sure that the goals of the
The organization are in compliance with regulations and ecological principles.
References


Community Development Partnership
http://www.capecdp.org/content/programs_and_services/small_business_programs/


Magnuson-Stevens Act: Limited Access Privilege Programs 16 U.S.C. 1853a Section303 A (a), (b), (c)

Magnuson-Stevens Act: Fishing Communities and Regional Fishing Associations. 16 U.S.C.1853a (3), (4)

Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006

Morro Bay Community Quota Fund
http://www.morrobaycommunityquotafund.org

NOAA Catch Share Policy

ORS Chapter 508, Section 822 http://www.leg.state.or.us/ors/508.html

Pomeroy, R. Connecticut Sea Grant Extension, Department of Agriculture and Resource Economics, University of Connecticut. (n.d.). Rights-based fisheries management (CTSG-04-02)

Port Orford Community Fishing Association New Entrants Program Report

APPENDIX B
ELIGIBILITY REQUIREMENTS FOR FISHING COMMUNITIES AND REGIONAL FISHERY ASSOCIATIONS
MSA § 303A

FISHING COMMUNITIES— IN GENERAL.—

(i) ELIGIBILITY.—To be eligible to participate in a limited access privilege program to harvest fish, a fishing community shall—

(I) be located within the management area of the relevant Council;

(II) meet criteria developed by the relevant Council, approved by the Secretary, and published in the Federal Register;

(III) consist of residents who conduct commercial or recreational fishing, processing, or fishery-dependent support businesses within the Council’s management area; and

(IV) develop and submit a community sustainability plan to the Council and the Secretary that demonstrates how the plan will address the social and economic development needs of coastal communities, including those that have not historically had the resources to participate in the fishery, for approval based on criteria developed by the Council that have been approved by the Secretary and published in the Federal Register.

REGIONAL FISHERY ASSOCIATIONS—

(A) IN GENERAL.—To be eligible to participate in a limited access privilege program to harvest fish, a regional fishery association shall—

(i) be located within the management area of the relevant Council;

(ii) meet criteria developed by the relevant Council, approved by the Secretary, and published in the Federal Register;

(iii) be a voluntary association with established by-laws and operating procedures;

(iv) consist of participants in the fishery who hold quota share that are designated for use in the specific region or subregion covered by the regional fishery association, including commercial or recreational fishing, processing, fishery-dependent support businesses, or fishing communities;

(v) not be eligible to receive an initial allocation of a limited access privilege but may acquire such privileges after the initial allocation, and may hold the annual fishing privileges of any limited access privileges it holds or the annual fishing privileges that is [sic] members contribute; and
(vi) develop and submit a regional fishery association plan to the Council and the Secretary for approval based on criteria developed by the Council that have been approved by the Secretary and published in the Federal Register.
**APPENDIX C**

Interview guide for the various audience groups regarding CFAs

**FISHING AND COASTAL COMMUNITY MEMBERS:** (Danielle Edwards, Brett Tolley, others?)

1. In what ways is your community dependent on fishing?
2. How should the 'fishing community' be defined?
3. What are the three biggest challenges you think fishermen face in trying to make a successful living these days?
4. Under what current regulations (permit programs, LAPs, catch share, IFQs, etc.) do fishermen work?
5. How do you feel about the current way quota is allocated? (Should there be caps? Quota connected to a boat? Have to be owner/operator? Etc.)
6. Please share with me what you know about CFAs?
7. Do you think CFAs are applicable to all fisheries and/or gears (e.g. crab, shrimp, groundfish; and why or why not)?
8. Do you think CFAs are applicable to all types of ports? (small, large, etc.; why or why not)
9. How should a CFA be set up? What kind of a system should a CFA be set up around? (For example, my understanding is that some CFAs are set up around quota, others are set up around infrastructure.)
10. Should the State or Federal agencies be involved with CFA implementation or management? How could they help or hurt CFAs?
11. What potential benefits might come from being a member of a CFA? Challenges?
12. Please share with me your perceptions of the future of commercial fishing? Do you see CFAs playing a role in helping to reach a positive future?
13. IF you feel comfortable, please share briefly about your insurance situation: are you insured? Is your boat insured? What finances your fishing business (banks, self, etc.)? Do you see a CFA helping with this?

**IF these folks have a current CFA, then ask these questions instead of #6 above:** (Cape Cod, Morro Bay, San Francisco, Port Orford, etc.)

1. What are the goals of your CFA?
2. What is the definition of community (fishing community) that you operate your CFA under?
3. What were the reasons your community decided to put a CFA in place?
4. Please share with me all the steps in the process of setting up your CFA?
5. What federal and/or state guidelines/rules informed the creation of your CFA? How about now?
6. What kind of a system is your CFA set up around? (For example, my understanding is that some CFAs are set up around quota, others are set up around infrastructure.) If set up under a quota system, how did/does your CFA get and give quota and to whom?
7. Who are the main financial backers of your CFA?
8. Who/what organization manages the CFA and your CFA process?
9. What are the benefits and downsides of the CFA?
10. What recommendations do you have for other states/communities regarding setting up and operating a successful CFA?

FINANCIAL FOLKS: (Jay Postalwate, Phoebe Higgins, Community Development Partnership, Peter Onsgad, others?)

1. What do fishermen need to acquire for financing/insurance?
2. Is there more opportunity for public or private funding in the fishing industry?
3. Do you see any benefit for fishermen to work in communities or groups, as opposed to remaining independent?
4. Please share with me what you know about CFAs?
5. Do you think CFAs are applicable to all fisheries and/or gears (e.g. crab, shrimp, groundfish; and why or why not)?
6. Do you think CFAs are applicable to all types of ports? (small, large, etc.; why or why not)
7. How should a CFA be set up? What kind of a system should a CFA be set up around? (For example, my understanding is that some CFAs are set up around quota, others are set up around infrastructure.)
8. Should the State or Federal agencies be involved with CFA implementation or management? How could they help or hurt CFAs?
9. Should the banks or other financial entities be involved with CFA implementation or management? How could they help or hurt CFAs?
10. What potential benefits might come from fishermen being a member of a CFA? Challenges?
11. Please share with me your perceptions of the future of commercial fishing? Do you see CFA’s playing a role in helping to reach a positive future?

ACADEMIA and people who study and support CFAs: (Madeleine Hall-Arber, Carrie Pomeroy, Steve Langton or Courtney Carothers, Paul Foley)

1. How should the ‘fishing community’ be defined?
2. What are the three biggest challenges you think fishermen face in trying to make a successful living these days?
3. Under what current regulations (permit programs, LAPs, catch share, IFQs, etc.) do fishermen work?
4. How do you feel about the current way quota is allocated? (Should there be caps? Quota connected to a boat? Have to be owner/operator? Etc.)
5. Please share with me what you know about CFAs?
6. Do you think CFAs are applicable to all fisheries and/or gears (e.g crab, shrimp, groundfish; and why or why not)?
7. Do you think CFAs are applicable to all types of ports? (small, large, etc.; why or why not)
8. How should a CFA be set up? What kind of a system should a CFA be set up around? (For example, my understanding is that some CFAs are set up around quota, others are set up around infrastructure.)
9. Should the State or Federal agencies be involved with CFA implementation or management? How could they help or hurt CFAs?
10. What potential benefits might come from being a member of a CFA? Challenges?
11. Please share with me your perceptions of the future of commercial fishing? Do you see CFA's playing a role in helping to reach a positive future?

AGENCIES, State (DFWs) and Federal (NMFS): Trish Clay, Jenny Thompson, Josh @ NMFS, others?

1. How should the 'fishing community' be defined?
2. What are the three biggest challenges you think fishermen face in trying to make a successful living these days?
3. In your experience, under what current regulations (permit programs, LAPs, catch share, IFQs, etc.) do you believe are the most successful for fishermen?
4. How do you feel about the current way quota is allocated? (Should there be caps? Quota connected to a boat? Have to be owner/operator? Etc.)
5. Please share with me what you know about CFAs?
6. Is there a way to create/implement a program, such as the CDQ or CQE in Alaska, in other states? Why or why not?
7. Is there a difference between a CFA and a RFA?
8. Do you think CFAs are applicable to all fisheries and/or gears (e.g crab, shrimp, groundfish; and why or why not)?
9. Do you think CFAs are applicable to all types of ports? (small, large, etc.; why or why not)
10. How should a CFA be set up? What kind of a system should a CFA be set up around? (For example, my understanding is that some CFAs are set up around quota, others are set up around infrastructure.)
11. Should the State or Federal agencies be involved with CFA implementation or management? How could they help or hurt CFAs?
12. What potential benefits might come from being a member of a CFA? Challenges?
13. Please share with me your perceptions of the future of commercial fishing? Do you see CFAs playing a role in helping to reach a positive future?