Case Study Examination of Programs Designed to Help Individuals and Communities through Fishery Disasters

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Abstract

In 2000, the US Congress responded to the industry-wide constriction of the West Coast groundfish industry by allocating \$5 million in disaster relief for Oregon, Washington, and California. Each state, with minimal federal oversight, designed and executed its own disaster response program to help impacted members of the fishing industry and coastal communities to cope with the downturn. While operating under the same broad goals set by the federal government, each state created different relief programs. Oregon focused on helping individual members of the fishing community to access social services. Washington used most of its money on economic development of coastal towns. California split their money among multiple programs, including payments to impacted individuals and cooperative fisheries research. While federal responses to fisheries disasters cost the government millions of dollars each year, they are rarely researched and poorly understood. There has been, as of yet, no comprehensive cataloguing of the socio-economic responses to the West Coast groundfish disaster, nor has there been an assessment of how well each state's program worked. The goal of this project was to document and compare the states' responses to the disaster, and to extract lessons-learned. Results indicate that people working in the fishing industry face many obstacles to leaving the fishery, and that aggressive, well-planned outreach programs are necessary for efforts to directly help members of the fishing community. It is hoped that this project will help both decision makers and those impacted by future fishery disaster responses.

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Case Study Examination of Programs Designed to Help Individuals and Communities through Fishery Disasters

Introduction

After two decades of rapid growth, Oregon's groundfish industry peaked in the middle 1990s, at which time it comprised approximately 40% of the state's total fisheries value (Husing et al., 2000). During this period of industry prosperity, most of Oregon's fishing ports had several, if not dozens, of trawlers tied up in their marinas and revenue from the industry supported hundreds of jobs in Oregon's coastal communities. Washington and California also had large fleets targeting groundfish, and between the three states, more than 11,000 vessels participated in the groundfish fishery between 1987 and 2000 (Scholz, 2003).

This halcyon period was not to last, and in the late 1990s the industry began a coast-wide constriction that continues at the time of this writing. While the cause of this downturn is not agreed upon, it appears to be the result of several causes, including the cumulative effects of decades of heavy fishing, poor stock recruitment, and management errors. As stock assessments began to reveal that populations of groundfish were much lower than anticipated, a newly amended piece of federal legislation — the Magnuson-Stevens Fishery Conservation and Management Act — mandated that fisheries councils more aggressively protect overfished stocks. The Pacific Fisheries Management Council, responsible for West Coast fish stocks, sharply cutback the amount of groundfish that the fleet was allowed to catch. However, even with these protective measures in place, current estimates predict that some species will not recover to legally fishable levels for almost a century (PFMC website).

The resulting drastic decreases in allowable groundfish catch left behind thousands of under and unemployed persons. These people included fishermen, their spouses, processor workers, gear store employees, and others. Some of these people managed to switch to other fisheries: crab in particular. For many, though, this was not possible, and with few other options, they faced the task of completely leaving the fishing industry. Community services were strained under the needs of these displaced workers as growing numbers of people exhausted their savings and then began to lose boats and homes.

Under local pressure, the states of Oregon, Washington and California requested federal assistance, and on January 26, 2000, United States Secretary of Commerce William Daley declared the West Coast groundfish fishery an economic disaster. The US Congress, in response to the declaration, allocated \$5 million in disaster relief funds to be used by the three states to help individuals and communities impacted by this downturn in the fishery. Funds were to be split in proportion to the disaster in each state: the final agreement gave California and Oregon each 35% of the funds (\$1.75 million) while Washington received 30% (\$1.5 million). Each state, within broad federal guidelines, was to design its own program that would best help their citizens. Plans were submitted to the National Marine Fisheries Service for federal review, and then funds were released to the states.

While all were seeking to help similar groups of people and all were operating under identical federal guidelines, Oregon, California and Washington each designed very different programs. Oregon's response focused on individual members of the fishing community and was designed to help affected people to access existing state and federal social services such as job retraining. Over 96% of Oregon's portion of the original disaster response funds went to financially support individual members of the fishing community as they attempted to transition out of the fishing industry. These payments, called "Groundfish Transition Income" were a key part of the state's Groundfish Disaster Outreach Program, which had been created prior to the release of federal funds. The remainder of the federal funding went to support a coast-wide network of outreach peers: trained members of the fishing community who helped other members of the community to transition out of the industry.

Unlike Oregon, Washington used their funding to broadly help coastal towns, rather than individuals, to adapt to the changing economic landscape. They channeled 80% of their money into a preexisting economic development program that was managed by the Washington Department of Community, Trade and Economic Development. The remaining 20% of their funds were spent on fisheries research for arrowtooth flounder: a recreationally targeted species.

California's approach was multifaceted. The state's original plan was to use just over half (51%) of their funding for a program of direct payments to fishermen. This Groundfish Disaster Stipends system was modeled partially from Oregon's Groundfish Transition Income. One third of the funds were to go towards collaborative groundfish research, using fishermen and fishing vessels together with scientists to try to better biologically understand the fishery. Thirteen percent was to reimburse vessel owners for purchases of Coast Guard required safety equipment. However, for reasons explored in this report, the fishing community did not respond the way program planners had hoped, and large portions of the funding for the disaster stipends and for the safety equipment programs went unused, and were reallocated into the ongoing collaborative groundfish research program.

While common and expensive, programs that attempt to assist individuals and communities with fisheries disasters are poorly understood and rarely documented. The goal of this study is to improve the understanding of fisheries disasters programs. The primary methods of research were ethnographic interviews with persons involved in fisheries disasters, and a literature review including many unpublished sources. Its specific objectives are to document and compare the three states' responses to the West Coast groundfish disaster, assess Oregon's response, and to explore the fisheries experience of these three states with that in Alaska. Because of their wide range of approaches, specifically evaluating the relative efficacy of each program would be impossible. This is especially true with Washington's response, which largely disappeared inside an existing program and seemed to be entirely unknown and forgotten even within its state boundaries and with the agency that used the funding. However, comparisons between states reveal telling similarities and differences in the programs that could be useful in future program design.

This report argues that while accessing social services like job retraining and food stamps is never an easy or pleasant task, that the process is particularly difficult for members of the fishing community. People who work in the fishing industry face a medley of unique obstacles different from the general population. These include a lack of familiarity with job-search skills and a demanding and unpredictable work schedule that makes adhering to traditional retraining programs extremely difficult. Research also shows that an aggressive, well-planned outreach program is necessary for any effort that aims to directly include people from the fishing industry. The traditional routes of advertising programs help, but the best success rates were found in areas where individuals actively recruited members of the fishing industry.

Fishery disaster programs cost federal and state governments millions to tens of millions of dollars annually¹, yet little research has been put into assessing them. It is hoped that this study will provide useful information for those planning existing and future responses to both fishing and non-fishing economic disasters.

¹ Or more. A NMFS representative reported hearing that fishery relief programs related to the 2005 hurricane season could cost over \$100 million.

Communities and Natural Resource Disasters: Context for the West Coast Groundfish Disaster

The following section lays a theoretical and historical context for this study by: 1. reviewing some of the different ways that social scientists study communities, 2. introducing the two communities that are the focus of this project, 3. examining some historic economic disasters, and 4. providing a detailed background for the West Coast groundfish disaster.

Defining Community

A common understanding of the term "community" is critical to study them, but finding a precise definition for the term has challenged sociologists and anthropologists for decades (Langdon-Pollock, 2004; Jacob, 2001). The resulting lack of consistent parameters between research projects complicates cross-study comparisons (Machlis and Force, 1988).

Traditional definitions of community often focused on geographic locations. In 1991, Wilkinson published a review of available literature and identified three common elements of community: 1. a locality, 2. a local society, and 3. a process of locally oriented collective actions, which he called a community field. By *locality* he meant a geographical location where people live and meet their daily needs. He defines *local society* as the network by which people meet their needs and express their common interests. His *community field* is the process of interrelated actions through which residents show their common interests in the local society (Wilkinson, 1991).

For many decades, sociologists believed that these three geo-centric elements went together in all communities, especially rural communities, which were generally very self-sufficient. However, with changes in technology, residents of communities increased their level of communication and travel outside of their geographical communities, and they began to form other communities with people and groups beyond their local areas (Flora et al., 1992). Consider the surge of bedroom communities throughout the United States, where people work in the city, live in the country, and may shop and recreate in either place or another one entirely.

Also consider the increasingly common use of the term "virtual community" which describes people who communicate with each other exclusively through computers. Such a group may span all geographic zones, and members may be of any age, race or gender. They may share neither a locality, a local society nor a community field. But while such a group might share very little in common life experiences and may never meet face-to-face, they may communicate with one another on a daily basis and identify themselves as part of a common group.

Complexities like these have frequently driven researchers to go beyond Wilkinson's common three elements. In a 1955 review of classic and contemporary literature, Hillery identified 94 different definitions of community in use in the social sciences (Hillery, 1955). More recent reviews (Jacob, 2001; Gilden et al., 1999) argue that with new means of communication, that number is only growing. To add to the complexity, any person is most certainly a member of several related or unrelated communities.

Because of the great range of possible definitions for community, it is critical that researchers carefully define the communities for any study (Machlis and Force, 1988). In this examination of the West Coast groundfish disaster (WCGD), two different broad definitions of community will be used: communities of place and communities of interest. These groupings (which are defined and discussed below) were selected for three reasons:

1. They best match the self-identification of the community members (fishermen are likely to view themselves as both as fishermen, and as residents of a particular town)

- 2. They best describe involved groups of interest in this study (members of the fishing industry impacted by the downturn in the groundfish industry and the people involved in assisting them)
- 3. They best reflect two definitions of communities outlined by the federal government in the relevant legislation, particularly the Magnuson-Stevens Fishery Conservation and Management Act.

Communities of Place

The Magnuson-Stevens Fishery Conservation and Management Act, or Magnuson-Stevens Act (MSA) is the primary piece of legislation guiding federal fisheries management. While it was initially concerned primarily with fish and the fishing industry, when the act was reauthorized in 1996, language was added which mandated that management decisions take into account their potential impacts on fishing communities. To that end, in section 312 of the MSA, the federal government defines fishing communities as:

> "geographic areas encompassing *a specific local* where residents are dependent on fishery resources or are engaged in the harvesting or processing of these resources". (62c FR 41911, italics added)

Here, the government's primary consideration is a specific location such as a coastal town. Sociologists and anthropologists refer to such groupings as a "communities of place" (Gilden et al., 1999). In this study, for example, most fishermen living on the West Coast would be members of a community of place such as Newport, Tacoma, or Eureka.

Considering people involved in the fishing industry as members of geographic areas can be very useful. While there are always limits on extrapolations possible from any grouping, there are sometimes broad differences between ports, some of which are caused by the specific geography of that area. For example, the lack of a true harbor in Port Orford limits the size of the fishing vessels in that port. As a result, fishing regulations affecting small vessels differently from large ones will impact Port Orford differently from a port that has mostly large vessels. Also, in wide scale fishery disasters such as the WCGD, the availability of non-fishing jobs in a community is important, too, and varies greatly between small ports like Port Orford and large ports, like Seattle. In these situations, recognizing fishermen as members of communities of place might help form informative theories.

However, defining communities exclusively by geographic location has limited utility. Consider a fisherman who lives Newport but fishes seven months of the year in Alaska. To which community of place does he or she belong? Many fishermen, particularly crewmembers who do not own vessels, frequently move from vessel to vessel, and also from town-to-town and even state-to-state. These people may not maintain permanent homes in any one geographic area. It is difficult to assign many people involved in the fishing industry to any one community of place.

Another limitation of looking at communities of place is that even in the busiest ports in Oregon, Washington and California, commercial fishing is only one of many industries and hence calling any town a "fishing town" may exaggerate the economic importance of the industry to the community. See Figure 1, which shows the relative economic importance of various industries in coastal economies. In reality, we have a community nested within another community; for example, the fishing community in Newport is part of the community of Newport as a whole.



Figure 1: Composition of private sector ocean economy by different measures. Note that light blue (indicated by arrow) includes both commercial fishing and aquaculture. From USCOP, 2004.

Communities of Interest

Perhaps recognizing these limitations, there is second definition of fishing community in the MSA:

"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 a community." –MSA Here the defining characteristic of the fishing community appears to be its dependence on or engagement in fishing.² This is an example of what Gilden et al. (1999) called a "community of interest". Such a community includes memberships in an occupation, business, commodity groups or clubs. By this definition fishermen, regardless of where they fish and live are members of a community of interest comprised of their coworkers at sea and the employees of the companies to which they sell their fish. This definition would allow researchers to view the West Coast's commercial fishing industry as one community, or to divide it incrementally into smaller industry segments such as targeted stocks ("shrimpers") or gear-type ("trawlers").

In many situations, the most useful way of defining a community may to recognize both geographical and interest-based parameters. Most fishermen are members of both communities of place and communities of interest, so it is reasonable to discuss the Oregon fishing community, for example. The National Marine Fisheries Service (NMFS, also called NOAA Fisheries) acknowledges this complexity and utility of both types of communities, and includes both in their definition of a fishing community as "a social or economic group whose members reside in a specific location. . . ." (NMFS website).

Communities Addressed in this Study

The focus of this study is largely on communities of interest; specifically the *fishing community* impacted by the collapse of the groundfish industry, and the

² This wording, not surprisingly, has come under much scrutiny. Jacobsen and others (2001) point out that this definition is only workable with a precise definition of what "substantially dependent" and "substantially engaged" mean.

community support/workforce retraining community that was involved in helping the members of the fishing community through the downturn of the commercial fishery.

The Fishing Community

For the purposes of this report, the term "fishing community" shall refer to the group of individuals substantially involved in the commercial West Coast groundfish industry.

This definition of the fishing community (FC) has limitations, particularly if one attempts to qualify individuals numerically. To begin with, consider that most fishermen are involved in more than one type of fishery. The ability to target several different species allows fishermen flexibility and potential economic resilience: when prices or availability of groundfish are low, boat owners may change fishing gear and go trawl for shrimp, and when shrimp prices are down, he may move to target crab. Crew may, similarly move from fishery to fishery. Diversification in the groundfish fishery is the rule, not the exception. Husing et al. (2002) found that 83% of Oregon commercial vessels targeting groundfish also held at least one permit for another fishery. Shore-side of the operations function similarly. Processing facilities that purchase groundfish from boats and prepare them for markets often work in other fisheries, too, so that they can respond to changes in availability, fishing seasons and markets.

Fishing vessels requires significant land-based support, but this support is often overlooked by research and statistics. Often this support comes from the spouse or partner of the fisherman. These support people perform a variety of duties, from keeping business records, doing taxes, checking fish prices, and advocating for fishing interests. As collective groups, "Fishermen's Wives" organizations have historically been active and powerful groups on the Pacific and Atlantic coasts of the US. As invested as business and emotional partners, these people are directly affected by industry downturns (Gilden et al., 1999).

Establishing meaningful numerical parameters to qualify members of the FC is also complicated by the paucity of available statistical data on fishermen and their fishery participation (PFMC website). Most funding for fisheries research goes into biological research. NMFS 2002 budget requests over \$200 million for biological fisheries research and only \$3.4 million for social research including economics and statistics (PFMC website). What little economic data exists on the FC is often combined with data from other groups, particularly timber (PFMC website). The general lack of data is due, in part, to the fact that fishing doesn't fit into the normal confines of most of the workforce and is hence difficult to fit into usual methods for studying workers. It is not an industry where people keep and record precise hours. Crewmembers on fishing boats are generally self-employed contractors, and many move from boat to boat and port to port. People are often paid based on catch, not the number of hours they work, and may work many days repairing boats and gear for no pay at all. Like people in many other industries, some fishermen do not report earnings to government officials in order to avoid paying taxes.

Identifying members of the groundfish industry is also challenging using *qualitative* methods. Trying to qualitatively establish defensible boundaries to the FC raises issues about whether the researcher or the subject is better equipped to know how integrated the subject is into the industry. Should researchers craft a set of rules to define who is and isn't involved in the groundfish industry? Or should they establish broad guidelines and allow individuals to self-assess their dependency on the industry? Jacob et al. (2001) points out the complexities in deciding between using self-assigned or criteria-assigned definitions for fishers, each with advantages and disadvantages.

Another challenge is to determine where "direct" influence of the fishery stops. Should the FC include only those who handle fish? What about commercial fishing's direct support network including boat builders, diesel mechanics, gear stores, marinas, ports, and bait shops? While these businesses do not catch or process fish, they are economically interdependent with fishermen; neither could function without the other. Linkages like these create a strong web that intertwines the fishing industry with a larger community (Jacob et al., 2001). Economic swings have strong impacts on these businesses, too, and when fisheries collapse businesses like these are sometimes forced to lay-off employees or even go out of business.

Finally, it is worth noting that, like most other groups, the fishing community is comprised of a very diverse group of people, ranging from processing plant owners who may primarily consider themselves businessmen or women, to fishers working on the high seas. The daily life of the head of a multi-state corporation running processor plants is very different from a crewmember on a boat. Such differences in experience foster a diversity of opinions. In a study of groundfishers' perspectives on conservation, scientists, managers and industry members, Harms and Sylvia (2001) remark on the diversity of opinion in this, even among fishers targeting the same species with identical gear. As a result of their breadth in experience and welldocumented feelings of independence, the FC often has difficulty banding together (Conway et al., 2000).

The Community Support/Workforce Retraining Community

For the purposes of this report, the term "the community support/workforce retraining community" shall refer to the group of individuals involved in helping impacted members of the FC with social services.

Like the FC, the CSWRC is a broad and heterogeneous group. It is comprised of government and non-government employees at a variety of agencies and

organizations. It includes caseworkers living in coastal communities and elected officials working in Washington D.C. Some members of the CSWRC are funded by federal programs, others by state or local governments or by various non-governmental organizations. Employees of various agencies may work directly with the FC on a daily basis, in activities including occupational training, or may help people to access food stamps, healthcare or other social services. Alternately, they may be involved more remotely — planning programs or executing the day-to-day functions necessary for relief programs' successes without regularly meeting with members of the FC. In Oregon, for example, workers at the Oregon Employment Department drafted and mailed checks to support members of the FC, and were regular contributors to the disaster response planning process but rarely worked directly with the FC. Because the CSWRC is a broad group with different goals and philosophies, its members may not immediately agree on the best way to address a specific problem.

Communities, Disasters and Disaster Relief

In the course of its existence, a community undergoes different stresses for a myriad of reasons. If such a stress is severe enough, it may be called a "disaster". Like "community", "disaster" is difficult to define (Kreps, 1989). When we think of a community disaster, we might think of a natural disaster (such as a hurricane or an earthquake), or a man-made disaster (such as war, or a reactor melt-down). However, social scientists use the term disaster to include all "events in which societies or their larger subunits (e.g. communities, regions) incur physical damages and losses and/or disruption of their routine functions" (Kreps, 1989).

When communities experience such an event, they undergo stress. Communities may show this stress in many different ways, including damage to the social fabric of

the community. Many communities may experience total or selective emigration as people move away. Like other stresses, disasters can damage residents' general well being (Raphael, 1986). Researchers found that communities significantly impacted by the 1980 eruption of Mt. St. Helens in Washington state saw increased rates of illness, alcohol abuse, family stress, violence and general violent behavior (Adams and Adams, 1984), while the World Health Organization estimated that up to half of those impacted by the 2004 Indian Ocean Tsunami will suffer from moderate to severe psychological distress, 5% to 10% would develop more persistent problems such as depression, or other anxiety disorders which would require intervention, and 1% to 2% would develop an incapacitating mental problem like psychosis (Miller, 2005).

The vulnerability of a community depends on many factors. Poverty and socioeconomic vulnerability are two traits that have been found to decrease a community's ability to constructively respond to a disaster (Raphael, 1986): these are traits often associated with rural communities (Freudenburg and Frickel, 1994). However, studies argue that no matter how well prepared or warned a community may be, that a disaster will stress it (Raphael, 1986; Kreps, 1989).

Federal, state and local governments, as well as various non-government organizations, often try to assist communities impacted by disasters. Relief programs vary as widely as do causes of disasters, and range from helping people to protect their homes during flooding events, to rebuilding their homes after fires, or paying for retraining or relocation of people impacted by economic disasters. Disaster relief may target particular industries or whole regions. In the US, federal response dates back to the Congressional Act of 1803. The Disaster Relief act of 1974 formalized the process of presidential disaster declarations, and five years later President Carter and Congress created the Federal Emergency Management Act (FEMA) to create the federal government's best-known relief coordination plan. In addition to FEMA, there are many other federal and state responses that tap into different pools of funding. The specific type of disaster declared is the result of political and economic pressures, and the ability of a specific disaster to meet the criteria of each program. Additionally, and increasingly often, states facing disasters are circumventing many of the traditional pathways of accessing federal disaster funds and are having congress members add relief dollars directly to different sections of federal budgets (NMFS, personal communication). This makes assigning specific dollar amounts to disaster relief responses difficult. However, as an example, in 2001 \$31.2 million were spent in NOAA administered fisheries disaster relief programs (Catalog of Federal Domestic Assistance website). A NMFS disaster coordinator for the Southeast Regional Office reported hearing request estimates exceeding \$100 million for fisheries disaster relief after the 2005 hurricane season (NMFS, personal communication).

Economic Disasters: Theory and Background

While rarely as dramatic as natural disasters, one type of disaster causing interference with a community's daily functioning is an economic disaster. Such a disaster could be caused by large-scale layoffs at a local factory, a plant closure, or a change in regulations that forces people to stop logging, fishing, or mining. Rural communities are often particularly susceptible to economic disasters due to market and regulatory forces outside their control (Overdevest and Green, 1995), and as a result, resource dependent communities have been estimated to be five to ten times less economically stable than the average community nationwide (Freudenburg and Frickel, 1994). In addition to the social stress responses outlined previously, economic disasters often result in emigration, as people move to find new employment.

The following section considers several specific economic disasters of different types and, where applicable, the response/relief programs resulting from them.

EXAMPLE 1: Pacific Northwest Aluminum Smelter Closures

Aluminum smelters, following the inexpensive hydroelectric power, began to appear in the in the Pacific Northwest in the early 1950s and rapidly became a significant part of the northwest's economy. The smelters remained a huge employer for decades, and a 2000 report asserted that with their existence in the region accounted for nearly 40,000 jobs (10,370 direct and 29,180 indirect), and their taxes provided \$141 million to state and local coffers (Backus and Kleeman, 2000). Low energy prices were critical for the competitiveness of the industry.

The sudden spike in electricity prices in 2000 and 2001 cut into profits and led to a massive constriction of the industry nationwide (Binczewski, 2002). Smelter closures caused the *direct* loss of 6,069 jobs distributed unevenly throughout the Pacific Northwest (75% in Washington, 17% in Oregon and 5% in Montana). However, an analysis found that with a multiplier effect over 17,600 jobs were lost (Backus and Kleeman, 2000). This multiplier effect includes positions lost at companies that sold products or services to the aluminum smelters and also the impacts of reduced disposable income in the communities.

Long-term projections estimate that while the impacts of these closures will be minimal when viewed from a regional or state level, that they will be pronounced at the county level. As the result of the industry constriction, Klickitat County, Washington, is expected to lose nearly 18% of its population by 2020, and Wasco, Oregon, is predicted to see about half of that, with a total loss of about 8.5% of its population.

EXAMPLE 2: The Pacific Northwest Timber Industry

For another example of an economic disaster in rural communities, we might look at the timber industry in the Pacific Northwest in the 1980s and 1990s. Timber had been an economic mainstay for much of the region's history, and in 1968 lumber and wood products accounted for 10% of Oregon civilian employment (Weeks, 1990).

Beginning in the late 1970s, the timber industry underwent significant changes in response to market, environmental, and technological shifts, including increased foreign and domestic competition, stricter interpretation of federal laws³, and a changing public view of how national forests ought to be managed (Conway and Wells, 1994). Between 1979 and 1988, the timber industry in Washington and Oregon cut more than 25,000 jobs as mills closed across the region (Pissot, 1993). This trend continued into the 1990s.

³ In particular, the Endangered Species Act which began a battle between industry and protection of the Spotted Owl.

Like in the aluminum constriction, looking only at the numbers of layoffs and closures understate the effect of this trend on Pacific Northwest communities. For a better understanding of the consequences of this economic disaster on rural communities we need to look at a smaller scale.

In 1990, there were mills operating in 34 of Oregon's 36 counties. In 24 of those counties, mills were the primary employers. In 17 counties, timber accounted for over 50% of manufacturing jobs. Further, (still in 1990), of 62 towns in Oregon with populations less than 3000, 80% of manufacturing work was in wood products. The first mills to close were in these small communities (Weeks, 1990).

After the layoffs resulting from the mill closures, communities' ability to recover varied by region and by demographics. In general, studies showed that loggers were hindered from reentering the workforce by the degree to which they felt their identity and shared meanings in life were tied into their logging (Carroll and Lee, 1990). Older workers had a markedly harder time finding new jobs, with 80% of those between 45 and 55 finding work only after agreeing to take a pay-cut. Those older than 55 were harder hit, still, and 8 months after a layoff 42% were still looking for work (numbers include only those actively looking for work). Seventy percent of the people in this community were from these two age groups (Weeks, 1990).

The effects of these disasters on their communities were marked, and not always intuitive. During the period of these layoffs, there was a decrease in high school enrollment in five of six communities studied by Weeks in 1990, presumably the result of working-age families leaving to take jobs or search for work elsewhere. However, the overall decrease in the population of the town is smaller than would be expected: one of the timber-dependent towns actually grew during the timber crisis. The demographic data gathered by Weeks shows that this is the result of selective migration in and out of the community based largely on age. In 1985, about 13% of Oregon's population was over 64 years of age. In all of the six post-disaster timber communities the percentage was above the state average. Four of them had two times the average percentage of people over 64 (Weeks, 1990).

Weeks argues that that this aging of the mill communities' structures will likely continue as communities lose their ability to provide jobs for new workers and as retirees move in. His survey findings back his prediction with 37% of people surveyed who were under 30 predicting that they would be looking for work outside of the community within the next five years. Thirty-one percent of respondents between 31 and 45 years of age felt similarly.

Layoffs have also direct effects on community health. Economic instability has been correlated with a lessening of support for community institutions (police, fire departments, parks, libraries, etc), likely the result of people feeling a need to economically brace themselves. A later study found that while many of Oregon's rural towns experienced economic challenges during the years of the timber crisis, that towns with mill closures generally took a bigger blow than those without (WRTC).

Governmental response to these layoffs was multifaceted. Employees of plants generally qualified for unemployment insurance. While this assisted them with paying bills, it was a substantial pay-cut. Those who were retrained often found jobs paying substantially less than their mill jobs had.

Communities received some assistance through the Northwest Economic Adjustment Initiative, the economic portion of the Northwest Forest Plan (Raettig and Christensen, 1999). The federal response exceeded \$1 billion. Its stated goals were to:

> "develop, stabilize and augment the capacity of individuals, businesses, communities and tribes to adjust to, and thrive in the face of declining timber harvests, by increasing the scope and effectiveness of federal investments in economic and community assistance through improved coordination and integration of federal, state and local resources and efforts." –Northwest Forest Plan, in Raettig and Christensen, 1999

The program funded various projects to try to assist communities in adjusting and to provide employment (Raettig and Christensen, 1999). A study in California found that it had created roughly the same number of jobs that the timber industry had lost, but that they jobs were not necessarily in the same region as the layoffs (WRTC).

Fishery Disasters

Like loggers, the commercial fishing industry is heavily dependent on environmental and regulatory conditions over which they have little control. Firm business plans are difficult if not impossible to craft. The FC must deal with constantly changing ocean and weather conditions. Some of these conditions, like strong winds, may change hourly, where others, such as climate variability, may be inter-annual (e.g. El Niño), or decadal (e.g., the Pacific Decadal Oscillation). People have adapted to these natural cycles, and the result is a well documented, if unpredictable, boom and busty cycle in many fisheries.

Many members of the FC now complain that human behavior, especially fishing regulations, are nearly as unpredictable as natural cycles. When fishing is good and fishermen are perceived to be making lots of money, non-fishermen buy boats and start fishing. Soon there is over-capitalization, with too many boats chasing too few fish and fishery managers reduce the amount of fish that the FC is allowed to catch. Prices change quickly based on immediate availability of goods, but, unlike timber workers, fishermen can rarely hold onto product and wait for more favorable market conditions.

These factors contribute to making the FC particularly economically volatile. While the legends of fishermen making tens of thousands of dollars in a few days are well remembered, stories of them going broke overnight or over several years are just as true.

EXAMPLE 3: The Atlantic Cod Disaster

Few, if any fisheries disasters have been so well documented as the North Atlantic groundfish disaster. While still called "groundfish", the term, as will be discussed below, refers to a different group of fish than those that are the focus of this West Coast study.

The North Atlantic fishery has historically been dominated by one species: Atlantic Cod (*Gadus morhua*). The cod fishery extends back far into human's prehistory. By 1000 AD the Basques were trading salted cod throughout Europe, and it is speculated that tight-lipped Basque fishermen were plying North America's coastline for cod long before Columbus first sighted it (Kurlansky, 1997). Early Americans claimed that the cod were so plentiful that one could catch fish by simply wading into the ocean with baskets.

While computing pre-fishing stock levels based on historic descriptions of abundance is extremely difficult (though attempted: see Jackson et al., 2001, and Meyers and Worm, 2003) what seems clear is that there were once nearly unfathomable numbers of Atlantic Cod along the northeastern seaboard of North America.

Targeted by fishermen throughout its range, in the 20th century the most productive waters were those off the Atlantic seaboard of Canada and the northeast US. Similar to the US West Coast groundfish industry, industrial-scale cod fishing was slow to grow, with foreign vessels leading the way. When foreign fleets were expelled from Canadian waters following Canada's 1976 declaration of a 200-mile fishery conservation zone, a swelling domestic fleet quickly replaced them.

After decades of large-vessel, industrial fishing, catches began to fall. Stocks were greatly depleted, and management schemes, even aggressive ones, did not seem

to be helping. By 1992, Atlantic Cod biomass was at one percent of its estimated unexploited level (Hamilton and Butler, 2001).

In 1992, the Canadian government enacted a moratorium on commercial groundfishing on their Atlantic Seaboard, terminating a fishery that had supported European settlement of North America (Innis, 1978; Kurlansky, 1997 in Hamilton and Butler, 2001) and shaped local cultures for five hundred years (Sider, 1986; Sinclair; 1988, Cadow and Corbin, 1997 in Hamilton and Butler, 2001).

The Canadian government responded with huge relief programs, beginning with the CA\$484 million Northern Cod Adjustment and Recovery Program, which was soon eclipsed by the staggering CA\$1.9 billion program called The Atlantic Groundfish Strategy (TAGS). TAGS had more than 52,000 applicants and eventually served 40,000 displaced groundfish fishers and processor workers (Prince, 1999). Its three main goals (from Prince, 1999) were:

 Labor adjustment: provided financial support for impacted fishers and plant workers, as well as career planning, counseling and other reemployment-related assistance. Also available were literacy and basic skills training
Capacity reduction: limited licenses and provided two "early retirement" programs. Goal was a 50% reduction in fleet capacity
Community economic development: aimed to help community and individual adjustment, employment creation and economic diversification.

When the TAGS program ended, the government added another \$730 million for retraining and restructuring adjustments for displaced workers (Hamilton and Butler, 2001) which was spent on retiring fishing licenses, TAGS final, lump-sum payments, community and economic development, and early retirement incentives (Prince, 1999).

In an assessment of the disaster and its relief programs, Hamilton and Butler (2001) found that instead of creating new social problems, the industry collapse merely accelerated previous trends dating back to the late 1980s when the "gloryyears" of seemingly limitless resource extraction ended. They argue that the relief programs only postponed or distributed existing problems over more years (Hamilton and Butler, 2001). Additionally, they assert that the value of the coast's fisheries are now comparable to what they were before the disaster, but that the distribution of wealth is now different and less "democratic" as the fisheries that have taken the place of cod generally require more expensive gear, and are hence more prone to consolidation. It is this new distribution, they argue, and not a lack of revenue for the fishery that is causing social stress.

EXAMPLE 4: The Salmon Disaster

For decades, the five species of salmonids on the West Coast were a mainstay of the regional economy (Montgomery, 2004). Plentiful almost beyond belief, the fish migrated annually to spawn in the rivers of the Pacific Northwest from southern California to the entire coast of Alaska. For various natural and anthropogenic reasons salmon runs decreased drastically during the second half the 20th century and continue at relatively low levels today.

While salmon, which require both ocean and freshwater habitat, were always vulnerable to natural cycles, a strong drought and poor ocean conditions, coupled with other complications, led to particularly low catches in the early 1990s. In 1994 the federal government declared a fishery disaster for the West Coast of the US. More than \$24 million was allocated to salmon disaster relief programs in Oregon, California and Washington. (Gilden and Smith, 1996b). Some of the uses of the money included:

• \$12 million of National Oceanic and Atmospheric Administration (NOAA) money spent under the Northwest Emergency Assistance Plan (Gilden and Smith, 1996b) on habitat restoration, data collection, and a vessel-license buyback program that resulted in the retirement of 302 of the existing 1378 Washington salmon troll, Washington charter and Columbia River gillnet licenses.

• \$9 million in FEMA disaster unemployment dollars was split among the three states (\$2 million for Oregon, \$5.8 million for Washington, and \$1.3 million for California).

In general, the program, especially the FEMA portion, viewed the disaster as biological, not manmade, and was designed as a tool for helping people through a tough time, not to remove people from the fishery (Gilden and Smith, 1996a).

The program in Oregon was publicized with mailings to all license holders, as well as newspaper and radio advertisements about available benefits. "You'd have had to live in a cave to not know about it after a couple of months," said a person involved in the program's outreach. Later in the program, nine ports in Oregon had part-time contracted employees, paid by the program, who were there to help with outreach efforts: to answer questions and find potential aid recipients. However, only fishermen were targeted by these outreach efforts, and only fishermen were qualified to receive benefits: not people who worked in processors or other businesses supported by the salmon fishing industry. This omission of non-fishing members of the industry from the program was "one of the failures of the program", felt a program coordinator. It also failed, he continued, to provide any retraining.

The predominant uses of FEMA unemployment money, according to a survey done in 1996 by Gilden and Smith, were family living expenses, purchasing Coast Guard required equipment (such as life-rafts, and EPIRBs – emergency position indicating radio beacons), and purchasing fishing gear.

Despite the large amount of money spent, the program was not generally wellliked (Gilden and Smith, 1996a, 1996b) and only a third of troll-permit owners applied for the relief, despite the fact that most (83%) who did apply were awarded some sort of relief (although only 39% felt they got what they needed) (Gilden and Smith, 1996b). Of those who did not apply, a third felt that they were not eligible, and a quarter did not know about the program. A few did not apply because they did not approve of what they viewed as "government handouts". Only a quarter of those who did not attempt to get aid cited a lack of need as the reason for not applying. Similar results were found in a survey of gillnet fishers.

In their 1996 research, Gilden and Smith found the following dominant complaints about the salmon disaster relief programs amongst salmon troll permit holders:

- Much of the help went to people who did not deserve or need it
- General expectations of the program were not met
- Those least in need got most of the help
- Eligibility was difficult or impossible to prove for those who had lost records or had been injured or performing major boat repairs during qualifying years.
- The rules, which were inconsistent for each type of aid, were too confusing.

In the end, trollers felt that the program could have been greatly improved through a better publicized, more timely, fair and equitable distribution of available funds.

The West Coast Groundfish Industry and Disaster

Groundfish Biology and Management

Through both deliberate and accidental linguistic changes, the term "groundfish" has gained context-dependent definitions, and a groundfish in Oregon is not the same as a groundfish in Maine. For consistency, and appropriateness to this study, this report uses the Pacific Fishery Management Council's (PFMC) definition. The PFMC's definition of includes more than 80 different species including 64 species of rockfish, 12 species of flatfish, 6 species of roundfish, and 6 species of sharks and skates.

Generally, these species live on or near the seafloor, but it is important to note that not all fish on the seafloor are managed as groundfish, nor do all groundfish live near the seafloor. For example, Pacific halibut, a high-value fish that lives on the ocean floor and is targeted by commercial fishermen throughout its range, is not managed as a groundfish, and is not, for legal reasons, targeted by the groundfish fleet. Pacific whiting , which schools primarily in pelagic waters *is* managed by the PFMC as a groundfish and is, in fact the largest part of the West Coast groundfish catch (by tonnage). However, it is a relatively low value fish, and is most often targeted by large vessels unrelated to the rest of the groundfish industry. For this reason, very few of the people involved in this report were related to this subsection of the industry.

Groundfish are often marketed under overlapping or conflicting names. This is at least partially the result of early efforts to increase the marketability of the fish. In 1979 the Oregon legislature legalized the renaming of fish species in an attempt to increase domestic demand for what were then low-value fish. All species of rockfish became "snapper", sablefish became "butterfish" or "black cod" and hake was renamed "Pacific whiting" (unrelated to Atlantic whiting). These were all clearly attempts to tap into existing demand for fish of the same names from other regions. (Mansfield 2001). The names stuck, and today "red snapper" or "snapper" is used to
refer to any rockfish, of which there are over 60 species (Love et al., 2002). Lingcod, a popular roundfish that is the 8th most important commercial species economically in the Puget Sound, is not related to the Atlantic Cod. And Pacific Ocean Perch, an important groundfish species in early years of the fishery, is not a true perch. Pacific whiting, which was considered for decades to be a trash fish, has found new favor as artificial crab.

Because they are such a diverse group, there are many different ways to harvest groundfish, including using individual hooks or traps. But by far the most popular way is trawling, which accounts for approximately 90% of the commercial catch (PFMC, 1997 data). There are two main types of trawling. In bottom-trawling a rectangular, funnel-shaped net is pulled through the water along the seafloor (see Figure 2). Bottom trawl nets are huge and funnel shaped. The mouth of a large bottom trawl net can be up to 200' wide and 12' high. The net is towed along the seafloor, often with various types of "rolling gear" which helps protect the bottom lip of the net and prevent it from snagging on rocky terrain. From the mouth the net tapers, funneling fish back into the narrow "cod" end, where fish are trapped. Midwater trawl nets are pulled through the water depth the boat determines to be optimal, never touching the bottom. Because they do not have the drag associated with scraping along the seafloor, they can be larger, sometimes up to 400' on a side and 1000' long. Midwater trawls in the groundfish fishery primarily target Pacific whiting and Widow rockfish (Johnson, 2003).



Figure 2: Bottom trawling (from PMCC website).

Coastal states and the federal government share responsibility for the management of ocean-dwelling fish stocks. States control the portion of the ocean from the shore to a distance of three miles seaward (Kalo et al., 2002). The federal government, through fisheries councils, controls fishing in the region from the edge of the states' boundaries to the edge of the national boundary at a distance of 200 nautical miles from the shore. In practice, many stocks are managed jointly by state and federal interests, reflecting both the logistical advantages of working together and the reality of fish migration between federal and state waters.

Fisheries councils, established by the MSA in 1976, were created to allow coastal regions to exercise influence on the federal government's (NMFS) decisions concerning the management of the fisheries off their shores. There are eight councils spanning the waters of the nation. On the Pacific coast of the mainland US there are two: the North Pacific Fisheries Management Council (NPFMC) which covers federal waters surrounding Alaska, and the Pacific Fisheries Management Council (PFMC) which manages the waters off the coasts of Washington, Oregon, and California. Management councils, with the help of several other government and non-government agencies, determine catch-levels for managed species, and may control allocation of the total catch among various stakeholders. Fishery Management Councils also set restrictions on how, where and when fish may be caught. The management decisions are then passed on to NMFS, which holds final regulatory power.

If a particular species of fish is determined to be "overfished", NMFS is legally obligated to take measures to protect it. Management of groundfish has proven to be particularly challenging for the PFMC. Because of the physiology of most groundfish (in particular the swim bladder that the fish use to regulate their buoyancy), very few survive if released, so managers cannot merely require fishermen to "throw back" overfished species caught inadvertently. Because groundfish often associate with other fish, it is difficult to target specific species of fish. This is particularly true for bottom trawling. This makes management of individual species challenging for fishermen and managers alike (Radtke, 2004, Mansfield, 2001). These complications and others often lead to heavy-handed management policies, such as the current (2005) area closures where large areas of the Pacific shelf are entirely closed to bottom fishing due to the low populations of a few species of groundfish. (PFMC website)

Groundfish History

Human use of groundfish on the West Coast dates back to the arrival of early migrants the region over 10,000 years ago. For the past hundred and fifty years total catch has grown and shrunk in response primarily to human, rather than natural causes. When demands rose and technology improved, catches increased. Fishermen, responding to economic forces, increased total effort to match not just their personal goals, but also those of the government that created incentives to develop growth. We can broadly divide the path of the fishery into four periods (adapted from Hanna, 2004):

- 1. The early years when demand and fishing effort was generally minimal
- 2. The post-war slump and rising foreign pressure, when the US ignored groundfish stocks
- 3. The boom when demand and effort skyrocketed
- 4. An ongoing period of fish and fishing decline

The Early Years (Prehistory to WWII)

While groundfish have been caught and used by humans for thousands of years, they were rarely targeted commercially until the middle of the nineteenth century. Catching them with hook and line was time-consuming, and markets showed little interest for the fish, which was thought to be of low quality (Mansfield, 2001). In 1876 the first version of bottom trawling gear, called the Paranzella Net, arrived in San Francisco. Suddenly catching large numbers of groundfish was easy, making the fish profitable despite the low prices for individual fish. Within a year of bottom trawling gear's arrival, there was controversy surrounding its use and their perceived destructive effects on fish stocks. By 1887, just eleven years after the introduction of the trawl to the bay, fishermen were complaining that San Francisco Harbor was completely "depleted of fish" (PMCC). The controversy surrounding trawling continues today.

In early years, bottom trawling was done with two sailing vessels, each holding a side of the net. As technology improved, so did efficacy of the fishery. In 1885 the first steam-powered trawl vessels started working in waters off California, and by the late 1920s gas-power began to replace steam, offering more power and enabling fishing boats to use bigger nets. The otter trawl, a mechanism that used the motion of the boat to keep mouths of nets open, allowed individual boats to pull nets, effectively doubled the size of the trawling fleet.

Markets, though, remained soft, (most of the fish was used as mink food for the burgeoning fur-farms industry) until the beginning of World War II when demand for meat substitute grew, as did the need for a source of vitamin A (easily extracted from fish livers). Growing demand, coupled with continuing net improvement, drove the West Coast trawl catch to increase ten-fold in the first three years of the 1940s (Radtke et al., 1998).

Post-War Slump and Rising Foreign Pressure (WWII-1976)

When the war ended, demand for groundfish decreased, and again the primary use of the low-value fish was for animal feed. Domestic interest for groundfish remained at low levels in the Pacific for the next couple of decades. However, foreign vessels, particularly from Japan and the Soviet Union, put considerable effort into fishing for groundfish, particularly Pacific Ocean Perch, which were harvested in great quantities off the Oregon and Washington coasts beginning in 1963 and off Alaska a decade before (Radtke et al., 1998). By 1966 there were 115 foreign vessels, mostly trawlers, fishing in the waters outside of the territorial sea boundaries then recognized by international law at a distance of 12 nautical miles from shore (Husing et al., 2002).

The US government and its citizens watched the growing foreign fleets just off their shores with increasing concern (Hanna, 2004). As a small and aging domestic fishing fleet (many of which were converted WW II vessels) was out-fished by foreign competitors, US imports of seafoods were steadily increasing. In 1969, amid growing public concern, the US Commission on Marine Science, Engineering and Resources (more commonly known as the "Stratton Commission") released a report to Congress stressing the need for a national interest in fishery rehabilitation, development and expansion to create wealth for the nation. In 1973 Congress responded with the Eastland Resolution, which committed the federal government to provide "all support necessary" to help the US fishing industry (Hanna, 2000).

In 1976, congress passed the Fisheries Conservation and Management Act (FCMA). Heavy on fishing incentives and light on conservation goals, this piece of

legislation expanded US control of exclusive fishing rights from the current 12 nautical miles to 200 nautical miles from the US shoreline (Kalo et al., 2002). Without this expansion of US control it is unlikely that the US groundfish fleet ever would have developed (Mansfield, 2001). Over the next decade and a half, foreign fleets were pushed out, and there was great encouragement to fish now, and fish hard (Radtke et al., 1998).

Unlike the US's east coast fisheries, which were already fully developed, there was a tremendous hope that rapidly growing fisheries on the West Coast, particularly groundfish, might help augment incomes in the Pacific Northwest coast. It was postulated that Oregon's coastal economy, traditionally reliant on seasonal natural resources and tourism, might be able to decrease its marked seasonal and total unemployment. In particular, the mid-1970s saw downturns in Oregon's timber, salmon and shrimp industries (Mansfield, 2001). Oregon Congressman Jim Weaver argued that "the development of a healthy processing industry for [groundfish] could significantly alter the employment situation in every coastal county from northern California to the Olympic peninsula" (Mansfield, 2001).

The Boom (1977-1989)

To encourage growth in the fishing industry, the federal government provided incentives through programs like the Farm Credit Act, Production Credit Associations, the Capital Construction Fund, and the Fishing Vessel Obligation Guarantee Program (Radtke et al., 1998, Mansfield, 2001). Some of these were new programs, created specifically for the fishing fleet, while others were existing programs that were expanded to encompass fishing. These programs – through low interest loans, federal backing of bank loans, and tax deferments – encouraged capital investment in fishing vessels, gear and technology and enabled members of the FC to enter what would otherwise be a prohibitively expensive fishery. The average vessel pursuing Pacific whiting, for example, cost between \$1-3 million in the early 1980s, while building a new factory trawler or converting a cargo ship into a factory trawler cost \$18-22 million (in 1982 dollars) (WCFDF, 1982).

These economic incentives were driven by a growing public and political push for increased fishing off US shores. In 1968, Senator Warren Magnuson demanded swift and decisive moves by federal fishery managers, insisting that:

> "You have no time to form study committees. You have no time for biologically researching the animal. ... Your time must be devoted to determining how we can get out and catch fish. Every activity...whether by the federal or state governments, should be primarily programmed to that goal. Let us not study our resources to death, let us harvest them..." –Warren Magnuson (from Hanna, 2004)

Fishermen across the US responded enthusiastically to the incentives and to a general feeling of national optimism, and the entire US fishing fleet swelled accordingly. Few segments, though, grew as quickly as the West Coast groundfish industry, which between 1980-89 grew from 42% to 70% of the total catch (by tonnage) on the West Coast (PFMC website). Catch of Pacific whiting increased more than a thousand-fold between 1976 and 1991, while catches of other groundfish doubled between the mid-1970s and the early 1980s (Mansfield, 2001).

Initially, there were substantial joint ventures between domestic and foreign vessels, particularly with whiting, which was passed from US fishing vessels to foreign processing vessels. This allowed domestic land-based infrastructure to develop more gradually than the fleet. As processor capacity increased to the levels needed to process the catch of the fleet, foreign vessels were slowly pushed out of US waters over the next decade and a half, leaving a new domestic fleet to catch all the groundfish they could manage (Radtke, 1998).

Industry Constriction (1989-present)

West Coast groundfish catches peaked in the early 1980s (Hanna, 2000), and then began a long-term decline. See Figure 3. The decreased catch was due to numerous factors, both natural and human caused.



Figure 3: US West Coast groundfish landings, 1981-2000. Modified from Husing et al. 2002.

Biologically, a string of five El Niños, including two of the strongest on record, temporarily changed fish migration patterns, decreased growth rates, and raised natural mortality. The 1982 El Niño, in particular, was a breaking point for many, causing fishermen to lose boats and homes to creditors. The 1997-98 El Niño event was even stronger. Adding to this were larger-scale, basin-wide changes in ocean conditions resulting from what is now recognized as the Pacific Decadal Oscillation.

These natural phenomena, coupled with the explosion of fishing effort, rapidly depleted fish stocks. By 1989 fishing effort could no longer be maintained: there were

too many boats chasing too few fish and many could not make a profit from their catch (Hanna, 2000). Fishermen anticipated this, and in 1986 went to the PFMC and asked it to limit the number of boats allowed in the fishery. From the late 1980s to the early 1990s, the PFMC responded, and instituted increasingly restrictive management practices, including reduced trip limits, shorter fishing seasons, bycatch limits, and gear restrictions. Finally, in 1994, the PFMC passed Amendment 6, which created a limited-entry portion of the fishery and, for the first time, restricted recreational catch of groundfish.

The federal government also recognized the growing threats to groundfish populations. In 1996, spurred on by similar problems in other parts of the country, the US Congress passed major amendments to the FCMA. This amended act is has several common names, including the Sustainable Fisheries Act, the Magnuson-Stevens Fishery Conservation and Management Act, or the Magnuson Stevens Act (MSA). While the legislation was clear on objectives, it was less so on how these goals were to be realized, leading some to criticize the MSA for sending "strong signals on conservation, but weak signals on management tools to implement these changes" (Radtke et al., 1998). For example, the MSA clearly defines acceptable fishery stock levels (as a percentage of the estimated unexploited population). Fish stocks below a certain level are declared "overfished". When a fish is determined to be overfished, fishery management councils are mandated to rebuild overfished stocks as quickly as possible. How to best do this, though, is left largely to the councils' discretion.

The council, already struggling with shrinking groundfish catches (by 2000, Oregon's catch of groundfish had dropped from a 20-year average of 74,000 tons to just 27,000 tons (Hanna, 2004)), was forced by the revised MSA to become more aggressive about stock preservation. In 2002, under MSA guidelines, the PFMC declared nine species of groundfish overfished. Their extremely slow growth rate (Rougheye rockfish in Alaska have been aged to 205 years (Love et al., 2002)) coupled with a high degree of scientific uncertainty left the PFMC no choice but to follow a conservative management. Part way through 2002, the PFMC closed essentially the entire continental shelf to bottom trawling. The growth bubble, it seemed, had burst.

Current Status of the Fishery

Of the nine species of groundfish listed as overfished by the PFMC in 2002 only one, Pacific whiting, has recovered to fishable levels. Unlike whiting, most of the remaining overfished species mature slowly (Love et al., 2002). Current stock rebuilding plans designed to return individual populations to fishable levels are extremely long for some species. For example, one rebuilding plan of the PFMC officially lists the year 2074 as the year at which Canary Rockfish stocks will have a 50% chance of being at fishable levels. (PFMC website). There are at least three other commercially important species of groundfish that are in a precautionary management status, and could easily be added to the list of overfished species (Radtke and Davis, 2005).

Because these species are overfished, the PFMC is required by the MSA to take decisive protective measures to help rebuilt stocks back to fishable levels. This continues to prove to be difficult, as it is difficult to target individual species since they tend to aggregate in groups. While there have been some successes in developing methods to catch individual species while not catching others, (ODFW, personal communication), the general approach has been to greatly restrict fishing effort by lowering allowable catch, and closing large areas of the ocean (generally determined by ocean depth) to any sort of targeted bottom fishing (Radtke and Davis, 2005). The fishery now operates under a limited entry system, wherein boats holding groundfish licenses are allotted the majority of the total allowable catch for the fishery. In 2004, those without limited entry licenses landed only 2.7% of the total catch by weight and 7.7% of the total value (Radtke and Davis, 2005).

The result of these measures has been a long decline in revenues from fishing. Over the last two years the catch has not changed much (Radtke and Davis, 2005), though it is too soon to tell if this is a bottoming-out or a brief respite from the freefall. In 2004 the Oregon groundfish fishery was 25.6 million pounds, with an ex-vessel value (the amount paid to vessels) of \$16.3 million. This is 53% below the ten-year average between 1987-1996 (Radtke and Davis, 2005).

In 2004, there were 112 fishing vessels that delivered more than \$500 in limited entry trawl or fixed-gear caught groundfish, (down from 178 in 2000). Average revenue in 2004 was \$136,686. The top 24 boats harvested 50% of the total fishery's value, with the top 10 vessels averaging \$414,000 per capita. Between California, Oregon and Washington there were 406 groundfish limited entry permits in April of 2004, (Radtke and Davis, 2005). At that time, 35% were registered in California, 37% in Oregon, and 27% in Washington. See Figure 4 for some general industry trends by state.



Figure 4: US West Coast groundfish harvester indicator differences between 1995 and 2000. From Husing, et al., 2002.

In 2003, 91 trawl permits were permanently removed from the fishery via a federal buy-back program. Thirty-four of those permits were based in Oregon (Radtke and Davis, 2005). This \$46 million program was funded by a \$10 million federal grant and a \$36 million loan to the fishermen remaining in the fleet (PFMC website). The goal of the program was to reduce capital in the fishery, leaving remaining boats with a bigger share of the remaining allowable catch.

The general coast-wide decline in groundfish has been felt unevenly geographically and by gear-types. Different costal communities depend on groundfish to varying degrees, as shown in Figure 5. Note that in 2004 70% of vessels in Port Orford caught over \$500 worth of groundfish, only 15% of those in Astoria did (Radtke and Davis, 2005). Depth-based area closures generally create no-bottomfishing areas shallower than a certain depth, and have more pronounced effects on areas when the continental shelf extends further out to sea so that local boats have to travel further out to see to reach depths that are legally fishable. Smaller boats in any port may also not be able to fish these deeper waters.



Figure 5: Oregon homeport vessel counts by port group and groundfish LE permit status. From Davis and Radtke, 2005.

The Response: An Overview

As discussed previously in this report, when a disaster strikes a community, there may be a governmental response. In the case of the sharp downturn in the West Coast groundfish fishery, pressure to act built from the local to state to federal levels. After the US Congress responded with an allocation of money, funds were spent according to plans crafted by each state. The following is an overview of the response to the disaster. A more detailed examination may be found in the Results and Discussion sections.

Federal Response

At the request of California, Oregon and Washington, the northwest regional office of NMFS requested the US Department of Commerce designate the West Coast groundfish fishery an economic disaster. On January 26, 2000, US Secretary of Commerce William Daley declared the fishery an economic disaster under section 312 of the MSA. This declaration enabled Congress to allocate funds to the impacted states, and they added a \$5.0 million aid package on to the FY 2001 Military Appropriations Act. The money was to be spent to provide compensation and direct aid to fishermen and communities that were impacted by the newly declared groundfish disaster.

The money was to be divided between California, Oregon and Washington based on the impact shouldered by each state. The states agreed to Oregon and California each getting 35% of the funds, with Washington getting the remaining 30%. Each state was required to submit a spending plan to the Seattle NMFS office, which would certify that the plans met the guidelines established by Congress, at which time funds would be released to the states. An overview of each state's plan follows.

Oregon

Oregon, which had anticipated the pending disaster, had already launched a pilot disaster relief program funded by the state, and it was into this framework that the federal monies were channeled. Led by Oregon Sea Grant Extension, the Groundfish Disaster Outreach Program was based on the use of outreach peers, who were members of the FC that had been contracted and trained to help members of the FC access existing programs such as job retraining, food stamps, and other relevant social programs. Up until this point, participating members of the FC had been scrambling to somehow support themselves while going through training. The pilot program leadership had recognized this as a huge barrier for entry into the program, for many people were forced to fish to pay their bills and could not fish and participate in job retraining. Oregon thus decided to use over 96% of the federal money to create Groundfish Transition Income (GTI). GTI provided qualifying individuals with a monthly check while they went through job retraining. Through the use of the outreach peers and the GTI, the GDOP sought to shrink the fleet, and help members of the FC transition out of commercial fishing.

Washington

While Oregon focused on individual members of the FC, the state of Washington put the bulk of its money into an existing program designed to help economically diversify its coastal communities. Eighty percent of their portion of the federal money went to Washington Department of Community, Trade and Economic Development, with the broad goals of helping coastal communities to better deal with the decline of groundfish fisheries. The remaining funding was put into research into the arrowtooth flounder, a largely recreationally caught species.

California

California, after holding meetings in coastal communities and discussions with Oregon and Washington groundfish disaster representatives, decided to divide their funding among a number of programs. Approximately half of their funding was designated for direct payments to fishermen, similar to GTI and called Groundfish Disaster Stipends (GDS). Another third was spent on groundfish data collection. The remaining funds were spent primarily for program administration and to help vessel owners purchase Coast Guard required safety equipment.

Methods

Goals

The goal of this study is to discern the lessons that can be drawn from Oregon's and other West Coast states' responses to the WCGD. Specific study objectives are to:

- 1. Document the three states' responses to the WCGD
- 2. Assess Oregon's response to the WCGD
- 3. Compare Oregon's response with those of California and Washington
- 4. **Explore** Alaska's fisheries, and how the situation there compares with that of the Pacific Northwest.

Objectives one, three and four are based largely on the gathering and processing of disparate but existing data. Objective two required the collection and processing of new data, which was done primarily through ethnographic interviews with persons involved in the groundfish disaster programs in various states. These methods are described in more detail below.

Documentation/Comparison of State Responses (Objectives 1, 3 and 4)

The primary method of gathering data for these sections of the study was collection and analysis of reports, studies and lectures on groundfish biology and the groundfish fishing industry. Documents were either accessed in-person or on-line through various academic and non-academic search engines. All of these sources are catalogued in the bibliography and cited in the text where appropriate.

Because the groundfish disaster relief programs of individual states are so recent (or even on-going), there are few published details about them available in print, and none in peer-reviewed publications. With these limitations, data had to be gathered in a variety of different formats, primarily through unpublished reports, notes from the author's informational interviews with involved parties, agency documents, and popular news media. Documents used included meeting minutes, office memos, emails, letters, notes, newspaper articles, press releases, advertisements, and spreadsheets. Documents were either found on-line or provided to the author by various individuals, including the principal investigator. Information gathered through personal communication was either conducted in person individually, in classes at Oregon State University or the Hatfield Marine Science Center, over the phone, or via email. When possible, these sources are listed and cited; however, the informal nature of some of the sources makes formal citation impossible.

Whenever possible, specific details and numbers were cross-referenced for accuracy. Numbers or specific details deemed unreliable were excluded from the report or included with caveats.

Assessment of Oregon's Groundfish Disaster Response (Objective 2)

Ethnographic interviews

For the assessment of responses to the groundfish disaster, information was gathered primarily through formal ethnographic interviews. This technique has various names in the literature including semi-structured interview (Robson, 2002), semistandardized interview (Berg, 2001), open-ended interview (Silverman, 2001), or a depth or exploratory interview (King, 1994).

The interview is based on a set of predetermined questions that can be reorganized or reworded to fit the requirements of individual interview. Unscheduled follow-up questions or "probes" are used to gain further information when necessary or available (Robson, 2002). For example, if a fisherman, when asked about his experience in the disaster relief program, mentions that he took classes at a local community college, the interviewee may ask questions about his experience at the community college versus his experience at other job-retraining centers. The specific wording of questions was also modified to meet local or occupational needs. For example, instead of asking a fisherman about his experience with "One-Stops" at the local "agency", a fisherman in Astoria was asked about his experience with "caseworkers" at "MTC" (the local service-providing agency).

This method best met the study's goal of gathering broad thematic views held by different communities. Both a review of the literature and the experience of the principal investigator suggested that this method of qualitative data collection is useful and appropriate when attempting to describe social and cultural groups (Robson, 2002), where the primary goal is to discover emergent themes and idiographic descriptions rather than very specific hypotheses and categorical frameworks (Cassel and Symon, 1994). Further, ethnographic interviews are also believed to be the best opportunity for enabling the interviewee to express his or her feelings on the issues targeted by the research: they give "the informant an opportunity to answer in ways that is important to him or her – not the researcher." (Schwartzman, 1993, p 58). Ideally, this allows the researcher to gain an understanding of an individual's "lifeworld" (Giorgi, 1970 in Cassel and Symon, 1994) in a way that surveys and observation cannot. Finally, researchers suggest that study participants are generally comfortable with ethnographic interviews: when researchers ask, "may I interview you about...", both the participant and the researcher have a common understanding of what to expect (King, 1994).

Sampling was purposive rather than random, with the asserted goal of interviewing a broad section of people involved in various professional capacities and geographic regions. Purposive sampling was necessary to ensure broad representation and to allow exploration of potential regional variations within the study group. Purposive sampling was also used to make sure that both the fishing and community service/workforce retraining community were represented in the interviews. Without purposive sampling, it is likely that the CSWRC, which is generally easier to find (many were interviewed while "on the clock"), would be greatly over-represented in the sampled group.

Initial contacts were provided to the researcher by the principal investigator. Additional subjects were found through snowball sampling. In snowball sampling, interviewees are asked for additional people who they feel should be contacted for the study. This type of interviewing does not allow for statistical generalization, but was deemed the best way to broadly examine the issues. It was also believed to be the best means of accessing a hard-to-reach population (Berg, 2001; Robson, 2002).

Interviews were conducted in person, when possible, or over the phone, and ranged from half-an-hour to two hours in length (see protocol in appendix). In-person interviews were conducted in various locations from offices to cafes, all at the interviewees' requests. Interview questions were written after a period of research and discussion by the principle investigator and researcher, and were designed to elicit information on the main themes of the study: the two communities and communication between them.

Participants by Community			
	FC	13	
	CSWRC	12	
Participants by State			
Oregon	FC	11	
	CSWRC	4	
California	FC	2	
Camonia	CSWDC	2	
	CSWRC	3	
Washington	FC	0	
0	CSWRC	1	
Alaska	FC	0	
	CSWRC	2	
National/Other	CSWRC	2	
Oregon Breakdo	<u>own:</u>	-	
North Coast	FC	1	
	CSWRC	3	
Central Coast	FC	5	
Contrai Coast	CSWDC	1	
	CD W KC	Ţ	
South Coast	FC	5	
	CSWRC	1	

Figure 6: Breakdown of Interviewees by geography and communities.

Analysis of Interviews

Towards the goal of assessing Oregon's response to the WCGD, interviews from Oregon were transcribed and then analyzed through a method called content analysis. Content analysis is a way to create reproducible data from qualitative sources, especially various forms of media (Robson, 2002; Berg, 2001). It is a "systematic, replicable technique for compressing many words of text into fewer content categories based on explicit rules of coding" (Berelson, 1952; GAO, 1996; Krippendorff, 1980 and Weber, 1990, all in Stemler, 2001). In use since the early 1900s, it has traditionally been used in the analysis of news or books (Berg, 2001) but can be used for many other durable media from movies to children's art projects (Stemler, 2001). One of its better-known uses is as a tool for figuring out the "top" news stories from a previous year. For this, researchers might select to measure the inches of print that each topic filled over the course of a year in one or more national newspapers (Berg, 2001). It is an effective tool for dealing with large volumes of data (Stemler, 2001).

Transcripts were analyzed with the use of theoretical coding. Theoretical coding is a method used to extract and group themes from interviews (Berg, 2001). For this study, codes were selected prior to reviewing the interviews and were based on the study goals of gaining a better understanding the relationship between the FC and CSWRC and assessing Oregon's response to the WCGD. Codes are listed in appendices. All comments relevant to a particular theme were extracted from each interview into a common pool where they were tallied with similar comments from other interviews. Depending on the particular theme, the pool might go through a secondary coding to further vet useful information.

Content analysis was not used for responses from Washington, California, or Alaska where the experience of the members of both the FC and CSWRC was so different that meaningful cross-comparisons were difficult. As will be explained below, Washington, in particular, had no response that targeted the FC at all. Instead, these interviews were used to add depth to the documentation of what occurred in their states and to gather participants' general views on their state's response.

Results

This section, which reveals what was discovered during research for this project, is split into three sections. Part one documents the reaction of the federal government, as well as Oregon, California and Washington to the WCGD. It also describes the status of fishery disasters in Alaska. Part two, which deals with the assessment of Oregon's response, contains the analysis of Oregon's interviews with members of the FC and CSWRC. Part three explores how these findings relate to available literature.

Results Part 1: Money Trail

This first section of the results tracks the federal and state responses to the WCGD. While many of the states' events occurred simultaneously, for clarity's sake they have been divided into separate sections by individual states.

The Federal Response to the West Coast Groundfish Disaster

In the late 1990s, under the new mandates of the revised MSA, the PFMC moved to aggressively protect groundfish stocks. The new regulations pushed the industry over the edge, and what had been a long decline became a precipitous drop. Local and state governments began pressuring for federal assistance. On January 26, 2000, under advice of the Seattle office of NMFS, the US Secretary of Commerce William Daley officially declared the WCGD. The official declaration cites the cause of the WCGD as: "undetermined but probably natural causes", including a changing California Current, a series of strong El Niños, and management difficulty in setting correct quotas.

The stated cause of a disaster declaration is important as different causes enable lawmakers to access different funding sources. The secretary of the Department of Commerce may declare a fishery disaster under one of two pieces of legislation: either sections 308(b) or 308 (d) of The Interjurisdictional Fisheries Act (IFA) (16 U.S.C. 4107) or Section 312(a) of the MSA (16 U.S.C. 1861). Each type of declaration has different restrictions as and stipulations (NMFS website). In the end, NMFS requested a disaster under this latter provision.

Section 312(a) of the MSA requires that fishery disasters may only be declared for, a) natural causes, b) "man-made causes beyond the control of fishery managers to mitigate through conservation and management measures", or, c) undetermined causes. Other important stipulations for MSA-declared fisheries disasters are that funds allocated must not "expand the size or scope of the commercial fishery failure in that fishery or into other fisheries or other geographic regions" and that the federal share in the cost of the plan may not exceed 75% of the total cost (requires state or local governments to front matching funds).

Congress, led by West Coast legislators, responded to the disaster declaration by allocating \$5.0 million in aid to California, Oregon and Washington. The aid was tacked onto the FY 2001 Military Appropriations Act, P.L. (106-246), of July 13, 2000. The money, which was to be divided among the states in proportion to the impact of the disaster in each state, was earmarked for the following activities:

- 1. To pay compensation for individuals who suffered a direct negative impact from the West Coast groundfish fishery disaster
- 2. To provide direct sustaining aid to such fishermen
- 3. To provide assistance to communities dependent on the West Coast groundfish fishery and have suffered losses from the disaster.

The specifics of which states got what percentage of the funding was determined by an analysis of each state's landings, revenues and groundfish dependency. After a review by congressional staff, on August 29, 2000, representatives from the departments of Fish and Wildlife from each state agreed to the following breakdown:

- California: 35% of funding or \$1.75 million federal, \$583,000 state matching for a total of \$2,300,000.
- **Oregon:** 35% of funding or **\$1.75 million** federal, \$583,000 state matching for a total of \$2,300,000.
- Washington: 30% of funding or \$1.5 million federal, \$500,000 state for a total of \$2 million.

Before they could receive the funding, states were required to submit spending plans to the NMFS Seattle office. There, plans were checked for compliance with federal guidelines prior to funds being released.

A Broad Look at Existing Federal Reemployment Programs

Because of the congressionally implemented goals and legislatively mandated regulations, states had to find a way to help members of the FC without increasing fishing pressure in other fisheries. States quickly concluded that they would need to get people out of the fishery, and into other fields. No state used their funds to set up special, FC retraining or reemployment centers. Instead, to help people leave the industry they accessed existing reemployment centers in their coastal communities.

These retraining centers (hereafter: 'One-Stops') although largely privately owned and operated, rely heavily on federal funding. This funding generally came through one of two leading federal reemployment programs that were active during the course of the WCGD response: the Job Training Partnership Act and the Workforce Investment Act. They are outlined briefly, here.

The Job Training Partnership Act

The Job Training Partnership Act (JTPA) — Public Law 104-65 — which took effect on October 1, 1983, was a broad-brush, inclusive act that emphasized *retraining* of unemployed persons. JTPA had separate funding streams for disadvantaged adults, dislocated workers, disadvantaged youth, and summer youth. Its goals were as follows:

> "It is the purpose of this Act to establish programs to prepare youth and adults facing serious barriers to employment for participation in the labor force by providing job training and other services that will result in increased employment and earnings, increased educational and occupational skills, and decreased welfare dependency, thereby improving the quality of the work force and enhancing the productivity and competitiveness of the Nation." –JPTA

Because of the timing (discussed below), only Oregon's response was affected by JPTA.

The Workforce Investment Act

The Workforce Investment Act of 1998 (WIA) —Public Law 105-220 —consolidated and rewrote the federal government's reemployment efforts, including the JPTA. Its purpose is to:

> "to provide workforce investment activities, through statewide and local workforce investment systems, that increase the employment, retention, and earnings of participants, and increase occupational skill attainment by participants, and, as a result, improve the quality of the workforce, reduce welfare dependency, and enhance the productivity and competitiveness of the Nation." –WIA

WIA has a far-reaching mandate that states consolidate many different services (including employment services, unemployment insurance, vocational rehabilitation, adult education, welfare-to-work, and postsecondary vocational education) under one roof. Called the "one-stop system", this reorganization was designed to streamline federal, state and local efforts to provide services, thereby increasing efficiency and consistency across states and the nation. In its goals of greater standardization, the program required agencies to work with "federally approved" educators and jobretrainers. Prior to WIA, One-Stops were allowed to select their own trainers.

Job Training Partnership Act	Workforce Investment Act of 1998		
Structure & Funding			
Separate funding streams and authorizing legislation for Job Training Partnership Act (JTPA), Wagner- Peyser, vocational education, aclult education, and vocational rehabilitation.	Organized into five titles: (1) job training; (2) adult education; (3) amendments to Wagner-Peyser and related Acts; (4) amendments to the Vocational Rehabilitation Act; and (5) general provisions. <i>Does not include vocational education</i>		
Target Population Groups			
Economically disadvantaged adults must be age 22 or older, economically disadvantaged (10 percent can be non-disadvantaged if they have serious barriers to employment).	All adults are eligible for core services ages 18 older. Priority for intensive services must be given to recipients of public assistance and other low-income individuals in areas where funds are limited.		
Dislocated Workers are defined to include four categories.	Excludes long-term unemployed from definition of dislocated workers. Adds displaced homemakers.		
"One-Stop" Service Delivery			
"One-Stop" implementation grants are currently awarded with Wagner-Peyser funds, but there are no statutory requirements to provide services through the "One-Stop" system.	Establishes the "One-Stop" delivery system as the access point for employment-related and training services. All core services must be available at least one site which may be supplemented by multiple additional sites and technological networks.		
Adult and Dislocated Worker Services			
Title II provides stand-alone employment services (e.g., job search assistance). Title III authorizes readjustment retraining services.	Funds will be used at the local level to pay for core "One-Stop" system, as well as for intensive training services for program participants. Core services funded by the adult stream would be available universally with no eligibility requirements. Intensive services (e.g., counseling and prevocational services) will be available for unemployed individuals who have been unable to obtain jobs through core services and those who are employed but need additional services to reach self-sufficiency. <i>Training is</i> <i>available for those who meet intensive services eligibility but were</i> <i>unable to find employment through those services</i> .		
Accountability			
Performance standards applicate to local areas are established by the Secretary of Labor which are to include factors identified in the law. <i>States adjust the</i> <i>standards based on economic, clemographic, and other</i> <i>factors</i> within parameters established by the Secretary. States may award incentive functs or impose sanctions based on local performance.	Establishes indicators of performance for all adult, dislocated worker, and youth programs to be applied to States as well as local areas. The Secretary of Labor is to negotiate the expected levels of performance for each indicator with each State, and the State, in turn, is to negotiate expected levels of performance with each local area. <i>Technical assistance, sanctions, and Federal</i> <i>incentive funds are tied to whether States meet the expected</i> <i>levels of performance.</i>		
Training Provider Eligibility			
Other than general procurement requirements, there are <i>no eligibility requirements for training providers</i> .	Eligibility to receive adult and dislocated worker funds requires a provider to be certified under the HEA, the National Apprenticeship Act, or an alternative procedure established by the Governor. All providers must submit annual specified performance- based information relating to outcomes of their students (completion rates, placement and earnings, etc.).		

Figure 7: Comparing the Job Training Partnership Act and the Workforce Investment Act. Adapted from AIDTAC website.

Oregon's Response to the West Coast Groundfish Disaster

Oregon's response to the downturn in the groundfish industry predated that of the federal government by several years. Individuals from both the FC and the CSWRC saw the fishing fleet's shrinking profits and the accompanying social and economic strains – similar signs to those they had seen recently in the salmon industry downturn. By the mid to late 1990s, case-workers in agencies, members of local fishery groups and Oregon Sea Grant Extension (OSGE) officials began discussing the possibility of a federal groundfish disaster declaration, and began to discuss potential uses of the funding. In the meantime, they planned and implemented their own program to help the FC to adjust to the strains of the shrinking fishery. This plan, which was eventually named the Groundfish Disaster Outreach Program (GDOP), was designed to help people access available resources, and to ease the passage of those who wanted to leave the fishing industry. It had two main components. First: the use of "outreach peers", who were members of the FC specially trained to help other members of the FC through the immediate crisis and perhaps out of the fishery. The second pillar of the GDOP was Groundfish Transition Income (GTI), which was a source of financial support for people who were actively transitioning out of the fishery. By the time federal money began to arrive in Oregon, the general structure of the response plan was in place, and dollars moved quickly into the hands of affected FC individuals.

Response Design and Outreach Peers

During the late 1990s, led by OSGE, fishing industry leaders, members of the Oregon Employment Department (OED), the Department of Community Colleges and Workforce Development (CCWD), local One-Stops and other social service agencies began meeting to design a response to what they felt was a pending disaster. The group eventually settled on a program designed to help members of the FC to voluntarily leave the fishing industry, not just groundfishing. This difference was important, as some of the federal funding mandated that relief funds could not be used to simply help people to move to other segments of the fishing industry. The GDOP was designed to use existing services such as One-Stops. The key to their proposed program was the use of **outreach peers**. These were members of the FC who were contracted, part-time, to help members of the FC to find services, and also to help the service agencies to find affected members of the FC.

The two project leaders (from OSGE) had prior professional experience using outreach peers while working with Oregon's Fishing Families Project (FFP), an OSGE program designed to help fishing families deal with the ups and downs of the fishing lifestyle. The program utilized members of the FC (largely fishermen's wives) to strengthen existing social networks among the FC. In the FFP, this network was used to distribute information about available services, such as training in budgeting, debt consolidation, taxes, business management as well as education on personal issues, including coping with being away from spouses/partners and relationships communication skills. The FFP was funded by OSGE from 1994-1998.

The creators of the Oregon groundfish disaster response program believed that outreach peers like those used in the FFP would be an effective means of reaching to a population that had not, generally, made much use of service agencies. Outreach peers are proven to be especially useful in exclusive groups that are wary of outsiders, and more prone to trust "their own", and have been used in everything from reducing HIV infection among injection drug users (Latkin, 1998, to promoting breastfeeding (Morrow et al., 1999).

In theory, individuals affected by the WCGD would find or be found by the outreach peer in their communities. The outreach peers would explain what benefits were available to them, including, but not limited to, GTI, job retraining, job search help, Oregon Health Plan, and food stamps. The outreach peers would answer questions and help people fill out the necessary paperwork but were *not* representatives of the service agencies. After talking to the outreach peers, affected individuals would then go to local One-Stops, who would help them sign up for services (job retraining, job searching, job skills, etc) and determine if that person could receive GTI. If qualified, the One-Stop would sign them up for whatever services they agreed upon. While the outreach peers would remain a resource for affected members of the FC, their primary contact for services – at least in theory –was now the service agency itself. The outreach peer role was to simply get the person "to the door" of the One-Stops.

In addition to getting members of the FC to the One-Stops, the GDOP worked in various ways to, in the words of an outreach peer, "grease the skids": to ease transition away from fishing. For example, one innovative creation of the program was the Occupation Skills Checklist (see appendix). This was a list of potentially transferable job skills possessed by members of the FC, from specific technical skills to business management experience. This list was useful for members of the FC who had never been required to articulate their skills on a resume or job application. The list effectively demonstrated to members of both communities that members of the FC did not "just know how to fish", but in fact already possessed skills that were in demand by employers.

In the original plan for GDOP, outreach peers would themselves be actively participating in the program and transitioning out the fishing industry. As they completed their successful departure from the industry, they would also transition away from being outreach peers, and be replaced by new outreach peers who would also be transitioning out of fishing. This cycling of outreach peers was to continue throughout the life of the program.

Program Initiation: the Beginning of the GDOP

The GDOP began as a pilot program in January of 1999 with just one outreach peer in Newport. This pilot program was funded with JPTA dollars, channeled through the Newport One-Stop. While the outreach peer began her outreach efforts, industry, agency and state official continued to meet, and by the fall of that year they had finalized a coast-wide program for the state for the anticipated groundfish disaster.

On November 5, 1999, Oregon Governor John Kitzhaber requested a federal disaster declaration for the Oregon groundfish industry, setting into motion the machinery that would soon lead to the federal response described in the previous section.

By the time of US Secretary Daley's disaster declaration on January 26, 2000, the state was ready. Just over a week after the declaration, the groundfish disaster steering committee met for the first time. The committee included representatives from OSGE, the fishing industry, conservation groups, state and federal agencies, and coastal community leaders. At the time, no federal money had yet been allocated, and nobody knew how much money might eventually come to the state. With the input of the steering committee, OSGE outlined a response strategy, and continued to meet with state agencies to work out specifics of the design and implementation of the strategy.

On April 1, 2000, OSGE and the Newport One-Stop signed an interagency agreement outlining and funding a three-month program for a coast-wide peeroutreach program, thus officially creating the Groundfish Disaster Outreach Program. The stated goal of the program, from their official website (created in summer, 2002) was:

> "... to create, deliver, and evaluate a peer outreach program that assists people to access support, resources, and training, and to assist community resource providers in reaching out through

improved communication to this population who are in need of support. The desired outcome is a better bridge between the fishing family business community and the agency/resource provider community."

The target audience was defined as:

"People who work in the commercial groundfish industry (fishers, fishing business partners, processing workers, gear suppliers, service/support workers) who are seeking to leave the industry and who commit to actively participate in a reemployment plan"

The coast-wide program included five outreach peers and an outreach peercoordinator, who would help oversee and coordinate outreach peer efforts. This group would meet regularly, as would a greater GDOP advisory board made up of the GDOP outreach peers and organizers as well as various agencies and state representatives from the OED, coastal One-Stops, Oregon Economic Development Department and the Department of Community Colleges and Workforce Development. OSGE leadership selected five outreach peers, carefully chosen based on location to reflect communities anticipated to be most impacted by the groundfish disaster. The ports selected were (north to south): Astoria, Newport/Tillamook, Coos Bay, Port Orford, and Gold Beach/Brookings.

The outreach peers met for their training session on May 22-24, 2000. Immediately after training the program went "active" and began working with the agencies and affected members of the fishing communities.

Groundfish Transition Income (GTI)

As the program began, one of the most pressing issues for GDOP organizers and the GDOP steering committee was the determination of what to do with the soon-toarrive fishery disaster funds. GDOP organizers determined that the primary obstacle to their goal of truly helping communities and individuals deal with the groundfish disaster was that, despite the fact that many people wanted to leave fishing, they were unable to afford to take sufficient time off from fishing to retrain or look for new work

This was compounded by the fact that Oregon fishermen were and are generally ineligible for federal and state unemployment insurance. This is largely the result of 1999 Oregon House Bill 3308, which designated fishing vessel crew as self-employed contractors, rather than employees.⁴ While the bill created an "opt-in" provision wherein owners could chose to continue to pay for unemployment insurance for their crew, most did not. As a result, when crew could not work, they no longer had access to unemployment insurance, a benefit that has traditionally been used while seeking new jobs or retraining.

From this need came the other major part of the GDOP: groundfish transition income (GTI), which would use the bulk of the anticipated federal moneys. GTI was created to allow people affected by the downturn in the groundfish industry to survive while going through job retraining or searching for a new job. GDOP leadership and state officials decided on an amount of \$1000 a month for single individuals and \$1500 a month for married people (if both people in a married couple were eligible, they could collect \$1500 each, or \$3000/month). FC members meeting eligibility requirements could collect for up to nine months. The requirements were as follows:

GTI criteria:

There were five criteria to qualify to receive GTI. Recipients had to:

- 1. Be an Oregon resident
- 2. Be a part of the groundfish industry
- 3. Have been negatively impacted by the groundfish disaster (be unemployed or underemployed)
- 4. Be actively using or willing to use reemployment assistance
- 5. Commit to permanently leaving the commercial fishing industry

Predictably, with up to \$1500/month per person on-line, each of these criteria raised challenges for the GDOP.

Program Beginnings

Meanwhile, the federal response progressed as the declaration moved on to allocation. On September 22, 2000, after the state allotment of the federal funds had been agreed to, the Director of Oregon Department of Fish and Wildlife submitted a spending plan for the GDOP to NMFS. While the total amount of funding for the program was, in theory, \$2.3 million (\$1.75 million federal plus \$583,000 state matching funds) Oregon successfully applied for an allowance for their contribution to be "in kind". In short, what had been state-funded groundfish research became Oregon's contribution towards the program, and so that portion of the funding is not considered in this report.

The remaining \$1.75 million was to split as follows:

GTI-1 (\$1.75 million)

- 1. \$1,684,000 (96.2%) went directly into funding GTI
- 2. \$66,000 (3.8%) supported outreach efforts (outreach peers)

GTI money went through the OED. The organizers felt that this agency had already demonstrated prior experience with handling unemployment payments, and hence could handle the job most efficiently. Neither the OED nor OSGE charged for their work, so 100% of the funds designated for GTI went directly to the FC.

As noted above, members of the FC had to sign-up for a reemployment program at their local One-Stop, and it is the One-Stop that made the final determination on whether or not the member of the FC fit the criteria outlined above. If so, individuals could begin collecting checks as soon as he or she began a program, and continue to collect for up to nine months.

GTI was available on a first-come, first-served basis, and the outreach peers and some agency representatives immediately began to recruit affected members of the FC. As revealed in their interviews, they spread the word in many ways: by setting up informational meetings and by visiting the docks, processing plants, coffee shops, bars, and homes.

As people were approved for funds, money enough for their 9-month period was shifted to a "funds committed" pool to assure that all people accepted for the program would be able to receive full benefits. Individuals could receive benefits for up to 9-months, as long as they were still participating in a reemployment program. If any allocated money was remaining after an individual left the program, it was freed up and used for somebody else. OED kept track of allocated funds to make certain that accounts were not over-extended. Once all the money had been earmarked, the agencies kept a waiting list. The first GTI checks were mailed out by OED on June 5, 2001, approximately eight and a half months after Oregon submitted its spending plan to NMFS for approval.

GTI 2 & 3

While the initial response from the FC was somewhat sluggish in some areas, as word got out and fishing worsened the program picked up momentum, and the \$1.7 million was quickly allocated. GDOP coordinators felt that "this was just the tip of the iceberg", and that more individuals needed help. Based largely on the success of the program, Oregon applied for and received two additional federal allocations of money for an additional \$1.0 million and \$1.2 million in early 2002. Funding came from the FY 2002 Commerce/Justice State Appropriations Bill. Like the initial allocation, the
money was primarily used for GTI. The money was eventually called GTI-2 and GTI-3, based on the order in which it was received. It was split as follows:

GTI-2 (\$1 million)

- 1. \$850,000 (85%) went directly into funding GTI
- 2. \$150,000 (15%) supported outreach efforts (outreach peers)

GTI-3 (\$1.2 million)

- 1. \$1,050,000 (87.5%) went directly into funding GTI
- 2. \$150,000 (12.5%) supported outreach efforts (outreach peers)

Unlike GTI-1, when outreach peers had to work extremely hard to get FC members interested, GTI-2 was allocated hours after it was made officially available. People involved told stories about lines outside the doors of the agencies, waiting for the offices to open so that they could apply for GTI. As of November 3, 2005, GTI-1 and GTI-2 accounts are exhausted, and there is \$17,000 remaining in the GTI-3 pool. These funds have already been allocated to individuals currently retraining. The final deadline for payouts from these funds is July of 2006 (OED, personal communication).

Some Challenges

Like all programs, the GDOP had its challenges. Personality conflicts between and within the two communities were a constant issue. There were a few obstacles that were likely the result of the GDOP being a new structural paradigm for most the parties involved. Complaints tat voiced by many interviewees are covered in a the next section. However, there were three frustrations voiced almost exclusively by GDOP leadership and were dealt with primarily at that level, and discussed here.

- The taxability of GTI. This was a long, drawn out problem. Initially, the IRS indicated that it would tax GTI as income, significantly reducing the aid provided by the program. This issue was resolved in February of 2002, with the IRS deciding that GTI was to be tax-free.
- **Privacy issues between agencies and outreach peers.** As members of the FC and the official liaison between the CSWRC and the FC, outreach peers felt entitled to information on the status of the FC individuals who were using the GDOP. Some agencies, though, for legal and perhaps other reasons, were reluctant to share information. This issue was neatly resolved by adding a line to the GTI application wherein the applicant agreed to have the outreach peer involved in his or her transition.
- Misleading advertisements from politicians. As soon as federal funds were allocated, politicians from each state were quick to send out press releases touting their accomplishments at making it happen. Unfortunately, their press releases were generally very unclear. Each time a press release was made available, some members of the FC would go to the agencies, demanding their share of the money. Requests for changes by political offices were not successful.

The Numbers: How Many Were Helped?

It would be impossible, for many reasons, to accurately quantify the number of people helped by the GDOP. Much of the outreach peers' work was not documented. While agencies' funding was often contingent on careful records indicating numbers of people helped, outreach peers only had to estimate the amount of time they spent.

working. They took phone calls throughout the day and night, and were approached with GDOP concerns when they were not officially working. There were few things that outreach peers did not do to help people. As one CSWRC member related about her local outreach peer:

> "If [a peer] said she got 20 phone calls in a week, I would bet that the number was closer to 100, but she didn't log every one of them, because some of them would be people saying, 'I don't really need training, what I need is help with my taxes, where do I go,' or 'I don't have any food for my family this week,' and she would hook them up with a food bank or a grocery store. She went out and found attorneys, clergy and counselors that would help these people." – CSWRC

There is also no way to document the number of people that the program helped simply by one-person serving as an example to others. FC members talked about how one transitioning deckhand or captain would cause a cascade effect, bringing several more people in for retraining. While the peer outreach and GTI programs are essentially complete, it is likely that successful transitions will live in the collective FC memory for at least the immediate future, and possibly inspire more to seek help.

However, with these qualifications we may make some cautious estimates for people who were assisted by the GDOP. When the program began, GDOP leadership estimated approximately 350 people along the coast (see appendices for method of how this was calculated) would access GDOP services. In the end, the most recent estimate was that it reached close to 1,500. Of those, 800 directly accessed resources, with 300 of these using agency reemployment programs, and 350 using other agencies (food or housing assistance, mental health, etc). As of early November 2005, OED reports that GTI-1 funds were paid to 192 members of the FC, GTI-2 was used by 112 and GTI-3 helped 110. A few individuals received funds from two different GTI funds so these numbers cannot accurately be tallied for a total number of people who accessed GTI funds. However, a representative from the OED reports that this number is "small", so we might reasonably estimate that approximately 400 individuals accessed GTI funds during the life of the program.

The program was accessed by a broad spectrum of members of Oregon's FC. Those who used it spanned the coast from the California border to the Columbia River. While exact records were not kept, general sentiment suggests that boat crews and fishermen's wives appeared to be the most likely groups to use the program. This is reflected in the "Success Stories" section of the GDOP website which features vignettes of individuals who used the GDOP to leave fishing (see appendices). While not deliberately designed to reflect the composition of GDOP users, of the 91 people listed there, 43% were "deckhands" or "fishermen", 29% were "shore support", 15% were boat owners, captains or operators, and 11% were from fishing related industry including fish processing and marine welding and marine painting. Of this crosssection, about 60% were male and 40% female.

The types of careers into which people transitioned varied greatly, spanning from academic (teachers), to laborers (truckers, tug boat captains) to social workers (psychologists). A more extensive list of careers chosen may be found in the Appendix C, as can specific "success stories" documented by GDOP workers.

California's Response to the West Coast Groundfish Disaster

While the GDOP in Oregon started to come together, California began to form their own plan for their share of federal monies. Unlike Oregon, they did not attempt to pay state matching funds "in kind", so despite an identical amount of federal funding, their total amount available for their groundfish disaster response program was somewhat larger: \$2,333,333 vs. Oregon's \$1,750,000. Securing the matching funds, though, slowed their response, as the funds had to be approved by the state legislature. The state response to the groundfish disaster used this money for several different projects, outlined below.

California's Plan

In June of 2001, a group of representatives from the California Department of Fish and Game (CDFG), the Employment Development Department, and local One-Stop agencies organized and led Groundfish Disaster Response Program meetings in five California coastal communities (Eureka, Santa Rosa, Santa Cruz, Los Alamitos and San Louis Obispo). The CDFG, which served as the lead agency in the project, used comments from the meetings, written public comments, and input from an industry advisory group to create the final spending proposal, which was then submitted to NMFS. The money was designed to help both the commercial fishing fleet and the commercial sports-fishing fleet. The initial funding request was as follows:

• \$300,000 (13%): Partial reimbursement for safety equipment purchases: qualifying commercial or charter groundfish vessels could be reimbursed for 50% of the costs of US Coast Guard required safety equipment. Maximum payout was \$1000 per vessel. Participants had to verify that they were fully compliant with Coast Guard regulations and were willing to carry a state or federal fishery observer.

- \$763,000 (33%): Collaborative groundfish data collection: This portion of the funding was to be used for fisheries research using the commercial fishing fleet and fishers. Research was to "improve the information base for management of the fishery while providing direct assistance to the industry". The Pacific States Marine Fisheries Commission administered the program. Funded projects included seafloor ROV (remotely operated vehicle) surveys and rockfish tagging projects.
- \$70,333 (3%): Program administration: This part of the pool paid a parttime CDFG employee to develop and implement the program.
- **\$1.2 million (51%): Groundfish Disaster Stipends (GDS):** The GDS program is virtually identical to (and partially modeled after) Oregon's GTI. It provided identical amounts of money to impacted fishers (\$1000-\$1500/month, though they had up to a year to collect funds). California One-Stop agencies began accepting applications for GDS on November 1, 2002 (about a year and a half after Oregon's first GTI checks were mailed). Funds (minus a state reserve) were divided among nine regions based on their processor receipts, commercial vessel landings, and number of charter boats in the area.

The California Experience (to Date)

Like Oregon, not everything went exactly according to plan in California. In general, the fishing fleet did not respond to presented opportunities as strongly as had been expected. The safety equipment buy-back program closed on July 15, 2003. While the official announcement from the CDFG called the program a success, only a third of the moneys budgeted were paid out (~\$100,000 of \$300,000). Groundfish Disaster Stipend funds were also not readily absorbed by the FC. A CDFG representative interviewed for this project reported that approximately a third (\$400,000) of the \$1.2 million remained in the GDS pool when the program closed in June of 2004. A total of 58 people received GDS funds during the program (California Employment Development Department, personal communication). Money remaining

from both of these projects was transferred into the collaborative groundfish research program, which is ongoing at the time of this report.

There were several reasons given by people in California for what appeared to be a lack of interest in retraining funds (GDS). One question was how well outreach had worked. A government representative who worked with the fishing industry said that he had heard nothing of any of the money coming out to his region, and had seen nothing compared to what he had witnessed during the salmon disaster. He'd heard about the Oregon program, and reported that a GDOP representative had visited his community, but that, to his knowledge, "California didn't make that kind of effort".

Similarly, a CDFG employee called the recruitment for the California disaster program "ad hoc". She detailed limitations of the efficacy of mailings, which was their primary method of reaching the FC. While the CDFG mailed out announcements to all license holders they had no mechanism for contacting crewmembers. "They didn't get word unless their boss told them," she said, and pointed out that even some supportive license-owners do not or cannot read their mail, and do not have access to computers. Additionally, while the target audience for the program officially included the vessel or fish processing plant owners, and their employees, that there was little effort into reaching those past license holders through mailings. She concluded that "the only real way to get word out is in person".

In contrast, a FC member interviewed thought that the word got out adequately, just with the existing "network" of FC members' word of mouth. He'd been a boat owner and said that he had had a few deckhands go through the program, and they had heard about from other deckhands.

One member of the FC argued that the timing of the response was wrong and that retraining efforts needed to come *after* a vessel buy-back program, rather than before. Ideally, the two needed to be coordinated. The buyback program, he felt, should go through first. After this removed boats from the fleet both vessel owners and crewmembers would be out of work, and would be ready for retraining. When retraining efforts went first, crewmembers felt little need to stop fishing and boat owners could not as they were economically bound to their vessels.

A CDFG representative felt that one problem was that her department should not have been the lead agency. She said that it was nice to have Oregon and Washington further along than California because her agency was one of biologists, not social scientists, and that they had had no experience coordinating or leading this type of disaster response. Perhaps due to a lack of experience and training, they found it "difficult to get much out of" the public planning process.

A broad overview of the California program is difficult to construct because all those interviewed appear to have worked in relative isolation from others. A representative at a California One-Stop said that she had almost never, during the whole program, talked to anybody in other agencies. Calls with state representatives were mostly to check numbers and funding levels, not to discuss broad problems. She said that there had been one conference at the beginning of the program wherein they discussed how the program was going to work, and then she was set off on her own.

A recently released report issued to the Monterey County Office for Economic Development (Pomeroy and Dalton, 2003) posited that the program was less effective than it could have been for three reasons: insufficient promotion of program, unclear rules for participants (it mentions, specifically, uncertainty whether or people could continue to fish while accessing services), and design flaws that did not address the "particular needs and limitations of potential applicants". Specifically, they argued that:

> "The program assumed applicants possessed the necessary skills, comfort and familiarity with land-based job search and employment practices. Yet these differ fundamentally from those associated with commercial fishing. ... [M]ost lack formal training or employment to document these skills." (Pomeroy and Dalton, 2003)

Washington's Response to the West Coast Groundfish Disaster

While Oregon and California transferred the bulk of their funds to individual members of the FC, Washington chose to spend their dollars on coastal communities –communities of place. On September 28, 2001, the state announced the final breakdown of its \$1.5 million award (they appear, like Oregon, to have matched funds "in kind"):

- **\$1.2 million (80%) to help diversify economies of coastal communities.** This funding would be entrusted to the Washington Department of Community, Trade and Economic Development (WDCTED), which would help communities "better deal with the coast-wide decline of groundfish fisheries". Grants were given to projects felt to "promote economic diversity away from dependence on the commercial groundfish fishery", and were required to address locally-defined priorities. Nineteen different communities (divided into five regional groups) were eligible to apply for the funds.
- \$300,000 (20%) for arrowtooth flounder research: this money, administered by the Washington Department of Fish and Wildlife, was to help set up a voluntary program for gathering data on arrowtooth flounder bycatch rates.

Obviously this program is radically different from those of Oregon and California. As funding went directly into existing programs (the WDCTED added these funds to an existing pool that was already working on similar projects), there was little project management. Research for this project was difficult. There was no centralized coordination. Numerous phone calls to the WDCTED uncovered no one who was knowledgeable about the program, or of what, specifically, the funds were used for (Washington fishermen were reportedly grumbling that it paid for new public restrooms). And while there was a mention of groundfish funds buried on their website the link was a dead-end. Some employees at coastal One-Stops were aware that the disaster had been declared, but as they received no guidance or funds to administer new programs, it appears that it was business as usual, with the occasional retraining of a member of the FC as they came in. Unlike Oregon, many Washington members of the FC were able to access standard state and federal unemployment insurance. According to a One-Stop employee: "They all sign up for unemployment instantly, soon as they come off, the boats. It's a pattern". Outreach was handled primarily though a mandatory meeting that all people collecting unemployment insurance were required to attend once per year. At this meeting, One-Stop employees explained available benefits, including job retraining. Since, as discussed elsewhere in this report, the disaster was a gradual rather than episodic event, there was not a reported sudden influx of members of the FC to agencies with the disaster declaration.

While unemployment insurance brought the fishermen in, there were concerns expressed that the system "wasn't working for them as well as it could". The main complaint was that it was too impersonal. Aside from the mandatory annual meeting, all people had to do to receive unemployment insurance was call into a call center. A One-Stop employee felt that this did not provide enough personal attention to the needs of the FC. She said:

> "[people at the unemployment insurance call centers] are dealing with hundreds of people a day, and they don't care particularly what profession you're in. I think it fails in that it needs more counseling with the interview. We need to think about what we need to help [people] get to a different state."

An agency member in SW did report that some fishermen who lived in the southern part of the state complained about the discrepancy in available programs for Oregon vs. Washington residents. People who lived near the border might fish off the coast of both states, and even on Oregon boats with Oregon crews. Yet to qualify for GTI they had to live in Oregon. For many who lived in Washington, Oregon was only a short drive across a bridge, and this frustrated them. "I'm getting screwed," one is reported as saying, "I fished in Oregon but I live in Washington, and I'm not eligible for their program."

Alaska and Fisheries Disasters

Alaska has yet to suffer a groundfish disaster and was not included in the 2000 disaster declaration. Nevertheless, although stocks in the North Pacific are generally healthy, Alaska fisheries have also suffered through difficult times in their fisheries, particularly with salmon. Salmon is big business in Alaska, with an estimated 20,000 individuals commercially harvesting the fish. While salmon populations are cyclical annually (returning seasonally to rivers for spawning), they also go through longer, less understood, spikes and drops in populations, probably strongly influenced by large-scale ocean conditions. These longer-term population booms and busts are notoriously difficult to predict making planning and budgeting particularly difficult for those involved in this fishery.

Probably more damaging to the industry lately is the huge influx of "pen-raised" or "farmed" salmon to the market. Although there is some limited domestic production of farmed salmon, the majority of it is imported from other countries, including Canada, Chile and Norway. From 1997 to 2000, imports of salmon fillets into the US increased 300% (Johnson, 2003). These imports have driven the prices in what was once a profitable fishery to historically low levels.

Salmon fishing returns peaked in 1988 at \$780 million, and had fallen to \$130 million by 2002 (Johnson, 2003). In April of 2003, the state cobbled together various sources of federal money and announced the Salmon Fisheries Revitalization Strategy. The resulting program was as big as the state, with a budget of \$50 million: roughly ten times the amount allocated to the three West Coast states named in the groundfish disaster.

The broad goal of the plan, according to Alaska Governor Frank Murkowski, was to "transition the salmon industry through a very tough time to establish a vibrant and competitive industry, and new way of marketing our wild Alaska salmon" (State of Alaska website). Or, as explained by a government employee interviewed for this study, to make the fishery more profitable without an explicit attempt to transition people out of fishing. The salmon disaster, from the state perspective, was a "marketing disaster" rather than a "fishery disaster".

However, for any wishing to leave the fishery, there was another federally funded program running in tandem with the Fisheries Revitalization Strategy. The fact that at least part of the downturn in the industry was based on imported fish allowed the state to apply for, and receive, an award under the Trade Adjustment Act (TAA), which was created by the Trade Adjustment Assistance Reform Act of 2002. Under this program, TAA pays 100% of tuition, books, fees and, if applicable, travel, rent, food, and utilities for people in retraining programs to leave the industry. The maximum duration of the program is 130 weeks per individual (Johnson, 2003). Yet despite the fact that this program is longer and broader than those designed to help the FC on the West Coast, only 68 fishermen used TAA benefits in 2003 and 2004. The coordinator of Alaska's TAA program explained that, "a lot of fishermen prefer to remain fishermen" (Bluemink, 2005).

Alaska has also, at times, had an active peer outreach program. The lead development official from Alaska's Marine Advisory Program credited Oregon Sea Grant's Fishing Families Project for much of the conceptual framework for their outreach peer program. An effective outreach peer network to cover Alaska's extensive coastline had to be large: at one time there were approximately 30 outreach peers. Organizers felt the outreach peer network worked particularly well in Alaska's expansive and culturally diverse geography. Their program was planned in 1997, executed in 1998, and ended in 2000.

Results Part 2: Oregon Assessment – Emergent Interview Themes

This section lists the themes that emerged during the ethnographic interviews with people involved in Oregon's Groundfish Disaster Outreach Program. These themes were extracted from the author's transcriptions of the interviews using content analysis. While these themes are not meant to be generalizable, most themes (exceptions are noted) were expressed by enough members of the communities to suggest that they may be prevalent in the community. Themes explored were:

- 1. Stereotypes of the FC
- 2. Stereotypes of the CSWRC
- 3. Obstacle and aids to leaving the fishing industry
- 4. Thoughts on the success of the GDOP
- 5. Suggested improvements
- 6. Other thoughts on the GDOP

A final section looks at the outreach peer experience from the perspective of the outreach peers themselves.

1. Stereotypes of the Fishing Community

This section summarizes expressed stereotypes of the FC by members of both communities. It includes latent themes that emerged during the interviews, as well as answers to direct questions of what they believed people thought about the FC. With noted exceptions, the FC and the CSWRC appear to hold similar views of the FC.

Proud/Independent/Hardworking

• "... fishermen are hard working people. They go out there and put their lives on the line." – Fisherman's Wife

- "[Members of the FC] are very independent people, like to do things their own way." – Outreach Peer
- "These are people who have always worked hard, and they have a lot of pride." CSWRC
- "... they're not people that come out with their hand out... they're motivated. They want to do something. They honestly want some help. And it's not easy for them to ask." – CSWRC

The view of the independent, proud and hardworking fisherman was expressed strongly by members of both communities. Some members of the CSWRC told stories about their clients' bravery while others mused that fishing was "way too hard" for them. While most members of the CSWRC mentioned their working with the FC as a source of this view, one indicated that her view of the FC had been most influenced by a television program that documented the exploits of a commercial fishing vessel, sharing that the experience had given her a "whole new, different outlook" on the fishermen she worked with.

Looked Down Upon

- "... [the CSWRC] kind of look down at fishermen." Fisherman's Wife
- "Some of them thought that [members of the FC] were lower-class. I think they looked down on them I was never told that . . . it was just like, 'oh, he's a fisherman.' The tone of voice, the mannerism." Outreach Peer

Nearly all members of the FC interviewed mentioned some sort of general negative impression when asked about what they felt were general views of the FC. They used words like "loser", "lower-class", and "bums", or mentioned broad "low opinions" of their community and profession. Interestingly, none of these broad views were mentioned by the CSWRC.

Poor with Structure

- "My experiences with fisherman is that they were horrible with paperwork."
 CSWRC
- "[Fisherman and loggers] are the same type of people; a little bit of an outlaw. Not in a negative sense, [but] they have little patience for bureaucratic bullshit." – CSWRC
- "We really aren't 9-5 people. Sometimes it's 24-7 for weeks on end, and then [we're] off." Outreach Peer

While only a couple of FC people interviewed mentioned a problem with the rigid structural demands of social services, all representatives of the CSWRC mentioned that fishermen generally fared poorly when confronted with paperwork and scheduled appointments required to access government programs.

Freeloaders

- "We had a few people that have looked at is as, 'I just want my GTI and I'm gonna do what I want with it and I'll be happy and you guys can leave me alone'." CSWRC
- "With some fishermen, and I say some but not all, they had the attitude that, 'it's my money and I deserve every penny of it." – CSWRC
- "They thought all fishermen were a bunch of useless bums out for a handout."
 Outreach Peer

Both communities reported abuse of the GDOP system by members of the FC who wanted to collect GTI but had no interest in retraining or transitioning out of fishing. Both communities were clear that this was not rampant, and that it made up a very small percentage of the total, and individuals from both communities expressed anger that this abuse of the program was taking place, and some FC members felt that this freeloader stereotype was unfairly projected onto their population as a whole.

Some suggested that there was a feeling of entitlement, that some individuals felt wronged by the government and that they were owed the money that was available. Some felt that people abusing the system was just a predictable and inevitable result of offering this type of program.

Alcohol and Drug Users

- "If you want to hire a crew member, you might as well forget about doing a pee test. . . or you won't have a crew." Outreach Peer
- "[A boat owner's mother], before she passed away, she'd say, 'Chris, you have to get rid of that guy. He's just not right. He's doing too much drugs.' And he'd go, 'Mom, you have a pair of boots? ... because if you fire him you're going to have to go to work because there's nobody else to get.'"

 Outreach Peer
- "I think that probably the number one [stereotype of the FC] is that they work hard but they party harder." CSWRC

Most of the CSWRC and about a third of the FC brought up drugs and alcohol use as a stereotype of the FC. Interestingly, the CSWRC never suggested that the FC had a larger problem with it than the general population, while two of the members of the FC said that the problem was more prevalent among the FC. One claimed that most of the members of the FC that she knew had drinking problems. Another saw it as part of the "fisherman and logging thing". Nearly everybody who mentioned drug and alcohol abuse said that it was a large problem for coastal communities as a whole, especially "meth" or "crystal" (methamphetamines).

Unreliable/Not Serious about Retraining

• "[The CSWRC believes that the FC] don't follow through, this just doesn't work for them." – Outreach Peer

- "It's easy to get the picture of this flakey group of guys and women that come in, participate for a couple of weeks, then vanish." – CSWRC
- "No matter what you did, they pretty much went back out fishing, so why bother?" CSWRC

All members of the CSWRC had stories about enrolled FC members disappearing, never to be heard from again. While none suggested that it was only members of the FC that did this, they did bring it up as part of working with fishermen.

A Different Breed

- "They just have a different way of living." Outreach Peer
- "This point about how they're not any different from any other person coming through the door –well, they are!" Outreach Peer
- "I think they have a different life than what we're accustomed to dealing with." CSWRC
- "It's like they have saltwater coursing through their veins It's not just an occupation for them, it's truly a way of life." CSWRC

Whether or not the FC was radically different from other people accessing social services was not agreed upon. While the CSWRC generally said that the experience of the FC person accessing an agency was identical to others using their services, comments like those listed above suggest that the FC was somehow different from other people living in coastal communities. Similarly, the FC expressed frustrations on being stereotyped, yet were generally quick to agree that they were a distinct group.

2. Views of Community Support/Workforce Retraining Community

There were many fewer emergent themes about the CSWRC than there were for the FC. This could be due to the fact that they're a less easy to identify from the general population, or could be simply that the FC doesn't often have reason to think of the CSWRC. Following are the main identified themes:

"Government"/Insensitive Bureaucrats

- "In my business, numbers are very important. Numbers make me money. But people are just as important, and I don't see that over there.... Government, crappy people, all out to make their own money...." Outreach Peer
- "This is government, any way you look at it. I can dress it up pretty and it's still government." CSWRC

For many reasons, the FC is wary and distrustful of anything related to the government. Part of it may be that they feel frustration with the management of the fishery. It may also be that, like all other occupational fields, there are some people who attempt to "fly under the radar" of the government, who do not pay taxes, or are generally avoiding government officials for other reasons. Part of it may be that they feel they are treated impersonally whenever they attempt to access government programs. FC members expressed anger at being treated as numbers, and that agencies asked what they felt were personal questions in public settings.

Helpful

- "He always sent me to the proper places, and he was really good." Outreach Peer
- "I went in and met with [a caseworker]. She was really cool. She made it easy." Former Fisherman

• "I felt like [people at a One-Stop] did a fantastic job of it." – Former Fisherman

It is important to note that over half of interviewees from the FC expressed happiness with specific people in the various agencies, even if their overall impression of the agency or their employees were negative. Others said that they had no prior experience with the CSWRC, and had never given them any thought.

Rude/Mean/Judgmental

- "They were very judgmental towards fishermen." Outreach Peer
- "They were snide, sarcastic. . . [and] mean to us." Outreach Peer
- "The enthusiasm was good at first, but at the end of it I watched how horribly they treated people. Had they treated me like that, I would have probably knocked the counselor off the stool. I don't believe you need to treat people that way." – Outreach Peer
- "A majority of people [in the CSWRC] have no customer service skills. They're kind of shitty to people." – CSWRC

Most of the FC interviewed expressed frustration with the way that they were treated by the CSWRC. Complaints ranged from direct rudeness and dismissiveness to consistently unreturned phone-calls. The CSWRC was very aware of their reputation. The CSWRC member who expressed the strongest opinions had formed these opinions while personally receiving aid through a One-Stop.

3. Transitioning: Barriers and Aids for Leaving the Industry

As previously discussed, the 2000 official declaration of the groundfish disaster came it the midst of a prior and on-going decline in the fishery. Incomes are far below what they once were; yet while some people left the fishery, many remain. This section explores the reasons that people gave for their departure from the fishery, and what they believe keep others from leaving.

Barrier: Reduced Income

- "... they're used to making big, huge chunks of money, and they don't make huge chunks of money when they get out into the real occupational world."
 - CSWRC
- "My guys are used to making a hundred, two hundred thousand dollars a year and all of the sudden you want them to make ten bucks an hour? It doesn't even cover their lifestyle, their bills." – Outreach Peer

While many mentioned that current groundfish incomes were far below historical levels, that some felt they could still make more money fishing than they could doing any land-based job, even after retraining. Every member of the CSWRC interviewed brought income up as a primary obstacle. They may have been even more aware of this obstacle than the members of the FC because of their own funding requirements that new careers meet a certain percentage of prior jobs.

Barrier: Loss of Pride

- "... anytime you try to seek help from anybody, basically what you're saying is, 'ok, I'm turning my life over'. Some of them feel like they're selling their soul to the devil." CSWRC
- "Probably the number one difficulty is that it's humiliating. You're used to being your own boss, running your own business.. You feel like a failure, going into those buildings and unfortunately you get a lot of people who don't seem to care, and you feel like you're being treated like a second-class citizen. So just getting people to go through the door to get help was a challenge, so they wouldn't feel so humiliated." – Fisherman's Wife

Many mentioned that feelings of pride prevent many fishermen from accessing aid. Some do not want to share personal information. Some view all assistance programs as "government" or "welfare", and unworthy of somebody used to supporting his or her family by working.

Barrier: the Fishing Addiction

- "Fishing is strange... it becomes an addiction, and it's a way of life. It's not just a job. If it was just a job you'd see more people quitting." Outreach Peer
- "Some people just love fishing and have no intention of ever leaving." – Former Fisherman
- "I think that they sat down and looked at their bottom line and were willing to live with a little less, just to do what they love." Outreach Peer
- "My husband was hard-headed, just like the drag fishermen, there was no way he was going to quit because it was going to come back around. It may not be in our lifetime, but it's going to come back around." – Outreach Peer
- "A lot of fishing families push their kids into fishing I have a nephew, and my brother says "you gotta fish, you gotta fish: this is life." Outreach Peer

Members of both communities acknowledged that the FC generally has a strong resistance to leaving the fishery. Whether this is based purely on a simple love of the job or the lifestyle or just a fear/dislike of the alternative is unclear.

Barrier: Age, Lack of Education and Skills

"There's nothing like being turned down. . . I mean I could not get a job. I'm 50, my back is fused, the carpel-tunnel. . . . I was applying for so many jobs and it was very frustrating. A male over 50, with some physical problems, that's coming from the fishing industry is not a well-sought-after individual." – Former Fisherman

- "I'm waiting to get some more financial aid somehow so I can finish out what training I need so I can go on with what I need to do." Former Fisherman
- "I think that doing a job search outside of the fishing industry was a challenge for them because they needed to talk and act in a whole new light. It didn't matter [when applying for a job on a boat] if you wore your waders... as long as they were willing to jump on that boat and take a fishing trip. It's not like having to dress-up and present yourself in a different industry." – CSWRC

As evidenced throughout this report, the life of a member of the FC is often very different from that of much of the rest of the workforce. There are no regular hours, no timecards. Being a successful fisherman requires extensive skills, and as shown in the skills checklist, many of them can transfer into other lines of work. However, there are many other skills that are considered necessary for the rest of the workforce that many members of the FC do not possess. In particular, the job search procedure is very different outside of the FC, and many members of the FC do not have resumes and haven't ever had an official job interview. Many lack high school diplomas.

Barrier: Lack of Industry Closure

- "The one thing that's really difficult with the fishing industry is that it wasn't like a plant closure. Plant closure: doors are shut. It's real clear who needs [help] and who doesn't.... The biggest issue is that their industry is not gone yet. With the FC here, it's two steps forward, then they go fishing." – CSWRC
- "'Do I really want to do this, what am I doing? This is crazy.' I had to keep telling myself that this was the right thing to do, to get out of the fishing business, and that everything would work out. You just didn't know it in the start. Was I going to fail? Was I going to work at a gas station for the rest of my life?" Former Fisherman

While the groundfish fleet has (and continues to) decrease in size, almost every port reported that they had at least a boat or two still going out. Thus leaving groundfishing was a real choice, not a false one, and people who chose to leave retained the ability to go back. Some of the people who went through retraining expressed that they constantly second-guessed their choice to leave. The CSWRC and outreach peers reported that many who started retraining went back to fishing. Some returned to finish their retraining programs, others did not. But this choice makes it unlike many other economic disasters when one day you know you have a job, and the next you know you do not.

Barrier: Perceived Lack of Self-Employment Options

- "The problem was that a lot of people did not want to hire somebody who'd worked for themselves, and for the most part I've always worked for myself and not worked for somebody." Former Fisherman
- "One [obstacle] was the self-employment taboo. [A One-Stop] didn't want to work with people who wanted to be self-employed, period. That was a really big obstacle. To me, it would have seemed more reasonable to expect these guys to want their own businesses." – Outreach Peer

Similar to the lack of education was the lack of experience and desire reported by and about members of the FC for working for somebody else. This clearly ties in with the strong sense of independence of the FC community. Unfortunately, the FC reported difficulty in getting cleared by the CSWRC for pursuit of self-employment, reporting that they were told that tracking self-employed people was too difficult.

Transitioning Aid: GTI

- "Wouldn't have been able to do anything [without GTI]." Former Fisherman
- "Without the GTI program, I don't think they could have successfully made that transition. With it people were able to at least try and get through the process." CSWRC
- "The GTI money was a big draw for people to come into the program, and it was a big draw because it was a nice chunk of change, but it also was a component that was needed for the success of the transition." Outreach Peer

There was almost universal agreement that the GTI was critical to the success of the program. Some people pointed out that people have, historically, transitioned out of the fishery without GTI, but they thought that the program was much more successful for the inclusion of GTI.

4. Success of Program

Each interviewee was asked, without qualification, whether or not he or she felt that the program was a success. The question was intentionally broad to allow respondents to answer in a way that revealed their own definitions of success, and also because many of the respondents worked in isolation from the program as a whole, and thus were without means of assessing anything other than their own experience and those of the people they knew. The one area they were specifically asked was if they thought that the program had effectively built bridges between the FC and the CSWRC. The primary themes that emerged are discussed below.

Overall Successes

- "I think it was a success for me. God yes." Former Fisherman
- "I think the GDOP was hugely successful because. . . it addressed our main goals to help fishermen access resource providers. . . . We had hundreds of people access our program." Outreach Peer
- "It worked real well, and our success rate has been real good I haven't looked at the stats lately, but last time I looked our placement rate was about 90%." CSWRC
- "In my eyes, it was an enormous success." CSWRC

Interestingly, nearly everybody interviewed faced with the question, "do you think the program was a success?" began by answering "yes". A few later asked for clarification of how to define success, but most appeared to feel, overall, that the program did well. Some people talked about how it had met specific goals, others quoted statistics (numbers of people helped, percentage successfully retrained) and others felt that it had simply helped members of the FC to deal with the downturn in the groundfish industry.

Bridges Were Built Between the FC and the CSWRC

- "I think [there were bridges], as long as the outreach peer was there."
 Outreach Peer
- "I think that a lot of bridges were built . . . [but] nothing lasts forever. There's an awful lot of turnover and burnout in agency work. I don't know that that

it'll be the same when everybody who experienced this program is gone." – CSWRC

Nearly everybody interviewed believed that bridges had been built between the FC and the CSWRC. They cited increased communication, and a raised awareness of existing services by the members of the FC. However, there was as also an almost universal sentiment that these bridges would not stand the test of time. Many felt that that the individuals involved were critical, (one said that the outreach peers themselves were the bridge), and that as they left positions in agencies or their communities, that the bridges would disappear with them.

Helping People Help Themselves

- "I think that the people who came in and sought services. . . and didn't try to take the system for a ride, realized that we were willing to go that extra step for them if they were willing to go that extra step for themselves." – CSWRC
- "I think that it was a really good opportunity for those that wanted to make the transition. I think that those that wanted to make that happen, they were the ones that made the program a success." CSWRC
- "Unless the fisherman, or whoever the program is directed at, wants to do it, it isn't going to work." Former Fisherman

Numerous people from both communities said this program was designed to help people who were interested in leaving the fishing industry. It was not a marketing program designed to convince people to leave. It required a lot of effort of its participants — all transitioning members of the FC mentioned difficulties in their process — and ultimately only worked for those who were willing to help themselves.

5. Suggested Improvements

In the interests of both analysis of this program, and in providing guidance for possible similar programs in the future, each person was asked what changes he or she would make if he or she could go back and reorganize the program from the beginning. The results were largely in-line with other answers.

More Time Needed (Longer Program, More Time for Each Individual)

- "My niece, she went for her [Certified Nurse's Assistant's certification] and now she's working in the doctor's office. She wanted to be an [Registered Nurse] but the funding ran out and she's got another two years to go... How can you keep doing something when your money runs out?" – Fisherman's Wife
- "It's almost better to take fewer people, and get them through the training and get them out there so they can get a job, so they're finished, not just started and dropped." Former Fisherman
- "I'd have liked it to go a little longer." Outreach Peer
- "It would be nice if it was extended." CSWRC

While many people who went through the retraining were pleased that they had gotten what they did, most expressed a desire to get more. Many wanted to continue on for more education, whether it was a college degree or increased specialization in their trade. Some were frustrated that they hadn't been able to finish programs that they had started, though those asked acknowledged that they had been aware of the duration of the program from the beginning.

Improve Communication, Coordination, and Training

- "I'd also have [Oregon Employment Department] involved at all the meetings, and I think that the partnerships should have been discussed upfront. . . I think that I would promote partnership way early and get buy-in from everybody." - CSWRC
- "I'd make them all do it my way. There needed to be some more standardization." CSWRC
- ".... from the very beginning, we'd make sure that the people in the resource community were educated on what was going on." Outreach Peer
- "You need somebody to check the agencies You need a watchdog."
 Outreach Peer

The most commonly held belief among people who worked with the GDOP was that there needed to be more coordination and standardization between the various entities and organizations involved. Some mentioned that they thought it would help avoid confusion and inconsistencies. Both communities mentioned that the other needed to be more "educated" on the program.

Would Change Little or Nothing

- "I don't think there's anything I would have done differently." Outreach Peer
- "I don't think I'd change anything. I really don't. It worked well for me."
 Former Fisherman
- "I wouldn't change much." CSWRC

A number of people expressed that, whatever their frustrations with the program, that they wouldn't have changed anything in its structure, suggesting that they, perhaps, saw whatever problems as inherent in any system.

6. Other Views on the GDOP

This section includes commonly voiced themes regarding participants' views on the program which were not captured in previous categories, yet were frequently mentioned by interviewees.

Frustration With Temporal and Geographical Inconsistencies

- "What [the agency] would do would vary from person to person, would vary from time of year, so we could never really tell them what [the agency] could do for them." Outreach Peer
- "Each of [the agencies] has their own mission with their own board of directors that decide who and how . . . they're going to take their pot of money that they get from the feds and sort of disperse it." – Outreach Peer

This frustration, not surprisingly, was voiced by persons involved in getting members of the FC to access services. As discussed elsewhere in this report, individual One-Stops generally operate with varying degrees of autonomy with little or no coordination with other One-Stops. For example, one One-Stops may get a grant that allows them to pay for client's books for his or her retraining program. The next One-Stops up the coast, though, may not have funding available for this service. GDOP Advisory Board meetings tried to encourage uniformity, but could not impose it. This caused sometimes striking regional variances in the services available for members of the FC. Additionally, One-Stops were adjusting to changing federal laws (from JTPA to WIA), which altered their funding and missions. Different One-Stops adapted to these new laws at different rates, leaving outreach peers, in particular, in the difficult position of trying to explain constantly changing services. Finally, several outreach peers expressed exasperation over turnover within the One-Stops, and that new people were not properly briefed on the GDOP. Members of the One-Stops, meanwhile, explained that they were taking on increased workloads with smaller and smaller staffs.

General Frustration with Accessibility of Services

- "When I started, 'well, there's something out there to help you –let's access it.' Then I realized that they had a whole screening process that really screened out most people who needed help." – Outreach Peer
- "They could be starving to death, literally, and their kids could be starving to death, yet, on paper their assets looked so great that they didn't qualify for a lot of programs." CSWRC
- "I showed them the income that I'd been making, [and] they informed me that they could not pay for the books or the tuition because they needed to be able to get me a job after I graduated paying 75% of the wages that I was making before going into the program, or it would count badly against them. There was no way that they could do that, so they were not going to give me any money." – Former Fisherman
- "We live and die by statistics. Its no longer just about getting people trained." - CSWRC

There was frustration expressed by both communities over restrictions and complications to accessing funding. In an attempt to include all people who were hurt by the WCGD, the GDOP had fairly malleable entry qualifications. In particular, the requirement that people were required to have been affected by the downturn in the groundfish fishery, was open to interpretation by the One-Stop employee approving the application. In some cases, the only proof that the One-Stops could get was the word of the outreach peer. This procedure was somewhat contrary to the normal operations of the One-Stops, which are required to meet various standards to receive the funding to operate. These standards might include numbers of people served, or numbers of people served that were later employed, or, increasingly, numbers of people served who were later employed in the field for which they received training from the agency. These goals might cause the agency to want to take on one member of the FC, but not another. Meanwhile, agency employees tried to coordinate available GTI funds with job retraining funds, since GTI recipients had to be accessing job retraining in order to receive GTI funds. Finally, there was universal dissatisfaction of people involved in the GDOP with the switch from JPTA to WIA, which, as discussed elsewhere, shifted agencies' foci from retraining to reemployment.

Personality Conflicts

- "I just happened to get an office that didn't really want to work with us. They
 had some problems and they took their problems out on the program."

 Outreach Peer
- "We had the best record at the beginning.... At the end, there wasn't that report... They were all getting really pissy and I was getting more impatient. I would go there and tell them, 'this is what I want you to do,' and wouldn't let go. 'I can sit here until the cows come home, but I'm really irritating you, aren't I? So let's get going.'" – Outreach Peer

Apart from any specific conflicts that arose from fishing or provider personalities, some people simply did not get along. Some of these problems were solved by staff turnover; others arose late in the program and went unresolved. One outreach peer described a relationship with an individual member of the CSWRC. "She was a thorn in my side", and that she expected the reverse was true. They learned to co-exist at meetings, but never officially smoothed things out. A particular source of ire was the distribution of GTI funding, and whose money it was. Both communities expressed feelings of ownership of the funds.

Positive Communication

- "Our success, basically, was because [program coordinators] kept coming together with us." Outreach Peer
- "Our first experience with the GDOP was not successful. It was not a good experience. We ended up having a meeting saying, 'why isn't this working?', and then it started working. . . . Pretty soon we had a hundred emails going back and forth and were communicating with each other and building relationships. And I firmly believe that the relationships are what made this work." CSWRC
- "We actually had a "come to Jesus" meeting down there with [outreach peers and an outreach peer-coordinator], and that was sort of the turning point, we all kind of got on the same page, and now [a One-Stop is], to my knowledge, probably still helping people." – Outreach Peer

While they were not without frustrations, nearly all persons involved in the coordination of the GDOP voiced favorable opinions of the channels of communication between different individuals and parties. While some found meetings frustrating, most agreed that they were critical to the success of the program as a whole. Other forms of communication mentioned (telephones and emails) received mixed reviews, generally because people felt that their calls or emails were sometimes unfairly ignored.

Positive in General

- "I just thought that it was incredible." CSWRC
- "Once [members of the FC] got into it and were complimented on the things they did, they were surprised at what they can do. When you sat someone down they were amazed that they could do so much." Outreach Peer
- "[My job-training] was good. I enjoyed it. It was a little hard being away from home, but I knew it was something that I wanted to do." Fisherman's Wife
- "I think that the program was a good deal." Former Fisherman

Everybody, at some point of their interview, expressed some point of the program that they liked. Many of these points are gathered elsewhere in this analysis, but some escaped other categorization. These are just a few.

The Outreach Peer Experience

While the official job of the GDOP outreach peers may have been just to get people to the door of the FC, the reality of it was that they wore many hats. Various outreach peers described themselves as teachers, guides, cheerleaders, friends, advocates, little angels, and parents to the people they helped. While all the outreach peers but one did go through the program and find non-fishery related employment, they did not leave their positions as GDOP outreach peers as was initially planned.

This segment of the analysis focuses on the costs and benefits of being an outreach peer. In an attempt to best capture the feelings on being an outreach peer, only the responses from the outreach peers and outreach peer coordinator were included here.

Outreach Peers Personal Goals

- "I wanted 100% success rate. I was devastated when people weren't going to do it right I would go over to their house, 'man, come on'." Outreach Peer
- "My goal was to get out more. Learn something. Helped me a lot with my people skills, and coming out of my shell." Outreach Peer
- "I think that it was probably my biggest goal was to help as many people as I could.... I guess you'd call me an enabler. I'm always for the underdog. I always want to instill in somebody else the confidence I feel I've gained by working out in the public." Outreach Peer
- "The only reason that I stuck with it is that fishing is in my family, it always has been." Outreach Peer

All of the outreach peers shared a common, seemingly altruistic goal of helping the FC however they could. While the interviews did not involve extensive discussions of their backgrounds, all outreach peers had been active members of their communities (both of place and interest). Other personal goals mentioned included selfimprovement, and drawing attention to their communities.

Outreach Peer Benefit: Successful Transitions of Community Members

- "It was kind of like one of them would go to school, and they would get a job, it was like 'YES!' That's what we wanted, that's what he wanted. 'He did it! I'm so proud!'" – Outreach Peer
- "I learned a lot. I learned more what the CSWRC was about, and how you have to go about things. I'd say the benefit was being able to help my people."
 Outreach Peer
- "Oh yeah, every time somebody went through, every time we beat the system up there it was great. It was stressful, it was great. I was happy for my guys, and my girls, happy that they made it through, and that was rewarding. When somebody would call me and say, 'look, I just aced this test', you got off on that stuff: it's cool." – Outreach Peer

It was clear that most of the outreach peers were very proud of the work that they had done in helping members of the FC, and some outreach peers spoke of the people that they had helped sounding almost like proud parents.

Outreach Peer Benefit: Relationships with Other Outreach Peers

- "For all of us to have never met before, we all worked great together. We were like one big happy family. It was like honey to bees. When we got together it was like a major joy." – Outreach Peer
- "I don't know how they did it, but they got the best group of people together to be outreach peers. We're all so opposite to each other.... We had a group that was excellent.... It was a great group of people." Outreach Peer
- "We emailed, phoned, and we had our monthly meetings, which were wonderful. We solved a lot of problems there. We built lasting relationships there... I don't think it matters if it's six years or sixty: if we're all still alive we'll all still be in touch, and that is the greatest part of the program. And I could cry, thinking about it, right now." – Outreach Peer
Every outreach peer, without exception, spoke favorably of every other outreach peer. They all asked for the interviewer to say hello to the other outreach peers. All said that they had built strong friendships that would not end with the program. Many talked about how these friendships helped pull them through the myriad of difficulties of the program.

Outreach Peer Benefit: Relationships with GDOP Leadership

- "I think [the GDOP Directors] did a hell of a job, and if they ever want another peer they should call me." Outreach Peer
- "[The GDOP Directors and Outreach Peer coordinator] were kind of like our bible." Outreach Peer
- "[The GDOP Directors and Outreach Peer coordinator] fought for everybody up and down the coast. [a GDOP Director] is great. I've had a few rounds with her but you want her on your side at any time: she really cared." – Outreach Peer

Outreach peers were never asked to discuss their views on the program directors and outreach peer coordinators, but every one mentioned them and, again, everybody spoke favorably of the GDOP leadership.

The Downside: Stress

- "It was sometimes real draining. Especially when you got involved with people's personal matters." Outreach Peer
- "But the stress was the worst stress that you could go through. It was just a nightmare. . . . For those years that I was [a peer], I was stressed out from the time I got up to the time I went to bed. And that sucks. To do it again, I don't think so." Outreach Peer

Specific complaints or concerns that outreach peers had with the program are outlined elsewhere. The primary personal drawback that they discussed was the general stress. Some outreach peers expressed that the job took over their life for the time they did it. In addition to having to the stresses of working with the CSWRC and advocating for the FC, the outreach peers were subjected to all parts of many people's personal problems, and saw drug and alcohol abuse, AIDS, cancer, crumbling marriages and more.

Results Part 3: How the Findings Fit Prior Research

The WCGD as a Community Disaster

If we look at the FC, there is no doubt that the WCGD meets classic definitions of a community disaster. Certainly there was Kreps's (1989) disruption of routine function, as people found it more and more difficult to make a living and so began to transition out of the fishery. This disaster stressed the community, leading to increased alcohol and drug abuse and strains on families (as predicted by Adams and Adams (1984) and reported by members of both the FC and CSWRC in this study). Consistent with the findings of Kreps (1989) and Raphael (1989), advanced preparation did *not* prevent communities from undergoing stress.

Comparison with Other Disasters

The WCGD was different, in many ways from the NW timber crisis: the scale of disaster and response were both much larger during the crash of the timber industry. In timber, federal programs pumped millions of dollars into affected communities throughout the region; communities which, it must be noted, were much more reliant on timber than any coastal community explored for this study was dependent on groundfish. However, both disasters showed an emigration phenomenon, wherein people were forced to leave their community in search for work. This was noted by members of both the CSWRC and the FC interviewed for this project. Unlike smelter-dependent towns surveyed by Backus and Kleeman (2000), and like the timber-dependent communities studied by Weeks (1990), coastal communities have not seen an overall decrease in population in the face of economic turmoil, but instead saw a change in demographic composition. Currently, the largest contributor to Oregon's coastal economy are transfer payments, a category that includes pensions, social

security, and returns on investments (OSU, personal communication). While these dollars may exceed dollars contributed by fishing at its peak, it generates fewer local jobs.

The literature and the research for this report suggest that timber workers and members of the FC face many similar obstacles to transitioning out of their industries. Both have strong senses of identity that are bound to their professions (as reported of timber workers by Carroll and Lee, 1990). Many members of both professional communities have low-levels of formal education, yet are accustomed to substantial incomes difficult to replicate elsewhere, particularly in the rural communities where both often work.

There were also some interesting similarities and differences between the WCGD and the Canadian cod crisis. Both were based on the crash of a resource once felt to be inexhaustible. Both stocks were brought down to very small percentages of their original levels (below 5% for cod, and even lower from some species of rockfish). Both stocks have also been slow to recover (though for different reasons), and hence did not create a situation where it was practicable to simply help support fishermen until they could return to the industry.

However, the situation on the remote eastern seaboard Canada was more severe than the WCGD. The closure there was more sudden, and more complete, and directly impacted more people. Probably the options were more limited for the people in Canada where there were fewer nearby cities or jobs. Certainly the response was more substantial, constituting billions, instead of millions, of dollars. Like Canada (reported by Hamilton and Butler, 2001), the overall value of Oregon's fishery has not drastically decreased with the WCGD (Davis and Radtke, 2005). At the time of this writing, the Oregon crabbing fleet is enjoying its third consecutive record-breaking year. But, for reasons discussed previously, it is increasingly difficult for members of the groundfish industry to switch into crabbing. The result is that, like in Canada, there has been a large-scale redistribution of coastal revenues. The salmon disaster involved a similar area, geographically, and, in fact, involves many of the same people. Several members of the FC interviewed for this had once been involved in the salmon fishery but had left the salmon fishery for the groundfish fishery when salmon became unprofitable. Some partially attribute the rapid growth of the groundfish fishery with the collapse of the salmon industry as people switched from one fishery to the other.⁵

However, while there are similarities between the salmon and groundfish disasters, there are also marked differences. Unlike the WCGD and the Atlantic Cod disaster, where recovery of stocks is not expected for decades or more, the response to the salmon disaster was designed as a stopgap mechanism to help people endure some bad years in the fishery it recovered and they could return to fishing. As a result, the jobs that salmon fishers took were often not designed to be careers, only temporary means of economic support. While some persons interviewed for this report complained that the salmon disaster response didn't help fishermen to permanently leave the fishery, comparing its success at transitioning people out of the fishery would be inappropriate since that was never an expressed goal of the response.

It is also worth noting that Oregon's response to the WCGD specifically targeted a broader audience than the salmon disaster programs by attempting to include not only fishermen, but their on-shore business partners (often their spouses), processor employees and other people who were directly reliant on the groundfish industry. This inclusiveness may have been a result of including FC representatives, who well understood their economic importance to shore-side businesses, in the collaborative designing of the GDOP. The successes of the GDOP may also have been related to the continual inclusion of the outreach peers throughout the life of the program. While the outreach peers did become imbedded in the GDOP they remained advocates and representatives of the FC.

⁵ Entry into the West Coast groundfish fishery was not regulated by the PFMC until 1994.

While this study was too different structurally for direct comparison with the Gilden and Smith study on the main complaints of salmon fishers with the salmon disaster response, it is interesting that some of the complaints are similar (people felt that some people got help who did not deserve it) but some were different. Gilden and Smith found that the salmon FC was frustrated with red tape required for proving eligibility, and that they were generally disappointed with the program. Neither of these themes emerged dominantly in the interviews for this study. This may be a causal effect: persons involved in planning the GDOP said that they specifically designed eligibility requirements to avoid some of the problems experienced during the salmon disaster.

Conclusions

Experiences of the WCGD varied greatly state-to-state, region to region and even individual-to-individual. While no one set of lessons learned would apply to every person involved in the disaster, there are some common broad points and keys to success that were consistent through most areas and would be worth considering when designing future fishery disaster relief programs. This section summarizes some broad lessons learned, some commonly identified "keys to success" and finally some thoughts on bridge building between the CSWRC and the FC.

Lessons Learned

1. It's About People

While there was grumbling about various structural issues of the various states' programs, the majority of the complaints were about individual people or groups of people and how they treated each other. Nobody claimed that the FC liked (or was particularly good with) paperwork, but when the FC expressed frustration with programs it was usually focused on the way that they had been treated, not on how much they had disliked the paperwork. The same holds true for members of the CSWRC when they talked about the FC, particularly when dealing with GDOP organizers or members of other agencies. More than one member of the CSWRC acknowledged that, in general, customer service at agencies is poor.

2. Nobody Enjoys Accessing Social Services

People generally access social services like food stamps, unemployment and job retraining as a last resort. Most people find the experience humiliating. While part of this is perhaps due to the way they're treated by agency employees, many people expressed that they had already concluded that they did not want to use services before they ever tried them. Reasons for this reluctance include feelings that accessing services is an admission of failure. It would be unreasonable to expect any program to overcome this socially engrained stigma. Instead, this obstacle should be acknowledged but not expected to be eliminated.

Additionally, while it was beyond the scope of this project to interview other members of coastal communities as to their feelings of the CSWRC, it is likely that other persons accessing services would mirror many of the concerns and frustrations expressed by the FC. Although the experience of a member of the FC in an agency might be somewhat different from the experience of a displaced worked from another field, there was no evidence found that the system is biased against the FC.

3. The FC Faces Some Unique Challenges in Transitioning

The fishing industry is different from much of the rest of the workforce. This study suggests that the most pronounced of these obstacles include relatively highincomes that are difficult to replicate in most coastal communities, work schedules that make it difficult to adhere to most retraining plans, and a sense addiction to the lifestyle. Additionally, unlike many other disasters, fishing rarely completely disappears, so there is always the temptation to return to fishing, or at least the uncertainty associated with that temptation. People in all states expressed this.

4. Successful Transitions Out of the FC are Possible

Despite these (and other) formidable obstacles there is plentiful evidence that members of the FC can leave the industry and transition well into other work. While some can argue that there are many "failures" when the FC attempts the transition, resource providers in all the states considered in this research shared stories of people successfully leaving fishing behind.

5. Successful Fishery Disaster Relief Programs are Possible

While no program was loved by all people interviewed, each had its advocates. In particular, people in Oregon felt that the GDOP's response, despite some problems, was generally a great success.

Keys to Success

1. Proactive Planning and Organizing

Oregon's anticipation of the impending groundfish disaster, along with organizing and relationship building, allowed them to set-up a program ahead of the disaster declaration that had already built relationships, created infrastructure, and begun addressing the needs of the industry. By the time funding materialized, they had already identified that the main obstacle for the FC was a lack of transition income. This realization allowed them to quickly determine what to do with their share of the federal appropriation. The money got out into the hands of the FC quickly. This is in stark contrast to the experience of California, which, according to all sources interviewed for this project, did not begin to plan their disaster response until after the federal disaster declaration, and funds began to be dispersed a year and a half after Oregon's.

2. Inclusion of FC in Planning and Implementation of Response

While both California and Oregon attempted to work with the FC to determine the best use of federal dollars, the continual inclusion of the FC throughout the life of Oregon's GDOP may have helped it to better adjust to unanticipated obstacles.

3. Carefully-Designed, Aggressive Outreach to FC

The usual outreach methods of the CSWRC (press releases, newspaper and radio advertisements, the internet, etc.) are often unsuccessful at reaching the FC. Successfully reaching this population requires deliberately planned programs specifically targeting the FC.

4. Outreach Peers

Clearly, history shows that some members of the FC can successfully transition out of the industry without the use of outreach peers. However, there was nearly universal agreement in Oregon that outreach peers were important to the widespread successes of the GDOP. None thought that the program would have gone as well as it had without the peers, and many felt that the program wouldn't have worked at all. Several people in other states expressed envy of Oregon's outreach peer system. A quick look at the experiences of the Oregon's GTI vs. California's GDS is very telling. The programs were nearly identical, but while Oregon's funds were quickly absorbed by the FC, California's were not. There is nothing to suggest that the FC in California was any less in need than Oregon, and the One-Stops in both states claimed to have done essentially the same outreach programs except for the outreach peers.

5. Inter and Intra-Agency Communication

While California program coordinators lamented their lack of communication with other persons involved in their disaster response, many people in Oregon claimed that the regular meetings of the GDOP coordinators, peers and agency representatives were key to finding solutions to many of the problems that arose during the implementation of the program. Likewise, many of the complaints about the GDOP appeared to arise from information not getting from one member of an agency to another in the same agency (such as when decisions were made at meetings, but did not make it back to employees) or when communication was not clear between one group and another (such as when peers were frustrated that they were not informed of changes within their regional agency).

6. Transition Income

Not everybody agreed that it was necessary, but there was a general agreement that some sort of economic support (e.g. unemployment insurance or GTI) for people seeking to leave the fishery helped many to successfully transition out of the industry. However, California's experience demonstrates that the mere availability of this sort of funding doesn't guarantee its use.

Building Bridges

1. There is a Gap to Bridge

It's worth acknowledging that there exist very real challenges to the FC and the CSWRC working smoothly together. The stereotypes that the FC holds about the CSWRC (namely that they're uncaring, insensitive bureaucrats handing out tainted money) mirror those of the general population. So do the stereotypes held by the CSWRC of the FC (that they're a flakey group of partiers who are not serious about leaving fishing). There was no suggestion that these stereotypes varied between states. These stereotypes, themselves, likely contributed to tensions between the two groups.

These stereotypes, while not always accurate, point to very real cultural differences between the FC and the CSWRC. Despite the fact that they inhabit the same communities of place, the day-to-day life individuals in the FC and CSWRC is often radically different. Members of both communities expressed wonder at how the

other could do their work (e.g., at sea or behind a desk), and it appeared that the each found the others' work equally unpalatable, even with its perceived benefits.

2. The Gap Can be Bridged

Coast-wide, the One-Stops were often located in small towns where the two communities managed to easily co-exist. A large percentage of persons interviewed for this study had generally good things to say about the other community. Many of FC people who worked with the CSWRC had favorable reports about individuals in the agencies. Similarly, many people in the CSWRC had friends or loved ones who were members of the FC and had clients from the FC who they felt were great successes. These personal bridges between individuals from each community helped to breakdown imbedded cultural stereotypes and were key to many successful transitions. The simple success rate of people from the FC who used CSWRC services to leave the industry, apparently permanently, suggest that the two agencies can successfully work together.

3. Bridges Inevitably Deteriorate Over Time

As one person pointed out, there are no long-standing bridges between the CSWRC and any group or individuals. People get needed services and then move on. In the end, these bridges are about individual people and relationships, and there was general agreement that when a program ends and the people involved move on, the bridges diligently built will naturally decay. This became repeatedly apparent as the high turnover of employees at One-Stop made constant retraining of new employees necessary. There is no suggestion that this varied between states.

Policy Recommendations

Given the current political climate and continued decline of many fish species, it appears likely that governments at all levels will continue to be involved in assisting communities through fisheries disasters. In light of this, the author suggests that policy makers consider the following recommendations.

- 1. Use existing Sea Grant Extension agents (or a similar, neutral convening entity) to help design and execute fishery disaster relief programs. Rather than training a new group of disaster response planners with each disaster, all programs should involve the common denominator of Sea Grant Extension agents. These individuals are already intimately involved in their coastal communities, and often have existing relationships with members of the FC and academia.
- 2. Sea Grant Extension agents should meet regularly with coastal One-Stops. An annual or biannual meeting with the leadership and staff of coastal One-Stops could help these organizations to both better understand the FC and also remain up-to-date on current fishery industry conditions. The Sea Grant agent could work with One-Stops to develop the best possible outreach for local FC's needs. A semi-regular schedule could help keep new One-Stop employees informed. Individual state's Sea Grant programs may wish to consider creating a "This is the Fishing Industry" pamphlet or website that outlines some of the complexities of the FC for One-Stop and other CSWRC employees.
- 3. **Outreach to the FC must be carefully and deliberately planned**. Traditional outreach methods do not always work well with the FC. If it is a program's goal to directly assist the FC, outreach needs to be specifically designed to do

so, and must be mindful of the FC's general unease with people outside of the FC. When practicable, the use of outreach peers is encouraged.

4. The federal government should create a Fishery Disaster Response Clearinghouse. This entity could catalog state responses to disasters, and provide both raw data and general advice for disaster response planners. The general goal of this would be to prevent the expense and mistakes resulting from each program effectively re-inventing responses to each fishery disaster. This information could be easily catalogued on a website.

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APPENDICES

Appendix A: Codes for Content Analysis

1. Views of FC

Stated by CSWRC

Stated by FC

2. Views of CSWRC

Stated by CSWRC

Stated by FC

3. WCGD vs. other disasters

Stated by CSWRC

Stated by FC

4. GDOP compared with other fishery disaster responses

Stated by CSWRC

Stated by FC

5. Outreach methods

Stated by CSWRC

Stated by FC

6. Opinion on if GDOP was a success

Stated by CSWRC

Stated by FC

7. Ideas for program improvement

Stated by CSWRC

Stated by FC

8. General thoughts on GDOP

Stated by CSWRC

Positive

Negative

Stated by FC

Positive

Negative

9. OUTREACH PEERS ONLY: Thoughts on the outreach peer experience

Benefits Difficulties

Appendix B: Occupation Skills Checklists

The following are Occupational Skills Checklists as available on the GDOP website. Below are lists for 1. captain/skipper, 2. deckhands, and 3. fishermen's wives/partners.

CAPTAIN/SKIPPER FISHING VESSEL

Personnel/Management		
interview for crew	files state and federal employment forms	
hire and fire	prepares payroll (computes % of catch)	
assigns crew to watches	tax reporting	

Training

a a basatata p		
vessel operation	safety procedures	
fishing operation		

Operations

navigation skills	
GPS Navigation	may use LORAN C (latitude/longitude)
computes positions	on-board computers (larger vessels)
may use SATNAV	uses compass, sextant, clock, radio fix, and navigation tables
plots courses on navigation charts	

vessel operation

	steers vessel		reads weather/interprets forecast	
	works gear (smaller vessels)		reads and interprets weather fax charts	
	directs fishing operations		interprets on ground/ocean conditions	
	has knowledge of fishing grounds		operates radio/SSB/CB/cell phone	
	delegates crew work load		sends and receives email (larger vessels)	
	may cook meals for self & crew		reads sonar printouts	
	records daily activities in ship's			
log				
	operates electronic equipment, radio,	rad	ar, sonar depth finder, and on-board computer	
	interprets water temps, wind speed, v	vave	: height, time of year	

crisis management fire fighting safety procedures on board fires at sea sinking boat personality conflicts sea storms CPR and first aid capsizing

Business Management

keeps track of catch	negotiates with fish plants for price
pays crew catch %	purchases supplies and equipment for vessel
arranges for markets for fish	researches new regulations and requirements
attends industry meetings	tax reporting
marketing catch	communicates with lawyers (buy & sell permits/boats)
handles liability issues	oversees gathering, preserving, stowing and unloading catch

L heense/permits appropriate for fish type
attends required classes/trainings for Coast Guard licenses (larger vessels)
FCC for radios

Maintenance

	_	
vessel repairs [scrape vessel for paint
paint vessel		install new equipment
electrical and electronics work [net mending
equipment repair		bearing installation & maintenance
rope cable splicing		antenna installation
metal fabricating		general rigging
welding		climb rigging
carpentry work [fishing gear maintenance
oil changes [lube all equipment
winch operations [exhaust work

Personal Skills

* ** 3941		
phy	ysical strength	good health
goo goo	od physical coordination	mechanical aptitude
рег	severance	patience
tcar	m leader	work outdoors
l 🗌 lon	ig hours	quick decision maker
COL	nmitment	flexibility to assume other's role on vessel
opt opt	timism	

Other Industry Related Skills

Compiled by Ginny Goblirsch, OSU Sea Grant Marine Extension Agent and Lorraine George, Community Services Consortium Certified Workforce Development Professional

lg/CSC/1198

OCCUPATION SKILLS CHECKLIST

DECKHAND FISHING VESSEL GENERAL

Vessel Operation

1.63	seroperation		_
	stands watch	takes direction from captain	
	steers vessel	loads equipment and supplies by hand or hoist	
	pulls and gaides nets and lines	signals other workers to move, hoist and position loads	
	removes fish from nets, hooks, pots	stows catch/refrigeration or preservation mixture or ice	
	sorts catch	has knowledge of radio operation for distress call	
	operates safety and fire equipment	has knowledge of refrigeration system	
	may cook for crew		

Maintenance

vessel repairs	switching out pumps-motors hyd/elec
scrape vessel for paint	equipment maintenance & repair
block and tackle	hydraulics/heavy equipment
rope & cable splicing	 general maintenance of vessel
oil changes	climbing in rigging for light replacement, rigging repair
battery maintenance	wash deck, conveyors, knives or other equipment
paint vessel	winch operation
electrical work	net mending
winch turning	gear repair
welding	

Business Management

Ŀ.,	tax for	ms		
	record	keeping (self-employed/sub-contractor):	vessel names, hours worked,	wages received, all
bu	siness	related expenses		

Personal Skills

physical strength	can take direction
heavy lifting	knowledge of fish types
good health	perseverance
good physical coordination	patience
mechanical aptitude	commitment
team player	work outdoors
long hours intermittent sleep	able to recognize and deal with emergency situations
good attitude	flexibility to assume other's role on vessel

DECKHAND Page 2

TRAWLERS

	inserts and attaches hoops, rods, poles, ropes, floats, weights, and cables to form, reinforce,
-	position, set, tow, and anchor net
	attaches flags and lights to buoys
	hauls net to vessel using winch
	empties catch from new using hydraulics pump and conveyor
	has good knowledge of cables and electronics

CRABBERS

ties buoy to line
attaches line to pot
baits crab pots
hooks marker float with pole and pulls up pots
uses pulleys and winches to set and retrieve gear
sorts catch by sex and size

TROLLERS

baits hooks
tend fishing lines
guts and cleans fish
may use hand reel or winch
may work alone or as crew member

Other Industry Related Skills

Compiled by Ginny Goblirsch, OSU Sea Grant Extension Agent and Lorraine George, Community Services Consortium Certified Workforce Development Specialist.

&CSC 1198

OCCUPATION SKILLS CHECKLIST

FISHING FAMILY MEMBER SELF-CERTIFICATION OF SELF-EMPLOYMENT STATUS

Accounting/Business Management

prepares payroll
organizes fishing business tax records
bookkeeping of fishing business records and receipts
meets with accountant
handles accounts payable (gear and supplies)
handles crew contracts
attends industry conferences and conventions
attends management meetings in place of fisherman
conducts ongoing communication with management agencies
takes phone calls to and from crew and relays messages
oversees fish weigh-in at plant packaging site
recruits crew
picks up paychecks from accountant and deliver to crew

Vessel Maintenance

runner for parts/gear
deliver parts/gear to different ports by car
prepares or picks up and deliver meals for vessel work crews
gets gear ready for fishing trip

Other Related Skills

prepares business documents using internet, word processing, desk top publishing
communicates with industry and boat crew by fax, email and radio communications
gets crew to and from vessel
prep cook for boat crew
does boat laundry

Other

I attest that the information stated above is true and accurate, and understand that the above information, if misrepresented, or incomplete, may be grounds for immediate termination and/or penalties as specified by law.

AP	PL	IC	AN	TS	SIG	NA	TL	JRE
----	----	----	----	----	-----	----	----	-----

/ / DATE

The above applicant statement is being utilized because no hard documentation exists as proof of self-employment for family members in the family fishing business.

INTAKE WORKERS SIGNATURE

1 1 DATE

Compiled by Connie Kennedy and Ginny Goblirsch Newport Fisherman's Wives and Lorraine George Community

Appendix C: GDOP success stories from GDOP website

Following is a selection of GDOP success stories, as posted on the GDOP

website.

Gender	On or Off Shore	Success Summary
М	Off	This former fisherman transitioned to the field of long-haul truck driver. The local GDOP Outreach Peer connected him with his local dislocated worker services. His transition took approximately 4 months at which time he moved his family closer to interstate-5 where he drives. Partners involved in his transition were the GDOP Outreach Peer, OED, and the local WiA provider. (ref73)
M	Off	This former fisherman transitioned to the field of electrical lineman. The local GDOP Outreach Peer connected him with his local dislocated worker services, and his community college for GED services. His transition took approximately 9 months. Between training he fished for survival for 2 months. He is now employed as a lineman for a company in Idaho. Partners involved in his transition were the GDOP Outreach Peer, OED, the local WIA provider and community college. (ref74)
м	Off	This former fisherman transitioned into the field of computer networking. The local GDOP Outreach Peer connected him to his local dislocated worker services, and his community college. His transition took approximately 16 months to earn CISCO and other computer certifications. While in training he continued to fish as a survival job. He now works as a networking manager at a hospital. Partners involved in his transition were the local GDOP Outreach Peer, OED, the local WIA provider and community college, (ref69)
M	Off	This former fishermen transitioned to the field of commercial truck driver. The local GDOP Outreach Peer connected him with his local dislocated worker services and the truck driver training school. His transition took approximately 4 months at which time he went long haul trucking for 8 months, after that he found a job on a local run. Partners involved in his transition were the local GDOP Outreach Peer, OED, and the local WIA provider. (ref70)
м	Off	This former fisherman transitioned to the field of auto painting. The local GDOP Outreach Peer connected him to his local dislocated worker services and mentored him through financial aid applications. His transition took approximately 6 months of on-the-job training when he was hired as a regular employee. Partners in his transition were the GDOP Outreach Peer, OED, and the WIA provider. (ref75)
M	Off	This former boat owner/operator transitioned to the field of water treatment. His transition took approximately 7 months. After earning his certification he became employed with a local cranberry grower. He fished for survival during his transition. Partners involved in his transition were OED, and the local WIA provider, (ref76)
м	Off	This former fisherman transitioned to the field of carpentry an occupation he had experience in prior to becoming a fisherman. The local GDOP Outreach Peer connected him with his local dislocated worker services, social services, and the community college. His transition took approximately 11 months of job search and working with a contractor to refresh his skills. He is employed now as a carpenter. Partners involved in his transition were the GDOP Outreach Peer, OED, Adult & Family Services the local WIA provider and community college. (ref77)
M	Off	This former fisherman transitioned to the field of security. The local GDOP Outreach Peer mentored him and connected him to his local dislocated worker services and helped him research training facilities. His transition took approximately 9 months and included security training school, state licensing, and being bonded. He is now employed with a logging company. Partners involved in his transition were the local GDOP Outreach Peer, OED, and the local WIA provider. (ref88)
M	Off	This former fisherman transitioned to the field of management. The local GDOP Outreach Peer connected him to local dislocated worker services. His transition took approximately 12 months of computer classes at a College in Portland. He is now employed as the manager of a Portland area open- air market. Partners involved in his transition were the local GDOP Outreach Peer, OED, and the local WIA provider. (ref79)
м	Off	This former boat owner/operator transitioned to the field of heavy equipment operator. The local GDOP Outreach Peer connected him to local dislocated worker services and to information about the truck driving school. His transition took approximately 5 months. He moved his family inland to where more work is available and was quickly hired on a certified job making 27.50/hr. Partners involved in his transition were the local GDOP Outreach Peer, OED, and the local WIA provider. (ref80)

Gender	On or Off Shore	Success Summary
м	Off	This former fisherman transitioned to the field of building and grounds maintenance after earning his GED. The local GDOP Outreach Peer connected him with his local dislocated worker services and community college. His transition took approximately 7 months. He is now employed by a school district. Partners involved in his transition were the local GDOP Outreach Peer, OED, the local WIA provider and community college. (ref81)
м	Off	This former boat owner and processor transitioned to the field of marketing and business. The local GDOP Outreach Peer connected him to his local dislocated worker services. His transition took approximately 15 months. He is now managing a fish processing plant in Alaska. Partners involved in his transition were the local GDOP Outreach Peer, OED, the local WIA provider and community college. (ref82)
м	off	This former fisherman transitioned to the field of commercial truck driver. His transition took approximately 4 months. The local GDOP Outreach Peer connected him to his local dislocated worker services. He is now employed as a long-haul truck driver, with health insurance benefits for his family and a retirement plan through his company. Partners involved in his transition were the local GDOP Outreach Peer, OED and the local WIA provider, (ref83)
М	off	This former boat owner/operator transitioned into the field of computer networking. The local GDOP Outreach Peer mentored him by connecting him to his local dislocated worker services and community college. His transition took approximately 18 months to earn CISCO and other computer certifications. While in training he continued to fish as a survival job. He now owns his own computer consulting business. Partners involved in his transition were the local GDOP Outreach Peer, OED, the local WIA provider and community college. (ref66)
F	On	This former boat support person transitioned to a career as a Certified Nurses Aid. The local GDOP Outreach Peer mentored her and connected her with her local dislocated worker services, helped her with the financial aid application process, and registering for community college classes. Lacking basic skills and confidence coming into this process, the Outreach Peer was there as a cheerleader throughout her 5 months in transition. She is now employed as a C.N.A at a care center. Partners involved in her transition were the GDOP Outreach Peer. OED, the local WIA provider and community college. (ref63)
F	On	This former boat support person transitioned to a career as a Certified Nurses Aid. The local GDOP Outreach Peer mentored her and connected her with her local dislocated worker services, helped her with the financial aid application process, and registering for community college classes. Her transition took approximately 5 months. She is now employed as a C.N.A. in a hospital. Partners involved in her transition were the GDOP Outreach Peer, OED, the local WIA provider and community college. (ref64)
F	On	This former boat support person transitioned to a career as a hair stylist. The local GDOP Outreach Peer mentored her and connected her with her local dislocated worker services, helped her with the financial aid application process, and connected her with a GDOP Outreach Peer from another region when she decided to move closer to training. This young mother was determined and made her transition happen in 16 months. She is now working as a hair stylist at a high-end spa/salon. Partners involved in her transition were the GDOP Outreach Peers. OED, and the local WIA provider. (ref65)
F	On	This former boat support person transitioned to the field of care giving. Her transition began when she was hired to train on the job in a nursing home. The local GDOP Outreach Peer connected her to local dislocated worker services. She is currently employed at a nursing home. Partners involved in her transition include the local GDOP Outreach Peer, OED and the local WIA provider. (ref78)
F	On	This former boat support person transitioned to the field of medical secretary. The local GDOP Outreach Peer connected her to her local dislocated worker services, and community college. Her transition took approximately 16 months of office certification classes at her community college. She is now employed as Medical Secretary at a hospital. Partners involved in her transition were the GDOP Outreach Peer, OED, the local WIA provider and community college. (ref68)
F	On	This former boat support person transitioned to the field of education assistant. The local GDOP Outreach Peer mentored her and connected her with her local dislocated worker services, helped her with the financial aid application process, register for community college classes, and with daycare. Her transition took approximately 18 months during which time she continued to work in the fishing industry for survival. She is now employed with an Education Service District. Partners involved in her transition were the local GDOP Outreach Peer, OED, the local WIA provider and community college. (ref71)

Gender	On or Off Shore	Success Summary
F	On	This former boat support person transitioned to the field of CNA. The local GDOP Outreach Peer connected her to her local dislocated worker services, and her community college. Her transition took approximately 9 months. After earning her certification, she moved inland to a larger community where she worked as a CNA in a clinic. UPDATE: She found a job as a Secretary which paid better and offered benefits. Partners involved in her transition were the local GDOP Outreach Peer, OED, the local WIA provider and community college. (ref72)
F	On	This former boat support person transitioned to the field of administrative support. The local GDOP Outreach Peer mentored her in career research and connected her with her local dislocated worker services and community college. Her transition took approximately 9 months. She is now employed as an Office Assistant. Partners involved in her transition were the local GDOP Outreach Peer, OED, the local WIA provider and community college. (ref84)
F	On	This former boat support person transitioned to the field of library support. The local GDOP Outreach Peer mentored her and connected her with her local dislocated worker services, helped her with the financial aid application process, and registering for community college classes. Her transition took approximately 24 months and included 18 months of community college classes and 6 months on-the- job training. She is now employed as a library assistant. Partners involved in her transition include the local GDOP Outreach Peer. OED, the local WIA provider and community college. (ref85)
F	On	This former boat owner and processor transitioned to the field of teaching. Her husband accessed dislocated worker services with the help of the local GDOP Outreach Peer first. Her transition took approximately 24 months. During her transition she worked a survival job as a waitress. She is now employed as a Substitute Teacher, working on her Master's Degree. Partners involved in her transition were CED, the local WIA provider and community college. (ref86)
F	On	This former boat support person transitioned to the field of dog grooming. The local GDOP Outreach Peer mentored her and connected her to her local dislocated worker services and helped her research training facilities. Her transition took approximately 5 months. She is now the owner operator of a successful dog grooming business. Partners involved in her transition were the local GDOP Outreach Peer, OED, and the local WIA provider. (ref87)
F	On	This former boat support person transitioned to the field of communications. During her transition she worked as a GDOP Outreach Peer. Her transition took approximately 9 months. She is now employed as a Communication Coordinator. She says "the GDOP made me think about what I could do, before the program I felt that I didn't have choices." Partners involved in her transition were OED, the local WIA provider and community college. (ref89)
F	Off	This former boat support person transitioned to the field of medical coding. The local GDOP Outreach Peer connected her to her local dislocated worker services, and her community college. Her transition took approximately 18 months of community college coursework and working to make ends meet in the financial department of a hospital. She is now employed coding medical forms at a hospital. Partners involved in her transition were the local GDOP Outreach Peer, OED, the local WIA provider and community college. (ref67)
M&F	Off and On	This longtime captain and his business partner wife, transitioned together. He went into specialty contracting learning and become certified to install ceramic tile. She studied to upgrade her business administration skills for the new business. They now have a successfully growing business, and were awarded a large contract with a major retailer that is remodeling. Their transitions took approximately twelve months respectively. Partners involved in their transitions were the local GDOP Outreach Peer, the local WIA provider and the Employment Department. (ref8)
M & F	Off and On	This longtime deckhand continued to fish as his wife began the transition away from the fishing industry first by starting gardening and grounds keeping business. As their business grew he too left the fishing industry. He studied master gardener & irrigation coursework through online classes & correspondence. His transition took approximately two years. They are steadily building clientele and growing their business. Partners involved in his transition were the local GDOP Outreach Peer and the local WIA provider. (ref49)
м	Off	This longtime deckhand is attending college-level water treatment classes (second year); he is still in school and doing well. He continues to praise the GDOP program and people involved. Partners involved in his transition are the local GDOP Outreach Peer and the local WIA provider. (ref1)

Appendix D: Estimates Numbers of Oregonians Impacted by WCGD

Following is an excerpt of a July 27, 2000 letter from Ginny Goblirsch, OSGE to OED, estimating the size of the GDOP target audience. The prediction was that 342 persons would try to access the program. As of December 2005, close to 1,500 are thought to have used GDOP services, with 800 directly accessing resources.

Following are my best estimates of the numbers of people impacted by the groundfish crisis. These figures were arrived at by looking at the vessel type (trawler, fixed gear, and open access) and multiplying by the estimated number of crew working on the vessel based on gear type. To be very conservative, I averaged 3 on trawl vessels, 2 on fixed gear vessels and 1 on open access vessels. The count includes both those in the high and moderate risk category.

Look at Astoria. There are a total of 46 groundfish vessels in the Astoria area (see Attachment 1). I estimate that 61% (or 28 vessels) of the 46 vessels are at high risk of bankruptcy because of their exclusive dependence on groundfish. An additional 24%, or 11 vessels, are at moderate risk of bankruptcy – depending on how successful they are in the other fisheries for which they have permits. If you combine the high and moderate risk vessels, then we see that 85% of the fleet in the Astoria area is at risk. I estimated that a total of 93 people work on all groundfish vessels in the Astoria area. 85% of 93 people is 79 (see Attachment 2).

You know that not all fishermen will seek services and that many are also married. Their spouses may also seek services. Also directly impacted by the groundfish crisis are fish plants/workers. We don't yet know how things will shake out for them. Expect some plants to close. We don't yet know which ones or how many. This process will continue on for several years. People will seek services at different times and at differing levels.

To guess at the numbers of people who may seek services we'll have to do some averaging to come up with our best guess at this time. I'd combine the moderate and high risk vessels and use the number of people those vessels represent. So, for Astoria, we might expect to serve 79 people. Round it off to 80 and have that also represent the unknowns – wives, fish plant workers and other potential support service workers. These are the best estimates I can come up with and I consider them to be conservative.

So here are the totals for numbers of people each region might expect to serve: Astoria Region: 80; Brookings Region: 29; Coos Bay Region: 60; Garibaldi Region: 25; Newport Region: 90; Port Orford Region: 40 and Florence Region: 7.

Attachment 1

Number of Groundfish Vessels at Risk by Port Region

Astoria (Warrenton, Hammond, Seaside): 46 vessels total (85% or 39 of the vessels are at high or mod risk) 61% - at high risk (28 vessels at high risk of bankruptcy) 24% - moderate risk (11 vessels at mod risk) 15% - at low risk (7 vessels at low risk) Brookings (Gold Beach): 29 vessels (69% (20 vessels) at high or mod risk) 41% - high risk (12) 28% - moderate risk (8) 31% - low or no risk (9) Coos Bay (Charleston): 40 vessels (62.5% (25 vessels) at high or mod risk) - high risk (18) 45% 17.5% - moderate risk (7) 37.5% – low or no risk (15) Garibaldi (Tillamook, Pacific City): 21 vessels (81% (17 vessels) at high or mod risk) 48% - high risk (10) 33% - moderate risk (7) 19% - low or no risk (4) Newport (Waldport, Depoe Bay): 81 vessels (57% (46 vessels) at high or mod risk) 28.5 - high risk (23) 28.5 - moderate risk (23) 43% - low or no risk (35) Port Orford (Bandon): 26 vessels (92% (24 vessels) at high or mod risk) 27% - high risk (7) 65 % - moderate risk (17) 8% - low risk (2) Florence/Reedsport: 11 vessels (54% (6 vessels) at high or mod risk) 18% - high risk (2) 36% - moderate risk (4) 46% - low or no risk (5)

Attachment 2

Numbers of People Expected to Seek Services by Port Region

Astoria Region: 80 (85% of all groundfish vessels are at high or moderate risk of bankruptcy. So, 85% of 93 people = 79. Round off to 80.) Type of Groundfish # # Total Vessel Vessels crew People Trawl 20 3 60 х = **Open Access** 19 19 1 х = Fixed _7 х 2 = 14 93 46 **Brookings Region: 40** (69% of 60 = 41. Round off to 40.)Trawl 13 39 х 3 = O/A 11 1 = 11 х Fixed 5 2 х = 10 29 60 (62.5% of 94 = 59. Round off to 60.)**Coos Bay Region: 60** Trawl 25 3 ----75 х O/A 11 1 11 = Х Fixed 4 2 х = 8 40 94 Garibaldi Region: 25 (81% of 31 = 25)Trawl 5 3 = 15 X O/A 16 1 16 _ X Fixed 0 2 = 0 X, 21 31 Newport Region: 90 (57% of 161 = 92. Round off to 90.)Trawl 99 33 3 = Х O/A 34 34 1 = х Fixed <u>14</u> 2 = <u>28</u> х 81 161 Port Orford Region: 40 (92% of 44 = 40.)Trawl 9 3 3 = X, O/A 11 1 = 11 X Fixed 2 12 = 24 X, 26 44 Florence Region: 7 (54% of 13 = 7)Trawl 1 3 3 = Х O/A 10 1 = 10

Х

Х

0

11

2

=

0

13

Fixed

Appendix E: IRB Certification
Case Study Examination of Programs Designed to Help Individuals and Communities through Fishery Disasters

Flaxen D. L. Conway, Oregon Sea Grant Extension Community Outreach Specialist

Brief Description:

This project will examine disaster programs designed to mitigate the social and economic impacts caused by the ongoing decline of the Pacific groundfish fishery. The primary focus will be on the disaster program in the state of Oregon (the Groundfish Disaster Outreach Project), with secondary foci on Washington and California. Each of these states received federal government funding to help lessen the impact of the collapse of the fishery, yet each state designed different approaches and utilized their funding differently. The goal of this study to document what happened in each state and capture lessons learned about the effectiveness of each approach from the perspective of both communities involved - the commercial fishing community (FC) and the social service resource community (RC). This project will also include a brief examination of similar issues just beginning to be faced and addressed in Alaska. Our objectives are to gain a better understanding of the history of the groundfish fishery and how this formally-declared fishery disaster compares with other regional fishery disasters, to document the resources used to help individuals and families cope with this economic collapse, and to understand the relationship within and between the communities.

This project will be used both for the development of an Oregon Sea Grant publication for distribution to communities involved and the general public, and in the development of a Masters of Resource Management thesis.

Participant Population:

We are interested in the experiences and perspectives of individuals known to be involved with the fishery and the subsequent disaster programs. Individuals interviewed for this study will be selected using snowball sampling technique where the initial contacts will be provided by the principal investigator but, at the completion of interviews, each interviewee will be asked who they think would be beneficial to interview as well. Individuals may be selected based on their position within organizations of interest.

It is estimated that the study will require approximately 25-30 interviews. These interviews will be with members of the FC and RC including federal and state employees, employment counselors, fishers and their spouses/partners, fish processors, and other members of the fishing community. Gender, age, range, or ethnic identity will not be used in interviewee selection. Once a wide range of

information is obtained and repetition of information occurs, sampling will be terminated.

Methods and procedures:

Semi-formal ethnographic interviews – commonly used in sociology and anthropology to explore complex issues – will be conducted. Ethnographic interviews allow "informants" to help shape the interview and raise topics that might otherwise not be explored by just limiting interviews strictly to a set of pre-determined questions. Individuals will be contacted by phone or email to schedule an interview date and time. Scheduled interviews will be conducted either in-person or over the telephone. There will be a specified set of questions to ask each individual (see attached) as well as followed-up questions to clarify or expand upon provided answers. Interview responses will be captured via notes and/or tape recording device. Recorded interviews will be transcribed and a computer program (software designed for analysis of qualitative data of all kinds including text, audio, and video) may be used for content analysis, or we will manually codes in the analysis to determine themes heard, etc. Coding of interviews will also be used so that identity is not attached to any particular statements.

Risks:

The interview questions do not request any sensitive information. Rather, they are confined to either specific, non-sensitive factual topics or general opinions concerning fisheries disaster outreach programs. The issues covered in the interviews will include the individual's experience with their community and the other community and their views on the effectiveness of fisheries disaster programs. Thus, the risks associated with the project will be minimal and will be related to the possible inconveniences that some people undergo while revealing their views.

Benefits:

In terms of benefits, the project provides the participants an opportunity to express their opinions and views regarding fisheries disaster programs. Obtaining this information could lead to recommendations for improvement in future fisheries disaster programs. Participants will be sent, via US mail, a copy of the completed study no later than December 2006.

Informed Consent Process:

During the initial phone contact (basically a "cold call" to each individual) the potential participant will be informed of the basic elements of informed consent: "Your participation in this study is voluntary and you may refuse to answer any question." During this call we will obtain their contact information (address, alternate phone number if needed for a phone interview). Prior to the interviews, participants will be provided with an informed consent letter explaining the project, informing them that participation is voluntary and their ability to refuse participation at any time, and the researcher and the participant will review this consent letter together prior to the interview session.

Compensation:

No compensation will be given to the participants in this study.

Confidentiality:

A tape recorder will be used for the interview, with the approval of the participant. The tapes will be transcribed by Conway, Shaw, or some professional transcription service professional. The recordings will be stored in a secured system and only available to Conway, Shaw, or the transcription service. The transcribed interview will be coded so that the individual's identity will not be attached to any statement. Any statements used in the study will remain anonymous. The list of names and contact information will be kept in a separate secure location. Once the project is completed, the recordings and all contact information will be destroyed. Please see the attached informed consent letter.

Attachments:

- Script of Initial Phone Contact
- List of Questions Used in the Interview
- Consent Document (in a separate file)

Script of Initial Phone Contact

- Hello
- My name is ______ and I got your name from ______
- I'm doing a study on the effects of the collapse of the Pacific groundfish industry on individuals and communities. Specifically, I am interested in learning about the effectiveness of the groundfish disaster efforts from the perspective of the commercial fishing community and the social service resource community.
- I want to
 - gain a better understanding of the history of the groundfish fishery and how this formally-declared fishery disaster compares with other regional fishery disasters,
 - document the resources used to help individuals and families cope with this economic collapse, and
 - \circ understand the relationship within and between these two communities.
- The results of the study will be used in a Sea Grant publication and for my Master's thesis. I'd like to set up a 30-90 minute phone or in-person interview with you to listen to your thoughts, ideas, and suggestions.
- Your participation is completely voluntary.
- You can refuse to answer any question or stop the interview at any time.
- What date and time would work best for me to visit with you or call you?
- What place (or phone number) would work best for me to visit with you?
- You will receive an informed consent letter explaining the project and the process of the interview. Please look it over carefully. I'd be happy to answer any questions you might have when we meet. May I have an address where I can send this letter?

Thank you for your willingness to participate. I'm looking forward to meeting with you.

Interview Protocol for

Case Study Examination of Programs Designed to Help Individuals and Communities through Fishery Disasters

Interview Protocol for the Social Service Resource Community

- Tell me about your experience with fisheries disaster programs: what was your involvement in past programs and how did this fisheries disaster program compare to it/them?
- What do you think the goal of this disaster program was? How was promotion/communication different with this fisheries disaster program? How did it help reach that goal?
- What was your past experience with the fishing community? Did your perspective on the fishing community change during the course of this fisheries disaster program, and if so, how? What were some of your challenges in working with the fishing community?
- What was the fishing community's perspective of the resource community in the past? Did this change during the course of this fisheries disaster program, and if so, how?
- Were bridges built between the two communities? Will they last?
- Do you think this fisheries disaster program was a success?

Interview Protocol for the Fishing Community

Questions for fishing community:

- Tell me about your experience with fisheries disaster programs: what was your involvement in past programs and how did this fisheries disaster program compare to it/them?
- What do you think the goal of this disaster program was? How was promotion/communication different with this fisheries disaster program?
- What was your past experience with the resource community? Did your perspective on the resource community change during the course of this fisheries disaster program, and if so, how? What were some of your challenges in working with the resource community?

- What was the resource community's perspective of the fishing community in the past? Did this change during the course of this fisheries disaster program, and if so, how?
- Were bridges built between the two communities? Will they last?
- Do you think the fisheries disaster program was a success?
- Did this disaster program change your feelings about transitioning out of fishing?

Additional questions for fishing community outreach peers (in Oregon only):

- What were your goals for the program?
- Was your program successful? Why?
- What would you do differently next time?
- What are some of the benefits and challenges of working between the resource community and the fishing community?