

Changes & Fishery Management: Impacts, Communication, and Fishing Communities

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Abstract: Fisheries resources in Oregon have been the focus of a public policy and management controversy for the last several years. As changes in fisheries resources management and policy decisions continue to occur, the two communities that are directly involved - the fishery management community and the fishing family business community - will continue to interface with each other. Recognizing the interdependence of these two communities is becoming more and more important. Equally important will be the recognition of how communication at the interface can help to lessen tension and negative impacts. This paper discusses an innovative outreach project and the lessons learned regarding small steps in communication that can help both fishing communities and the fishery management community in their struggles to cope with changes in fishery management.

Keywords: Fishery Management, Community, Communication, Change.

1. INTRODUCTION

Fisheries resources in Oregon have been the focus of a public policy and management controversy for the last several years. What were first coined as crises, then called disasters, have resulted in tremendous changes in Oregon's fishing industry and its coastal communities.

Fishing in Oregon has always been challenging - economic change, environmental change, changes in biological systems, social systems, management systems, and political systems. Independently they are nothing new to the commercial fishing industry and the family businesses that are its backbone. Resilience, innovation, and endurance have been key coping and adapting mechanisms for these families, their businesses, and the industry. But as these changes have begun to "overlap" each other, the stressors became too great, some of the old coping mechanisms failed to work (bigger boats, more gear, fishing longer, etc.), and the family systems began to fall apart along with the economics and environment.

The driving forces behind this change are the tools of our own success: technology and development, global markets, and an exponentially growing demand for goods. This paper shares reflections from an Extension outreach program—the Fishing Families Project—as it

observed some the communication strategies used to convey changes between the fisheries management community and the fishing family business community from 1995-2000.

2. CONTEXT

Oregon's fisheries are undergoing dramatic change. After expanding rapidly with the development of new technologies in the late 1970s and early 1980s, at the turn of the millennium the industry is experiencing resource scarcity and decline.

Both the commercial salmon and groundfish industries in Oregon are experiencing crises, and both have been—or are currently—the targets of disaster relief programs for commercial fishers. Salmon fisheries declined sharply in the early 1990s as a result of many factors including habitat loss, dams, over-fishing, and ocean conditions. From 1976-80, salmon fishing averaged \$55.5 million (calculated in 1998\$). At the peak of the fishery 2,500 families earned income from salmon fishing. From 1994-98, income dropped to \$5.2 million with only 800 families earning income from salmon fishing (PFMC 1999; C. Smith, personal communication).

After a period of full utilization and overcapitalization, the pacific groundfish fishery is also in decline. In Oregon alone, commercial groundfish landings contributed \$67.6 million (real 1998 dollars) in personal income to the economy in 1995, but this decreased to \$46.1 million in 1998 (Radke and Davis, 1999). All indicators show a decrease will continue. The long history of fishing in Oregon, combined with expectations generated in the 1970s, has made recent declines particularly devastating. Because the occupation of fishing is inseparable from other areas of a fisher's life, changes in the industry also profoundly affect participants' lives. These effects ripple through the fishing family and community (Danowski, 1980; Gilden and Smith, 1996a and 1996b).

3. TWO COMMUNITIES, SEPARATE YET UNDENIABLY INTERDEPENDENT

Communities, whether defined by locality (place) or interest (fishing family business or fisheries management), are the links between humans and their natural environment. Shaffer and Anundsen (1993), define community as "a dynamic whole that emerges when a group of people participate in common practices, depend on one another, make decisions together, identify themselves as part of something larger than the sum of their individual relationships;" and commit to "their own, one another's and the group's well-being." Most Oregon coastal communities are economically and culturally based on resource extraction, though tourism is becoming increasingly important. Declines in natural resource extraction have forced many families to relocate against their preference.

3.1 Fishery Management Community

Fishery management has certainly undergone many changes over the years; some related to biology, environment, economics, globalization, etc. However, the changes we are most interested in are the changes in process and structure, particularly with regard to citizen involvement.

Fishery management has traditionally been top-down, science-based, and bureaucratic; the government decides and acts unilaterally, and fishermen are asked to comply (McCay and Jentoft, 1996). Co-management - the systematic and formally-organized collaboration between user groups and government agencies in the design, implementation, and enforcement of management functions - has been a step towards ending this top-down approach (Jentoft and Sandersen, 1996). However, this

attempt at a two-way process of communication between government and industry, as represented by user groups on advisory or management councils, is still problematic.

3.2 Fishing Family Business Community

Most Oregon fishing businesses are small, family-run enterprises. Trolling and trawling are the two most commonly used gear types in Oregon. Trolling involves boats around 30-39 feet long that drag lines with multiple hooks, generally targeting salmon or albacore. Trawlers are generally 60-69 feet long, drag long funnel-shaped nets, and target shrimp and groundfish. In Oregon, both are usually family-run businesses. To earn enough for a family, trollers usually target multiple fisheries or supplement their fishing income with non-fishing jobs. Trawling, however, is a full-time job and until recently could provide a comfortable family income.

Fishing family businesses have strong ties to both their occupational and geographic communities. Fishermen and their families are often born, raised, and live in local communities (Jentoft, 1999). Both men and women in the fishing industry are actively involved in work, friendship, and fishing community relationships (Davis, 1986). Fishing businesses are family businesses, and fishing community members have strong family ties that help them manage daily strains (Poggie and Gersuny, 1973; Shafer, 1996; Smith and Jepson, 1993). Because fishermen¹ are frequently at sea, the responsibility of maintaining the shore-side business and home falls largely on the spouse's shoulders (Mederer, 1993; Thiessen et al, 1992). The wife or at-home partner in the fishing business works independently, managing business and family finances, running errands for the boat, and working with fish processors and sellers. She also manages the household, keeps the family together and provides emotional support (Davis, 1986; Smith, 1995; Bogan, 1998).

Communication within the fishing industry itself is a major challenge. The monolithic "fishing industry" actually comprises many different and often conflicting interest groups based on gear types, fisheries, geographic locations, and other factors, and most communication in the industry takes place within, and not across, these interest groups.

¹ Although the vast majority of fishers are men, there are women who fish commercially. However, many of these women prefer to be called "fishermen," seeing the term "fishers" as misplaced political correctness (Greenlaw, 1999).

Fishing community members trust other industry members for information more than newspapers, agencies, environmental groups, or other sources (Conway, 1998). Important communication takes place at informal encounters on the docks, in coffee shops, and while repairing nets or maintaining gear. In addition to this person-to-person communication, community-of-interest networks such as commodity groups and fishermen's wives organizations are an important resource for the industry. While commodity groups encourage networking, however, they also foster an environment of competition by separating people based on gear types or fisheries. The challenge is to communicate with and listen to *all* members of the fishing community. Cross-industry groups such as fishermen's wives organizations help by bringing together members of different commodity and gear groups.

3.3 Communication And The Interface

Communication between management and industry is troubled in part because of the lack of communication within the fishing industry itself. Fishermen complain that management doesn't listen to them; management personnel claim that fishermen do not respond to their attempts to communicate.

Even though public participation approaches bring scientists (the fisheries management community) and citizens (the fishing family business community) together, such participation does not necessarily foster an interactive, mutual learning environment as a part of natural resource policy decisions. In the Pacific Northwest, participation has been most effective for the Pacific Fishery Management Council (PFMC) when the process allowed for mutual learning, information transmission, incremental change, common interest in reaching an outcome, increased regulatory compliance due to participants' knowledge of industry operations, and when resource conditions supported decisions that avoided large-scale losses to any single group (Hanna, 1996). Furthermore, fishermen recognize the need to participate in the scientific management process to control decisions affecting their livelihoods (Smith and Jepson, 1993). However, participation is most valued when it is interactive and involves communication that is two way, and shared decision making rather than formal public hearings or letter writing (Walker and Daniels, In Press).

An example of problematic communication surfaced in 1994, when the Pacific Fisheries Management Council closed the ocean fishery for coho salmon. In response, the

governors of Oregon, Washington and California declared a "salmon disaster" to allow fishers to receive federal disaster relief assistance. In turn, the National Marine Fisheries Service (NMFS) held a series of meetings in coastal communities to generate input on the design of the disaster relief programs. In all, the meetings drew 700 people and provided 37 hours of testimony (*Federal Register*, 59: 46225). Some fishing industry members felt the meetings were merely a "dog and pony show" (as one fisherman said), and that NMFS staff really did not hear what the attendees were saying. Also, it was evident that in these meetings men were speaking with men. Had the "entire fishing family business" been present, the discussion would have focused on social issues as well as economic issues.

Gilden and Smith (1996a; 1996b) interviewed salmon fishermen about their reactions to the disaster relief programs. Members of commodity groups and other industry organizations felt they understood the needs of participants and could have allocated disaster relief more fairly than the federal agencies that managed the programs. Although fishermen convinced disaster relief planners that their income in the few years before the coho closure was not representative of the income they typically received, they felt the resulting eligibility rules for unemployment and other programs were excessively complicated. Fishermen also complained of inappropriate distribution of funds.

4. SMALL STEPS IN COMMUNICATION HELP WITH COPING

Communication - simple yet complex, easy to do yet easy to blunder. It can be the source of conflict and misunderstanding that launches wars; ironically, it's also the only thing that can get you back to peacetime.

The Fishing Families Project (FFP) observed the changes occurring in fisheries management and the impacts they were having on fishing family businesses. One of the objectives of the FFP was to provide education that supported taking steps towards better communication and understanding. Another was to provide support for inter-community and cross-community networks. Both objectives focused on helping communities to better cope with change.

The idea was to support cooperative efforts to create communication tools or strategies that both informed community members but also connected member of both communities to each other. One example of this is the Heads Up! web site (www.heads-up.net). Heads Up! is a collaborative web site created by Oregon Sea Grant and

the Women's Coalition for Pacific Fisheries (WCPF is a multi-region, multi-gear, multi-fishery group). Heads Up! provides news about the fishing industry/management, family issues, safety and seafood. The site's goal is to connect individuals, families, and communities interested in the West Coast commercial fishing industry. This type of cross-community communication tool can help decrease isolation, increase involvement, and develop a more equitable balance of power within the fishing community and between the fishing and management communities.

Multi-region, multi-gear groups also serve as platforms that reach across gear groups and fisheries. They can be used to address issues that interest all in the industry, such as involvement in fisheries management, health insurance, and safety concerns. WCPF, the Massachusetts Fishermen's Partnership (a fishing industry support organization with offices in three Massachusetts communities), and the Pacific Marine Conservation Council (a coalition of fishermen of different gear types, fishing family members, scientists and environmentalists) are some examples. For instance, recently the WCPF Board of Directors decided to make sure a member is present at every council meeting—in order to share the perspectives of their membership with the council and to be able to inform membership of what happened at the council meetings.

Involving and recognizing the "fishing family business" part of the fishing industry in decision making is critical. For example, in planning for the disaster aid response to the groundfish crisis, both men and women were requested to serve on the Disaster Steering Committee. And, in Oregon, a new Groundfish Disaster Outreach Program is being launched. This program is using eight fishing community members in regions covering the coast to serve as conduits between the fishing family business community - those members wishing to transition out of the industry - to state and federal agencies that provide support assistance. Another new program will soon be pilot tested to try out a cross community liaison between the fisheries management community and the fishing family business community.

5. CONCLUSION

Coping with changes in fisheries resource is difficult. It is difficult for both the fishery management community (those who have to design models and research projects to determine the changes, and then the policies and management activities that help to save or enhance the resources) and for the fishing family business community (those who make their living providing this food source).

One thing is for sure, things will continue to change. Our observations indicate that even small steps in improving communication help both communities cope with changes.

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