Managing Fisheries—Empowering Communities: Conference Proceedings

April 21-23, 2005
Anchorage, Alaska

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Introduction

Many of Alaska's coastal communities, rich with vibrant histories and diverse cultures and economies, face an uncertain future. In most coastal communities, the local economy is fueled by a combination of government spending, subsistence activities, and, in the private sector, fisheries and other resource development. When the balance of any of these sectors changes, communities must realign their economies to adjust and hope that the outcome will be, in the long run, positive.

In recent years, fishery managers have focused on managing fisheries for biological and economic sustainability. Often, the challenge of addressing overcapitalization ("too many boats chasing too few fish") has led to limited-entry programs, which use tools such as limiting licenses (as is the case with the salmon and herring fisheries) or allocating a specific amount of quota to individuals (as seen in the halibut and sablefish Individual Fishing Quota [IFQ] programs).

Fishery management regulations, and limited access in particular, clearly impact fishing communities. While there are considerable benefits to limiting access, such as longer fishing seasons, increased efficiency, improved product quality, and increased value of the fishery, there also has been a trend for fishing activity and supporting industries to migrate away from rural coastal communities. This out-migration of fishing activity can result in weaker local economies and a less certain future for Alaska's coastal communities.

Understanding and considering impacts to coastal communities should be a necessary step in the fishery management process. The Managing Fisheries—Empowering Communities conference brought together about 150 Alaska coastal community residents, fishermen, fishery managers and regulators, economists, and speakers from outside of Alaska to address such questions as:

- Are there ways to develop effective policies and programs that do not foreclose opportunities to coastal communities?
- What aspects of "coastal communities" are we trying to protect?
- How can communities be considered under the federal and state fishery management systems?

- What do we need to know in order to assess community impacts?
- Are there better ways for communities to participate in the development of fishery management programs and plans?
- How can community members take advantage of the provisions of existing programs?

Speakers addressed the importance of fisheries to Alaska's coastal communities, the need for accurate and complete data on community impacts from fishery management actions, the state versus federal management authority and process, and a series of case studies from around the world representing various efforts to include communities in fishery management actions.

The rest of the conference was dedicated to five breakout sessions of participants who shared their concerns and ideas about incorporating community into fishery management. During the last half-day, the conference participants came back together to share their discussions. The main discussion points of these breakout groups are included in this book.

It was apparent to all that many coastal community residents in Alaska feel that their communities have been impacted in the past by fishery management actions, and that they should participate in the process to a greater level. A number of attendees requested in their evaluations that this community conference happen again soon. The conference planners are in the beginning stages of organizing another conference for spring 2006.

Acknowledgments

We would like to thank the speakers for sharing their experiences with us, particularly our out-of-state speakers—Ross Shotton, FAO; Madeline Hall-Arber, Massachusetts Institute of Technology Sea Grant; and Hubert Saulnier, Fundy Fixed Gear Association. Thanks also to Sherri Pristash, Alaska Sea Grant, for coordinating the conference. We also would like to recognize the funders of the conference—NOAA Fisheries, Alaska Region; North Pacific Fishery Management Council; Gulf of Alaska Coastal Communities Coalition; Norton Sound Economic Development Corporation; Central Bering Sea Fishermen's Association; and Aleutian Pribilof Island Community Development Association.

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Agenda

Thursday, April 21, 2005

9:00 Opening remarks

Moderator: Phil Smith, Program Administrator, Restricted Access Management, NOAA Fisheries, Alaska Region

Welcome, "The Importance of Community to Fisheries Management"—Dr. James Balsiger, Regional Director, NOAA Fisheries, Alaska Region

Keynote Address, "Empowering Fishing Communities: A view from an IGO bureaucrat"—Dr. Ross Shotton, Fishery Resource Officer, Food and Agriculture Organization, United Nations, Rome

10:15 Alaska's community fisheries management programs: Where are we now? (Panel 1)

Community Development Quota Program—Mark Davis, Director of Banking and Securities, Alaska Department of Commerce, Community, and Economic Development

Local Area Management Plans—Eric Jordan

Chignik Salmon Cooperative—Axel Kopun and Heather McCarty

Community Quota Program for Halibut/Sablefish—Brian Templin, City Planner, Craig, Alaska

BSAI crab rationalization—Steve Minor

1:15 Coastal communities and fisheries management: Finding and using the data to analyze impacts (Panel 2)

Facilitator: Wanetta Ayers, Executive Director, Southwest Alaska Municipal Conference

Dr. Michael Downs, Senior Social Scientist, EDAW Inc.

Dr. Jennifer Sepez, Anthropologist, Economics and Social Sciences Research Program, NOAA Fisheries, Alaska Fisheries Science Center

Courtney Carothers, Graduate Research Assistant, Economics and Social Sciences Research Program, NOAA Fisheries

2:45 Community considerations in state-managed fisheries: The Alaska Board of Fisheries process and legal framework

Ed Dersham, Vice Chair, Alaska Board of Fisheries

Diana Cote, Executive Director, Alaska Board of Fisheries

3:45 Community considerations in federally managed fisheries: The North Pacific Fishery Management Council and NOAA Fisheries process and legal framework

Chris Oliver, Executive Director, North Pacific Fishery Management Council

John Lepore, NOAA General Counsel

Jay Ginter, Sustainable Fisheries Division, NOAA Fisheries, Alaska Region

Friday, April 22

8:30 Opening remarks
Stephanie Madsen, Chair, North Pacific Fishery Management Council

8:45 Case study 1
Community-based management in the fixed gear groundfishery off Nova Scotia—Hubert Saulnier, Chair, Fundy Fixed Gear Council

10:00 Case study 2
The community panels project: institutionalizing social science data collection—Madeleine Hall-Arber, Anthropologist, MIT Sea Grant College Program

11:10 Case study 3
International perspectives on community-based fishery management—Dr. Ross Shotton, Fishery Resource Officer, Food and Agriculture Organization, United Nations, Rome

1:15 Case study 4
Alaska coastal communities and the salmon industry: the future—Dr. Steve Langdon, Professor of Anthropology, University of Alaska Anchorage; and Bob Waldrop and Chuck McCallum, Members, Alaska Board of Fisheries Salmon Restructuring Committee

2:30 Breakout sessions

This is an opportunity for small groups to discuss the conference presentations, the questions below, and other issues related to fisheries management and Alaska's coastal communities.

- What are Alaska's coastal community needs? What are we trying to protect, sustain, or promote?
- Were there tools, provisions, or programs presented in the case studies that might work in Alaska?
- What goals are these programs intended to meet?
- What are the key elements of these programs that make them effective?
- How can and should communities be involved in determining the objectives, design, and implementation of these programs?
- What are effective and appropriate ways to represent communities in a regulatory regime?
- How can government provide meaningful opportunities for community development via public policy while also supporting community efforts to determine their own futures?

5:30 Reception

Brief presentation: Alaska Coastal Communities Observer System—Gale Vick, Executive Director, Gulf of Alaska Coastal Communities Coalition

Saturday, April 23

9:00 Opening remarks
McKie Campbell, Commissioner, Alaska Department of Fish and Game

9:30 Breakout group reports

Facilitators provide a summary of each group's recommendations and/or conclusions.

11:00 First steps: Discuss process for furthering measures recommended in the working groups.

- Is this action within the Board of Fisheries (BOF)/state, North Pacific Fishery Management Council (NPFMC)/federal, legislative, or community authority?
- What mechanisms are necessary to further these recommendations?
- What is the most effective course of action? What steps could communities take to get there?
- Discuss modifications as we learn more about the obstacles to implementation

The Importance of Community to Fisheries Management

James Balsiger
Administrator, NOAA Fisheries Service, Alaska Region, Juneau, Alaska

NOAA Fisheries Service supports this conference. We believe that communities and their representatives have a voice when decisions affecting their viability are made. This conference is an opportunity for community leaders to interact with fisheries managers and to build on their knowledge of management systems and processes.

Federal managers must strike a balance between the nation's demands and the needs of smaller communities. That means balancing between large-scale versus small-scale operations, between protections and open market competition, and between demands born of different lifestyles that are applied to the same resources.

General protections for small-scale fisheries and communities are built into much of Alaska federal fisheries management. Tools used are direct allocation of fishing quota, programs that allow and encourage communities to purchase quota, and vessel restrictions such as quota and privileges retained uniquely for smaller boats.

The Community Development Quota (CDQ) Program, jointly managed by federal and state fisheries officials, is the mainstay of community programs in Alaska. There are six CDQ groups—Norton Sound Economic Development Corporation, Yukon Delta Fisheries Development Association, Coastal Villages Region Fund, Central Bering Sea Fishermen's Association, Bristol Bay Economic Development Corporation, and Aleutian Pribilof Island Community Development Association. In all, sixty-five communities totaling 27,000 inhabitants are involved. They benefit from forty-seven different quota allocations of groundfish, halibut, crab, and prohibited species.

In 2003, the total revenues of the six CDQ groups were about $87 million combined. Total annual royalties from CDQ allocations are about $54 million, with a valuation of total assets at the end of the audit (2003) at $262 million.

The first CDQ allocation of pollock was in 1992, followed by halibut and sablefish in 1995, then groundfish in 1998. The CDQ program has

provided infrastructure, education, training, cash, employment, and ownership to CDQ communities.

Crab rationalization, a new management program for the Bering Sea and Aleutian Island crab fisheries that became final in 2005, has community protections built in. The program sets up a "cooling off" period, during which crab quota cannot be transferred out of some communities until July 1, 2007, for certain fisheries. The program includes a "right of first refusal," which means communities with historic participation have a chance to buy processor quota before it is sold elsewhere and transferred out of the community.

The program increases allocation of crab to the CDQ groups from 7.5% to 10%, and adds two new species, Eastern Aleutian Islands brown king crab and Adak red king crab, to the CDQ allocations. Adak receives a specific allocation of Aleutian golden king crab under crab rationalization.

Quota for halibut and sablefish is partly assigned by vessel category, ensuring that vessels under 35 feet have a certain amount of quota set aside. An early protection for community halibut and sablefish quota was the block program, which protected small-scale fishermen—another way of protecting communities where small-scale fishermen lived. A fisherman could own one or two blocks of halibut-sablefish Individual Fishing Quota (IFQ). If a fisherman owned one block of the "blocked" IFQ he could also own IFQ that was not part of a block. But if he owned two blocks of IFQ, he could not own any unblocked IFQ. And no one could own more than two blocks of the blocked IFQ.

Amendment 66 (to the Fishery Management Plan for Gulf of Alaska Groundfish) changed the halibut-sablefish IFQ program so that communities could hold IFQ. Small coastal communities could enter the quota share market by forming nonprofit corporations to receive, hold, and fish the IFQ harvest on behalf of the community.

Forty-two Alaska communities are eligible under Amendment 66. These communities have fewer than 1,500 people, are not on a road system, have a history of fishing halibut and sablefish, and have been named as eligible by the North Pacific Fishery Management Council. So far, two community quota entities have formed, one serving the town of Craig and one—named Aleutia—that serves the communities of King Cove and Sand Point.

The halibut subsistence program, which began May 15, 2003, allows rural residents of Alaska to catch halibut for subsistence. There are currently just over 14,000 subsistence halibut registration certificate holders. At last survey, these caught about 1.3% of the overall Alaska halibut harvest.

Alaskans also harvest marine mammals under subsistence harvest comanagement agreements between the federal government and different tribal entities. Marine mammals harvested include harbor seals, northern

fur seals, beluga whales, and Steller sea lions. Other subsistence marine mammal hunting is for bowhead whales and for ice seals such as spotted, ringed, and bearded seals. Walrus are also taken.

"Gulf rationalization" is a new management program being designed for the Gulf of Alaska. The proposed program does not yet have a final, distinctive shape, but community support programs likely to be part of it are direct allocations of quota, provisions for community ability to purchase quota, and regional designations to protect particular activities.

The rockfish pilot program would increase stability for processors and harvesters, largely in Kodiak. It would have an entry-level component of the fishery for small-scale entrants and would freeze rockfish harvest by area for two years, ensuring that historic harvesters would keep their harvest rights. The pilot project would last only two years or until Gulf rationalization is final.

The proposed halibut charter IFQ program would give halibut charter operators quota based on their fishing history. It would also allow charter boat fishermen to purchase quota from commercial fishermen. The proposed program has passed the North Pacific Fishery Management Council, is now under rule-making by the agency, and actually will be fished in 2007 at the earliest.

In conclusion, federal fisheries managers have made strong efforts over the years to support coastal communities through fisheries programs. Our efforts cannot be successful without knowledge from and participation by members of the coastal communities. We have open public processes, and encourage all to come to our public meetings. North Pacific Fishery Management Council meetings are also open to the public.

We work to make sure that our agency processes are open and understood and that people's inquiries are answered. By law, as well as by culture and commitment, we ask people to comment on our draft documents and rules.

I admit that open does not always mean easy. It only means that we don't hide things, and that we seriously consider what people's needs and thoughts are. Our ears are open to comment and to ideas. We will continue to be aware of community needs, to listen to community concerns, and to take communities into consideration in our decisions.

Empowering Fishing Communities: A View from an IGO (International Governmental Organization) Bureaucrat

Ross Shotton
Marine Resources Service, Fisheries Department, Food and Agriculture Organization, Rome, Italy

The roles of the Food and Agriculture Organization (FAO) are to:

- Function as a global statistics department collecting, collating, and publishing "fish stats" for the world.
- Provide a means of developing global protocols related to fisheries management standards and acting as the technical advisor to the United Nations General Assembly on fisheries matters.
- Produce and disseminate publications and information related to the management and governance of fisheries.
- Act as the global forum for discussion of fisheries-related issues through the FAO Committee on Fisheries (COFI) and related consultations.

The Managing Fisheries—Empowering Communities Conference objectives include looking for ways for participants to "gain a voice in local fisheries management."

These can be further framed within the context of

- Avoiding foreclosure of opportunities for coastal communities.
- Asking what is it about a community that is to be protected.
- Determining how to assess impacts.
- Seeking better ways for communities to participate in the development of management plans.

When I visit a community as an FAO bureaucrat, these are the things I like to see from those involved in the fishery:

- Know what you want as best as is possible—"Management Speak" (articulate objectives).
- Recognize you probably can't have everything. "Wolde you bothe eate your cake, and haue your cake?" (John Heywood, 1546). In Management Speak, if you have conflicting objectives you must compromise one to reach or increase another.

And, do you know if you want

- Commercial fisheries or pristine untouched marine ecosystems?
- Economic efficiency or "jobs all round"?
- Well-paid and secure, but limited, jobs or "jobs for the boys"?
- The benefits of secure rights to fishing entitlements and easy entry for all in the community to share in harvesting the catch, while it lasts?

Empower yourselves! While I know this is easier said than done, these steps may help.

- Set objectives.
- Decide which are the most important—rank them.
- Reconcile conflicting objectives.
- Reconcile differing views.

Do the easy things first!

- Own your problems. Don't transfer to bureaucrats internal community problems that you have been unable to solve and expect them to get it right!
- Conversely (Mr. Bureaucrat), don't be afraid to cede power to those who have created the problem.
- Be proactive about accepting responsibilities.

Those at the community level will see opportunities to support management before bureaucrats in headquarters or even regional offices will.

Some examples from elsewhere:

1. Weighmasters, Maritime Canada

2. Groupement des Armateurs a la Pêche Crevettière de Madagascar.
3. Challenger Scallop Enhancement Company (New Zealand)

   - "Fishermen managing their own fishery!" You've got to be joking!
   - No one has ever done this before!
   - What would they know about managing anything, let alone a fishery!
   - You can't trust them!
   - They're bound to stuff it up, just wait and see!"

   Company Structure

   - Exclusive to scallop quota owners.
   - Unlisted limited liability public company.
   - Voting proportional to amount of quota owned.

   Governance.

   - 10 member board.
   - Business plan and budget set at Annual General Meeting.

   Funding

   - Commodity levies.
   - Levy set at General Meeting, up to 25% of landed value of scallops.

4. CRA2 Rock Lobster Company (New Zealand)

   The CRA2 Rock Lobster Company represents rock lobster quota owners on the east coast from Waipu Cove south to Te Araroa (including the Hauraki Gulf, Bay of Plenty, and outlying islands) in Quota Management Area 2.

   The company has a strong history of involvement in issues affecting property rights of fishers and established the successful CRA2 Multi-sector Fisheries Management Group, comprising commercial, recreational, NZ Tangata Whenua, conservation/environmental, and charter boat representatives to ensure harvesters share responsibility for managing the CRA2 fishery

5. New Zealand Mussel Industry Council

   The New Zealand Greenshell™ mussel is a sought after seafood delicacy, and the structure of the New Zealand mussel industry is a major reason for its market success. The industry's success is based on a "cooperating to compete" model where key strategic generic issues (e.g., production techniques, environmental management systems, generic market research, and market development) are funded by otherwise competing New Zealand processing companies and producers. The processors and producers collectively own and manage the company.

Bureaucrats (should) welcome proactive stakeholders who take increased responsibility, contribute to the management process, and bring solutions, not problems. For their part, bureaucrats should devolve more autonomy, leave stakeholders alone to sort things out on their own, and help them be able to make decisions.

The Western Alaska CDQ Program

Mark Davis
Director of Banking and Securities, Alaska Department of Commerce, Community and Economic Development, Juneau, Alaska

The Western Alaska Community Development Quota (CDQ) Program was formally approved in 1992 by the North Pacific Fishery Management Council and NOAA and implemented by Governor Hickel with the goal of promoting self-sustaining fisheries-related economic development in Western Alaska. In 1996, the Sustainable Fisheries Act was passed as an amendment to the Magnuson Fishery Conservation and Management Act. This amendment established the CDQ Program in statute. In 1998, the American Fisheries Act (AFA) was passed by Congress, requiring all vessel-owning entities in the Bering Sea to be 75% American-owned and establishing a cooperative system of management for the Bering Sea pollock fishery. Included in this legislation is a 10% allocation of Bering Sea pollock to the CDQ Program.

The CDQ Program is allocated a portion of all groundfish, halibut, and crab species in the Bering Sea, including the species quota necessary to prosecute the target fisheries. Sixty-five coastal communities in the Bering Sea and Aleutian Islands, representing approximately 27,000 residents, are organized under six regional CDQ corporations and are eligible for benefits from the CDQ program. The program was created to enhance the participation of Western Alaska communities in the Bering Sea fisheries. The revenues generated from harvesting CDQ provide the means for funding local projects, with the intent of creating a self-sustaining fisheries economy in one of the poorest regions of the state.

The CDQ groups may invest in fishing vessels, fishing companies, and the infrastructure needed to support a fisheries economy. The State of Alaska (State) is responsible for monitoring the performance and regulatory compliance of each CDQ group, reviewing financial statements and substantial investments, and participating in the allocation decision-making process with the North Pacific Fishery Management Council (Council) and NOAA. CDQ groups submit applications for allocations on a competitive basis every several years, which provide the means for completing community development projects. The State approves the

Community Development Plans (CDPs) and periodically reconsiders the allocation of quota based on past performance and future plans. The State consults with the Council on its recommendations to change the allocations, and subsequently those recommendations are forwarded to NOAA for approval.

As of 2003, the asset value of the six CDQ corporations exceeded $260 million. Since 1992, over $500 million in revenues have been generated, with revenues exceeding $88 million in 2003. Since 1992, over $110 million in wages, education, and training benefits have been generated for over 25,000 residents.

Revenues from the CDQ Program primarily consist of royalties earned from leasing quota to fishing companies. The CDQ Program has matured over the last twelve years, allowing groups to acquire equity ownership in the major pollock, cod, and crab companies that prosecute the Bering Sea fisheries. Currently, all CDQ groups have investments in Bering Sea pollock, Pacific cod, and crab vessels.

Western Alaska communities have many social and economic needs, which underscores the importance of this program to the region overall. The benefits from the CDQ Program provide hope for Western Alaska communities and will continue to play a vital role in the future economic development of this region.

In June 2002, the North Pacific Fishery Management Council recommended that each CDQ group should be allowed to invest up to 20% of its annual pollock CDQ royalties in sustainable, non-fisheries-related economic development projects within the CDQ region. As the program has evolved, several CDQ groups have requested an allowance for non-fisheries projects, in order to allow for further diversification of their economic development opportunities in Western Alaska. While most groups have indicated they continue to have significant fisheries projects to undertake, several groups have also identified local, viable, non-fisheries-related businesses in which they would like to invest.

CDQ groups will be recognized as major economic engines in Western Alaska, due to increasing ownership interests in Bering Sea vessels and processors. The State is hopeful that the allowance for sustainable non-fisheries-related economic development projects will be successful in providing additional economic development opportunities and in-region benefits to local residents of Western Alaska.

Please visit the CDQ Program Web site for more information: www.dced.state.ak.us/bsc/CDQ/cdq.htm.

Local Area Management Plans: Using the Collaborative Process in Sitka

Eric Jordan
Fisherman, Sitka, Alaska

I want to make it perfectly clear that all of my income comes from our commercial fishing operation. I also want to make it clear that my presentation is a personal story about what I perceive to be happening in Sitka, Alaska, relevant to this meeting. It is in no way either a scientific or comprehensive documentation of the fisheries management work in Sitka.

I also want to apologize for not attending this meeting. As many of you know, maintaining a fishing boat in a small community is sometimes a challenge. My boat is presently hauled out and my wife is bottom painting it as we speak. I am just completing a two-week haul-out with major drive train rebuild. Hopefully we will get back in the water tomorrow and the propulsion will be smooth and the hull watertight.

The collaborative principle

In the late 1990s the Island Institute brought David Chrislip, an expert in collaborative leadership, to Sitka. After attending one of his workshops it became clear that this man was teaching and writing about what we were doing in Sitka. Since attending several of his workshops and using our experience in Sitka with group process, I am completely confident that this process works. I want to share with you an overview of the body of work coming out of Sitka so you can understand the context of community-based fisheries management as we know it here.

Abalone

Subsistence abalone protection was adopted in Sitka Sound in the mid 1970s. This was recommended by the Sitka Fish and Game Advisory Committee and adopted by the Alaska Board of Fisheries. Since then it

has become a model for protecting subsistence shellfish resources near communities.

Herring

The Sitka Fish and Game Advisory Committee unanimously recommended a minimum threshold of 7,000 tons for herring population before a commercial sac-roe harvest could begin. Adopted for Sitka in 1977 by the Alaska Board of Fisheries, minimum thresholds were eventually adopted for all Alaska herring sac-roe fisheries. Sitka Tribe of Alaska became active in herring conservation politics in the late 1980s and the threshold was raised to 20,000 tons. Sitka herring population estimates and harvests are near or at record levels during recent years.

Northern Southeast Regional Aquaculture Association Hatchery, Bear Cove

Sitka fishermen organized to control ocean ranching technology emerging in the late 1970s. The Chichagof Baranof Aquaculture Association evolved into the Northern Southeast Regional Alaska Aquaculture Association. By 2000 the association budget exceeded $3 million per year and millions of salmon were produced for common property fisheries each year. A board of twenty-three members, mostly fishermen, manages the association.

Groundfish trawling

Groundfish trawling was prohibited in both state and federal waters of Southeast Alaska in the 1990s. Linda Behnken, director of the Alaska Longline Fishermen's Association, led an effort to prohibit groundfish trawling in federal waters off of Southeast Alaska, which was eventually adopted by the North Pacific Fishery Management Council. Sitka resident and retired fisheries biologist Robert Ellis proposed prohibition of groundfish trawling in Southeast Alaska. The Alaska Marine Conservation Council staff and board members shepherded the proposal through the Alaska Board of Fisheries.

Rockfish and the Sitka Pinnacles Marine Reserve

In 2000, NOAA established the Sitka Pinnacles Marine Reserve in Southeast Alaska. It became the first sanctuary for groundfish (including rockfish and lingcod) off Alaska's coast. Groundfish biologist Tory O'Connell developed the concept. Local fishing groups and conservation groups collaborated to refine the boundary lines and details.

Redoubt Lake Sockeye Management Plan

The Redoubt Lake Sockeye Management Plan won a national award from the U.S. Forest Service for Collaborative Aquatic Resource Stewardship. A task force appointed by the Sitka Fish and Game Advisory Committee, including representatives of all fishing interests and the Sitka Tribe, worked collaboratively to develop a plan to both share and conserve the most popular sockeye run in the Sitka area.

Sitka Sound Local Area Management Plan (LAMP): Halibut

In the mid 1990s Sitka residents became aware of localized depletion of halibut in their traditional fishing holes near town. The Sitka Fish and Game Advisory Committee organized a task force to document the problem and recommend solutions. Aided by sport fish biologist Art Schmidt, and Tory O'Connell, two different task forces met, prepared extensive documentation of the problem, and recommended voluntary actions by halibut fishermen to alleviate the problem. After a year, and in response to a proposal by the Sitka Tribe of Alaska to close Sitka Sound to commercial and guided sport halibut harvest, the Sitka Sound Halibut Task Force met over the course of six weeks and recommended regulatory action. The proposal was adopted unanimously by the Sitka Fish and Game Advisory Committee; endorsed by numerous community groups including the City of Sitka, the Sitka Borough, and the Sitka Tribe of Alaska; and finally by the North Pacific Fishery Management Council and the Alaska Board of Fisheries (BOF), and is used as a model for community action with joint BOF and Council protocols.

The Sitka Halibut Plan problem statement: Decreased availability of halibut in the Sitka area is diminishing the quality of life for local residents.

The most difficult aspect of initiating a collaborative effort is to shift attention away from the content or substance of the issue to the process challenges. Most people begin thinking about an issue by staking out positions on what should be done. There is no agreement about the problem, the process, or the solution.

A critical reason for the success of so many fishery proposals from Sitka is that we have taken the time to think about the problem statement, the process to address it, and the political dynamics before we have staked out positions on what should be done.

Regulation proposal example: Retention of halibut would be prohibited in the guided sport fishery inside the same areas defined for the category "D" longliners during the months of June, July, and August.

This is part of the proposal for halibut adopted by the Council. I share this with you because I have come to believe that translating your

good ideas and plans to specific regulatory action is an essential part of community-based fisheries management.

LAMPs work because:

- Regulations can be tailored to meet the identified needs and concerns of a specific community.
- Communities often avoid unnecessary or overly burdensome restrictions.
- They are informed by local and traditional knowledge that is often dismissed as anecdotal during other regulatory processes
- Involving local people in identifying problems and developing consensus on solutions fosters a sense of stewardship for local resources and a sense of ownership in implemented management measures.

The community's commitment to the resource and the management policy local people develop translates into enhanced compliance, lower enforcement costs, and direct conservation benefits.

As we think about community-based fisheries management and empowering communities, I believe we must begin by thinking about the dynamic forces shaping both what has happened and the future. What is the problem, do we really understand it, and is there a common understanding of the problem, of the political dynamics? If there is a common understanding of the problem and political dynamics then what is the process or processes to both develop solutions and build consensus for them? In the groups I work with, and the lessons from David Chrislip, as you come together in your community to address a perceived problem, resist the temptation to stake out positions on what should be done. Instead, focus on developing a common, a better understanding of the problem. Hear each other's stories; let the group shape your evolving knowledge of the problem. Then think about an inclusive process to develop consensus-based processes to propose and cultivate the political momentum for solutions.

Community Quota Entity (CQE) Program in Craig, Alaska

Brian Templin
City Planner, Craig, Alaska

Introduction

The City of Craig has a long history of cultural and economic participation in local fisheries. The Craig of today was founded when a saltery at Fish Egg Island was established by Craig Millar and eight Haida men. The saltery and a cold storage facility were constructed between 1908 and 1911, thereby establishing the present location of the City of Craig. By 1910 between twenty and twenty-five houses were constructed at the site. Today there are over 1,100 residents within the municipal limits and fishing is still a primary economic factor for Craig.

Craig is centrally located for a variety of fisheries including salmon, halibut, herring, and sablefish. Craig is also centrally located for several emerging fisheries such as the dive fisheries for geoducks and sea cucumbers. Commercial, subsistence, recreational, and charter fishing is central to our community's economy.

As the fishing and timber industries change in Southeast Alaska it is important that communities evolve to maximize their participation in the value-added aspect of any industry. Fishing is not different. One of the key elements for Craig's participation in the Community Quota Entity (CQE) program is the emphasis at local levels on continuing to develop our community fisheries and related industries. Additional fish availability is a natural outgrowth of seafood buying, seafood processing, available cold storage, transshipment of product, and vessel haul-out/repair infrastructure. The City of Craig is actively pursuing increased fishing infrastructure through both the public and private sectors.

Craig citizens feel that a key component of participation in the CQE program is strong local government support. One of the reasons for success in the program to this point is the support of the municipal officials and employees. Even though the corporation is an independent entity, it faces hurdles that a close relationship with local government can overcome. Local government support is important since most local

governments have established relationships with granting agencies, fisheries-related personnel such as harbormasters or community planners, and fishing industry groups, a closely linked interest.

An important part of Craig's success is its participation in fishing industry groups such as the Gulf of Alaska Coastal Communities Coalition (GOAC3) and the Southeast Alaska Regional Dive Fisheries Association (SARDFA). Support of fisheries infrastructure development by these groups is a huge advantage. Craig's involvement with GOAC3 and their role in Amendment 66 to the Fishery Management Plan for Gulf of Alaska Groundfish, Halibut and Sablefish Program, is a prime example of this relationship.

Planning for entry into the CQE program

Any planner (whether land use, industry, environment, etc.) will tell you that planning does not happen by accident. Craig's planning efforts prior to entering into the program have proven invaluable in the outcome.

Participation in the CQE program did not suddenly come up with the advent of Amendment 66. Our involvement had been considered in economic development planning for several years as the CQE program had been discussed prior to final approval. As part of the organized Community Economic Development Strategy (CEDS) committee, the "community IFQ program" was a high priority. When the program was finalized the city had already conducted major public discussions on the potential value of Craig's participation.

A key document in Craig's program development is *Community Quota Entity (CQE) Program Economic Analysis and Business Plan for the City of Craig, Alaska*, dated July 2004. This document was prepared by the Craig Planning Department and laid out the program requirements, Craig's concept of the program in planning documents, financial analysis of participation, and a brief outline of participation requirements and documents. In addition to showing financial requirements and how to get involved in the program, the city conducted a survey of local fishermen to determine demand and the price that they would be willing to pay.

Program entry

On December 8, 2004, at the North Pacific Fishery Management Council meeting in Anchorage, Craig Mayor Dennis Watson, representing the Prince of Wales Island Community Holding Corporation, was presented the Transfer Eligibility Certificate for the Craig CQE. This certificate was the first in Alaska given to a CQE corporation. There was key support from several agencies along the way. Each community needs to work closely with federal, state, and local governments to ensure a smooth process.

State assistance in formation of the nonprofit corporation has been crucial. Close communications with the National Marine Fisheries Service (NMFS) Restricted Access Management (RAM) staff have ensured that most of the bumps were worked out long before documents were submitted. Close communications with these agencies occurred at each stage of the program development for Craig.

Once again, local government support was critical to our CQE formation. Support from the mayor and city council ensured that program liaison between the city and the CQE corporation would go smoothly. CQE staff regularly reported on CQE activities to the Craig City Council and on City Council activities to the CQE Board of Directors.

Communications with the Craig City Administrator ensured day-to-day support in terms of staff, clerical support, and meeting space. Some of it seems almost too basic to discuss; however, without this built-in support system even routine meetings and events become problematic. In addition to basic support, the City of Craig has arranged, through a memorandum of agreement, to provide dedicated staff for the CQE. This relationship recognizes the close tie between the CQE and city development efforts. This relationship has also opened the doors for early discussions of monetary support and loans for the purchase of quota share by the corporation. I can't stress enough: don't forget your local government in development of any CQE program.

The board of directors was formed prior to nonprofit incorporation to facilitate the incorporation documents. Early on it was decided that the board would be appointed by the city council and that the number of appointed directors would be dependent on the number of communities represented by the CQE. The three directors appointed by the City of Craig represent the city council, the local economic development committee, and the fishing community since these three entities have the most to gain from proper development of this program. As other communities are invited to be represented by the corporation they may have different priorities for their directors. The one requirement written into the bylaws is that the elected governing body must appoint their members to the board of directors.

One of the key tasks given to the board of directors was to clearly identify the corporate goals of the program. These goals would reflect the procurement and distribution strategy for the Individual Fishing Quota (IFQ). The directors determined that they had two primary goals that would dictate how the distribution policy would be set. The first of these goals was to ensure that a significant amount of quota was permanently maintained in the community. This quota would bolster the total amount of IFQ fished by local fishermen. The result would be increased fish revenue, increased raw fish tax, and increased revenue for supporting industries. The second goal of the CQE board was to ensure that there were ample opportunities for emerging fishermen through the

program. In the end the board determined that it would divide distribution between those eligible fishermen holding 1,000 pounds or more and those eligible fishermen holding less than 1,000 pounds of IFQ. The board is also currently exploring means to highly encourage hire of local crew members to allow young fishermen to crew the required number of days to become eligible to hold IFQ. Those crew members would then move into the emerging class of fishermen and eventually take a primary role in the halibut and sablefish fisheries in Craig. The planning process continues, in this case using the CQE as a tool in planning for another generation of fishermen.

Current participation

The Prince of Wales Island Community Holding Corporation was designed to represent any number of Prince of Wales Island communities (about nine communities are eligible to participate in the program). The original bylaws were created with multiple communities in mind, and can adjust things like number of board members according to the number of member communities. Currently the corporation is not open to membership from multiple communities.

Under a memorandum of agreement the City of Craig continues to provide the staff position for the corporation. As additional communities are included they will be required to draw up a memorandum of agreement with the corporation for staff support. In-kind or cash support will be negotiated between the represented communities and the corporation on an individual basis. This will ensure that all communities bear some of the administrative burden of the nonprofit corporation. When there is a high level of activity this staffing may move to a part-time or full-time dedicated staff member. In the meantime flexibility and, again, a close relationship with local governments is critical.

The current board members are working to complete all document reviews and solidly establish lease procedures before multiple communities are involved. Although all documents required for NMFS application have been finalized, several documents are still being reviewed. For example, the corporation is still reviewing a comprehensive lease application and lease document to ensure that all program requirements are met. The corporation is also working on federal tax-exemption prior to any lease fees being collected.

A key issue currently in front of the Craig CQE is procurement of quota share. With the broker-advertised price of $19-$24 per pound for halibut and $11-$12 per pound for sablefish, the CQE must carefully approach purchases. Since most CQEs do not have an established fund ready to spend, loan agencies become central to any purchases. The problem with loan funding is that even a state loan at 6% over fifteen years for 65% of the purchase price would require an annual debt repayment

of over $10,000 on less than 8,500 pounds of halibut IFQ. This debt is in addition to the other 35% (approximately $52,000) capital required to make the purchase. If you could get a loan on 100% of the capital for the same IFQ you would have a debt repayment of over $15,000 per year (almost $2 per pound required at the lease)! This kind of debt overhead leaves the corporation extremely vulnerable to non-repayment of lease, decrease in price, decrease in total allowable catch, or other factors. For CQEs with little or no existing capital for investment a grant/loan combination is essential to ensure successful operation of the program. At this time the City of Craig and the Craig CQE are looking for available funding. The predetermined limit that we have set for ourselves is to look for a combination of funding sources that will have a maximum $1.00-$1.25 per pound lease requirement to cover all debt overhead. Additional funds generated from leases would be used to offset administrative costs and to establish capital for future purchases.

Conclusion

In conclusion there are three keys to successfully implementing the CQE program in any community. Those keys are planning, planning, and planning. Craig has ensured successful participation because of three key planning issues.

The first is to know where the program fits into the community and economic development structure. If you try to make this fit into an overall development strategy that does not encourage fishing, you are buying into trouble.

The second is to have clear program goals and financial benchmarks. Your program needs to be driven by clear goals. All program decisions in Craig are driven by the goals of economic development. It is also essential to preset financial limits. With the high cost of quota share and the limited amount of funds locally available it is potentially very easy to get in a position where one or two unpaid leases or a downturn in the dock price could jeopardize any security agreements.

The third planning consideration to keep in mind is to work hard to follow the plan that you have set for yourself. Make as many determinations, approve as many documents, and look at as many funding options as you can well ahead of purchasing and leasing quota.

The City of Craig is solidly behind this program. It is a vital part of keeping an adequate level of halibut and sablefish IFQ in the local community. It is also very useful in ensuring the next generation of fishermen is brought up through the local system. The City of Craig thanks NMFS and the State of Alaska for the opportunity to participate in the program and thanks the University of Alaska Fairbanks and the Alaska Sea Grant College Program for the invitation here today.

Community Impact Assessment Data Issues in the North Pacific Fisheries

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Fishery social impacts assessments are driven primarily by the National Environmental Policy Act, Executive Order 12898 on environmental justice, and National Standard 8 under the Magnuson-Stevens Act. Each provides a different perspective on community-based or population-based impacts, and data requirements vary under each. In the North Pacific region, social impact assessments of management actions directed toward Steller sea lion conservation, essential fish habitat conservation, and crab fishery rationalization, among others, have been undertaken in recent years. This presentation addresses some of the community, regional, population, and "population pocket" data issues and lessons learned in a region where fishery engagement and dependency are spread across multiple states, and span industrial and artisanal scale operations. Spatial relationships involving engagement and dependency of particular communities are explored, and the limitations of existing data are discussed.

Overview

This presentation grew out of a project developed under the title "Pilot project for the development of comprehensive baseline commercial fishing community engagement and dependency profiles for the Bering Sea, Aleutian Islands, and Western Gulf of Alaska regions," funded by the North Pacific Research Board and the North Pacific Fishery Management Council. The goal of this project was, in part, to produce a template for the collection and analysis of community profile information for fishing communities of the North Pacific region, and to use that template to initially construct four key fishing community profiles. The objective in doing so was to provide resource managers and federal decision-makers with information relevant to community impact analysis in an ongoing

and timely basis. This project was intended to result in data and an analytic framework that will have direct applicability to the community level analysis of social and economic implications of rights-based and capacity reduction management initiatives as well as other management actions. The results of this work were also intended to provide information central to the understanding of community engagement in, and dependency on, the range of federally managed commercial fisheries, which will be useful as the basis for design of management alternative features directed toward fostering the sustained participation of fishing communities during changes in resource management strategies or under individual management actions.

Under the National Environmental Policy Act (NEPA), "economic" and "social" effects are specific environmental consequences to be examined (40 CFR § 1502.16 and 40 CFR § 1508.8). Executive Order (EO) 12898 on environmental justice (59 Fed Reg 7629) requires that "disproportionately high and adverse human health and environmental effects on minority populations and low-income populations" be addressed. Magnuson-Stevens Act (MSA) National Standard 8 states that:

> Conservation and management measures shall, consistent with the conservation requirements of this [Magnuson-Stevens] Act (including the prevention of overfishing and rebuilding of overfished stocks), take into account the importance of fishery resources to fishing communities in order to (A) provide for the sustained participation of such communities and (B) to the extent practicable, minimize adverse economic impacts on such communities. (Sec. 301[a][8]).

The MSA defines a "fishing community" as

> . . . a community which is substantially dependent on or substantially engaged in the harvest or processing of fishery resources to meet social and economic needs, and includes fishing vessel owners, operators, and crew, and United States fish processors that are based in such community. (Sec. 3 [16]).

The National Marine Fisheries Service (NMFS) further specifies in the National Standard guidelines that a fishing community is

> . . . a social or economic group whose members reside in a specific location and share a common dependency on commercial, recreational, or subsistence fishing or on directly related fisheries dependent services and industries (for example, boatyards, ice suppliers, tackle shops). (63 FR 24235, May 1, 1998).

"Sustained participation" is defined by NMFS as ". . . continued access to the fishery within the constraints of the condition of the resource." (63 FR 24235, May 1, 1998).

Social impact assessments under NEPA, EO 12898, and MSA National Standard 8 all come with their own data challenges. This presentation

focuses specifically on data issues in recent social impact and community profiling experience in four Alaska coastal communities.

The study communities

Four key Alaska fishing communities were chosen to be profiled under the pilot project. The genesis of this project was the realization that while all are significantly engaged and dependent upon commercial fisheries of the Bering Sea/Aleutian Islands (BSAI) and/or western Gulf of Alaska, the nature of their individual engagement and dependency varies greatly and is tied to the particular constellation of sectors and subsectors present in combination with other features of the community, including demographic and economic attributes. While each of these communities is fundamentally dependent on commercial fishing, a common fishery management action can have diametrically opposed impacts in the different communities, based on community/population definitions, the attributes of the local fleet, local processing sector, local support service sector development, and local governance and public revenue structures, among other factors. These communities, and the main reasons for their selection, follow.

- Unalaska/Dutch Harbor is the Alaska center of the processing and support sectors for the BSAI fisheries. This community has relatively minor involvement in the harvest sector in comparison to its processing involvement. It is the dominant processing community in the country, in terms of volume processed, and in the state, in terms of value of processing.

- Akutan is a central community in terms of processing volume, but has very limited engagement via direct harvest participation and/or support service sector involvement. Akutan is unique in its blend of a developed processing location and Community Development Quota (CDQ) program status, and nature of the industrial enclave and traditional village distinctions seen in the community.

- King Cove is a community heavily involved in a wide range of fisheries through both harvesting and processing, but is not the type of industrial center seen in Unalaska or Kodiak. Like Akutan, it is a single processor community, but it is also the home of a significant residential fleet.

- Kodiak is the Alaska center of the western Gulf of Alaska fisheries, plus it is significantly engaged in the BSAI fisheries. The community also has the largest harvest fleet in the state and, like Unalaska, is the home to multiple processing entities and a well-developed support service sector. Unlike Unalaska, the processing labor force is drawn primarily from the local labor pool.

These communities vary in their geographic relation to the fishery; their historical relationship to the fishery; the nature of their contemporary engagement with the fishery through local harvesting, processing, and support sector activity or ownership; their local governmental structures; their participation in the CDQ program; and their contemporary social and economic structures. Each of these factors alone and in combination influences the direction and magnitude of potential social impacts associated with any particular fishery management initiative.

The community profiles developed under this project contain several different types of information. The specific types of information include

- Detailed narrative on community sociodemographic context and harvest sector, processing sector, and support service sector entities and activities. Summary information is provided on public revenues as well.
- Quantitative information on fisheries harvest and processing activities.
- Spatial information on harvest activities.
- Photographs of the community and the various sectors.

Population and demography

For each community, the history of the community, total population, ethnicity, and community structure and housing types have been influenced by commercial fishing activities such as the presence of a local fleet or processing capacity.

Quantitative description of the harvest sector: Local vessels and permit holders

Quantitative information on the local vessel fleet, as represented by local vessel ownership, was gathered for each community. This information is derived from the data on vessels owned by residents of any given community that is collected by the Commercial Fisheries Entry Commission (CFEC) when owners renew their vessel registration. These data are not considered confidential and are available on the Internet at www.cfec.state.ak.us/mnu_summary_info.htm. Only current holders of permits were included in this study.

Crew member information is also presented for each community, as communities also directly benefit from the harvest sector through participation of residents as crew, as well as through the engagement of local vessel owners and permit holders. Beginning in 2000, CFEC has produced estimates of crew members by community, based on the number

of permit holders in the community, plus the community residents who have applied for a Crew Member License with Alaska Department of Fish and Game (ADFG).

Spatial distribution of harvester effort

To the extent permitted within confidentiality restrictions, spatial distribution of harvest effort by local fleets was mapped for each community. Changes in patterns over time were developed, as well as a breakdown by gear type. The "footprint" of the community fleets varies widely, with Kodiak vessels ranging over a broad area, and other communities' fleets fishing closer to home.

Narrative community fleet characterization

For each community, a narrative characterization of the local fleet was developed. This information is based primarily on data gathered during fieldwork in the communities themselves. This type of information has proven critical for the understanding of fleet dynamics. Further, this work has pointed out the limitations of the quantitative data, where the quantitative data vary sharply from observational and interview data regarding conditions on the ground in the communities. One of the lessons learned, or reinforced, during this project was that while quantitative data are necessary for analysis, there is no substitute for a ground-based, detailed understanding of community dynamics in order to adequately characterize the local fleet well enough to understand likely outcomes of any given future fishery management action.

Quantitative description of the processing sector

Unique counts of processors for each community were developed from lists of processors that submitted fish tickets to ADFG indicating that the delivery was made in the community shown, as provided by CFEC analysts. In general, floating processors were excluded; however, several processors regularly anchored in and around Unalaska and Akutan and processed groundfish and/or crab over long stretches of years. These processors were included as local processors.

Narrative community processor characterization

For each community, a narrative characterization of the local processing sector was developed. This information is based primarily on data gathered during fieldwork in the communities themselves. Like the narrative local fleet characterization, this type of information has proven critical for the understanding of local processor dynamics.

Spatial distribution of harvests delivered to processors

The study team was unable to obtain processing "footprint" information for the communities parallel to the harvest footprint information for the local fleet. A part of the original study design was to define the spatial relationships of processing effort in the communities to their delivery fleet's efforts (that is, to answer the question in its most basic form of "where do the resources come from that get processed in this community?").

Local support service sectors

A narrative discussion of the support service sector was developed for each community. Depending on the community, these businesses are major contributors to the local economy, and they provide a mechanism whereby "multiplier effects" are realized in the communities. Information on support services is not readily accessible from existing sources and was gained through field efforts in each of the communities.

Local governance and municipal revenues

Each community depends, to varying degrees, on commercial fishing in the form of municipal revenues. In terms of local governance, the nature and structure of local jurisdictions influence the definition of community for the purposes of portraying engagement and dependency. Whether or not communities are within a borough has a direct impact on the way that fishery-associated tax revenues are distributed among and between communities

Insights gained

Over the course of this project, a number of insights were gained, or lessons learned. In general, the quantitative data manipulation proved to be more challenging than expected. Three specific insights have come out of this:

> Insight 1: Regulations regarding the confidentiality of data significantly complicate the ability to obtain data about communities.[1] Because the pilot community profiles were not explicitly related to ongoing management actions, direct access to confidential primary data was not an option.[2]

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[1]State of Alaska regulations regarding confidentiality of catch and revenue information prohibit ADFG or CFEC from providing information to the public that includes fewer than four entities, while federal regulations use a standard of three or fewer entities. The regulations allow employees of these agencies access to the primary data; access to the primary data is also granted on a case-by-case basis, to outside consultants or researchers who are working on projects explicitly related to ongoing management actions.

[2]A stated objective of these projects is to demonstrate the types of information that can be developed by "the public" without direct access to primary data.

Insight 2: Given the confidentiality restrictions, there is no single approach to data acquisition and development that is appropriate for all communities.

Insight 3: A step-wise and iterative data acquisition process tailored to each community will result in more information overall and will also be more cost effective than a process that attempts to acquire all information for all communities in a single comprehensive data request.

In general, the characterization of communities remains a complex undertaking, and the information to allow for a detailed examination of the engagement and dependency upon particular fisheries in spatial terms remains elusive, particularly for small communities with few commercial entities. The organizational structure of communities and the development of secondary or fishery support sectors are critical to approaching the central question of local multiplier effect.

Issues of preclusion arise where communities not currently engaged in or dependent upon particular fisheries are essentially "invisible" in Magnuson-Stevens Act–based analyses. The desire to retain future options and entry level opportunities is inconsistent with management based on sustaining recent historic or current engagement and dependency, and existing data cannot help address this issue.

Issues of redistribution have accompanied recent rationalization approaches in the form of community development/protection strategies.

The trends of change that have accompanied rationalization have included consolidation within sectors, resulting in fewer vessels, fewer support service businesses, and a decline in processing capacity demand, which may eventually result in a decline in the number of processors. With access to resources becoming commoditized, there have been changes in permit use and associated local multiplier effect as well, especially where permits have become an investment vehicle for individuals not actively participating in the fishery.

Community and social impact assessment is a challenging task due to a number of limitations of current data within a complex socioeconomic context. Even larger challenges, however, result from the dynamic nature of change in the current management framework where there are no easy answers in the attempt to balance responsible resource economics at the fishery level with individual community sustainability.

Communities Research at the Alaska Fisheries Science Center

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The Alaska Fisheries Science Center (AFSC) Economics and Social Sciences Research Program has several ongoing research projects related to communities in Alaska, of which two will be described in this presentation. The first involves compiling and assessing quantitative data on involvement in fisheries by each community. The second is an effort to profile fishing communities with baseline social and economic data and descriptions of fisheries involvement by community members.

The emphasis of this presentation is on the data that we have been using to facilitate the large-scale approach needed to assess hundreds of communities at once. This approach is intended to complement finer-grained approaches that look more closely at particular communities that have been or will be impacted by particular policy changes. In other words, the projects described here are not social impact assessments, but are meant to provide baseline descriptive information about a large number of communities involved in fishing in the North Pacific.

The focus on the community as a unit of study is generated by the language of the Magnuson-Stevens Fishery Conservation and Management Act (MSA), which defines a fishing community as:

> . . . a community which is substantially dependent on or substantially engaged in the harvest or processing of fishery resources to meet social and economic needs, and includes fishing vessel owners, operators, and crew and United States fish processors that are based in such community.

The National Marine Fisheries Service has not yet designated a list of fishing communities as defined by the MSA. The assessment of communities in terms of quantitative indicators, and selection (or not) of communities for profiling, is not necessarily indicative of how such a designation will eventually be conducted.

Fisheries indicator data

In order to assess communities in Alaska and elsewhere in terms of their involvement in North Pacific fisheries, the AFSC compiled quantitative data on a variety of fishing indicators. Based on the databases available to us, we collected information for the following indicators:

- Landings in tons
- Landings by value
- Number of processing plants
- Number of vessels delivering to local plants
- Number of vessels owned by residents
- Number of crew licenses issued to community residents
- Number of federal permits and permit holders residing in the community
- Number of state permits and permit holders residing in the community
- Number of recreational licenses issued to community residents
- Number of vessels home-ported in the community

Assembling these data is a huge task. The information must be compiled from many separate state and federal agencies, including the Alaska Department of Fish and Game (ADFG) Fish Ticket Database, the Alaska Commercial Fisheries Entry Commission records, federal and state fishing vessel registration files, the ADFG Sport License Database, the ADFG Crew License database, the NMFS Restricted Access Management Division files, and the ADFG Commercial Operators Report. When the scope is broadened to include communities in other states (particularly Washington, Oregon, and California) the complexity of data sources grows exponentially.

Once compiled, the indicator data must be processed. In addition to being entered into compatible databases, the data must be tabulated by community. In other words, raw data rows representing individuals must be added up by community of residence as declared in their address information. To do this, community designations must first be standardized to correct for spelling and data entry errors. In addition, the data must be processed to create uniform community boundaries.

The final major aspect of data processing is recalculating certain values so that the indicator more meaningfully expresses fishery participation. For example, indicators that count individual persons are often best understood as a ratio to the population of the community. As raw

numbers, large communities such as Anchorage and Fairbanks will almost always have higher values than smaller places like Kasaan or even Kodiak. After the raw indicator is divided by the population of the community, the result shows a scaled rate of participation that makes it possible to assess the relative importance of that participation by community.

Selecting communities for profiling

Once compiled and processed, the data can be used to select which communities to profile. For this process we used year 2000 data to correspond with the year 2000 Census population data. We established a method for selecting communities based on the numerical criteria. If a community had any processing activity (indicated by a number greater than zero for landings, processing plants, or vessels delivering) it would be selected. If the number of vessels home-ported, or vessel owners, or crew license holders, or recreational license holders, or gear operator permit holders was greater than 15% of the total population of the community, then the community was selected. And finally, if a community was not selected based on any single value, we developed an aggregate indicator that assessed communities for a medium level of activity across the range of indicators. Of 396 communities in Alaska for which we had data, we selected 136 by this method.

The selection process was focused on commercial fisheries participation. Sport fisheries and subsistence fisheries are very important, but were not quantified in the selection process. In the case of sport fisheries, we did not receive the data in time for making selections, but we added sport fishing information to each of the profiles, including number of licenses sold in a community and number of license holders residing in a community. For subsistence, we only had data available for some communities, and could not use it to assess all communities. Where available, we included subsistence harvest and household participation data in the profiles.

Unfortunately, due to budget and time constraints, we could not profile every community in Alaska, and had to make some difficult choices using the available information. Of the places in Alaska, only the top 35% most involved in commercial fisheries (according to our indicators) were selected. Many of the remaining 65% are involved in commercial fisheries in some way, as well as subsistence and sport fisheries, and would have been appropriate places to profile. The limitations of our time and funding required us to develop a threshold for profiling, and we believe that using quantitative criteria allowed for an evenhanded approach.

It is also very important to note that communities that were not selected for profiling will still be considered in agency decisions. If a non-selected community is expected to be significantly affected by a regulatory change, the persons preparing the social impact analysis

would have to draft a profile themselves from scratch, rather than start with ours.

Also important is the fact that many communities outside of Alaska participate in North Pacific fisheries in significant ways. These communities are being profiled in a separate project conducted jointly with the Northwest Fisheries Science Center and the Southwest Fisheries Science Center. In that project, 129 communities in Washington, Oregon, California, and other states were selected based on participation in North Pacific and/or West Coast fisheries.

Finally, selection for profiling in this project does not necessarily mean that a community is a "Fishing Community" under the terms of the MSA.

Alaska community profiles

The Alaska communities selected by the above method and profiled for the profiles project are Adak, Akhiok, Akiachak, Akutan, Aleknagik, Alitak Bay, Anchor Point, Anchorage/Chugiak/Eagle River/Girdwood, Angoon, Atka, Bethel, Chefornak, Chignik (Bay), Chignik Lagoon, Chignik Lake, Clam Gulch, Clarks Point, Cordova, Craig, Dillingham, Edna Bay, Eek, Egegik, Ekuk, Ekwok, Elfin Cove, Elim, Emmonak, Excursion Inlet, Fairbanks, False Pass, Fritz Creek, Galena, Goodnews Bay, Gustavus, Haines, Halibut Cove, Hobart Bay, Homer, Hoonah, Hooper Bay, Hydaburg, Igiugig, Iliamna, Ivanof Bay, Juneau/Douglas/Auke Bay, Kake, Karluk, Kasilof, Kenai, Ketchikan/Ward Cove, King Cove, King Salmon, Kipnuk, Klawock, Kodiak, Kokhanok, Koliganek, Kongiganak, Kotlik, Kwillingok, Larsen Bay, Levelock, Manokotak, Marshall, Mekoryuk, Metlakatla, Meyers Chuck, Naknek, Napakiak, Nelson Lagoon, New Stuyahok, Newhalen, Newtok, Nightmute, Nikiski, Nikolaevsk, Ninilchik, Nome, Old Harbor, Ouzinkie, Palmer, Pedro Bay, Pelican, Perryville, Petersburg, Pilot Point, Pilot Station, Platinum, Point Baker, Port Alexander, Port Alsworth, Port Graham, Port Heiden, Port Lions, Port Moller, Port Protection, Portage Creek, Prudhoe Bay, Quinhagak, Saint George, Saint Marys, Saint Paul, Sand Point, Scammon Bay, Seldovia, Seward, Shaktoolik, Sitka, Skwentna, Soldotna, South Naknek, Sterling, Tenakee Springs, Thorne Bay, Togiak, Toksook Bay, Tuntutuliak, Tununak, Twin Hills, Ugashik, Unalakleet, Unalaska/Dutch Harbor, Valdez, Wasilla, Whale Pass, Whittier, Willow, Wrangell, and Yakutat.

The profiles are given in a narrative format that includes three sections: "People and Place," "Infrastructure," and "Involvement in North Pacific Fisheries." People and Place includes information on location, demographics (including age and gender structure of the population, racial and ethnic make up), education, housing, and local history. Community Infrastructure covers current economic activity, governance (including city classification, taxation, Native organizations, and proximity to fish-

eries management and immigration offices) and facilities (transportation options and connectivity, water, waste, electricity, schools, police, and public accommodations). Involvement in North Pacific fisheries details community activities in commercial fishing (processing, permit holdings, and aid receipts), recreational fishing, and subsistence fishing.

A rough draft of the profiles was completed in 2004 and sent out for review. In addition to seeking feedback within NOAA and academic circles, a substantial attempt was made to solicit comments from community members. A list was formulated of official contacts within each community, including governmental bodies (city governments, Native village councils) and quasi-governmental resource management organizations (village and regional Native corporations and Community Development Quota groups). The profiles were mailed to 296 such organizations. We also took comments from other organizations and individuals that had received the draft by other means.

The Alaska community profiles document is currently in final revisions and copyediting. We expect the final report to be released this year (2005). The first draft of community profiles from other states involved in West Coast and North Pacific fisheries is under way, and will be available for review when completed.

Applications, benefits, and drawbacks of the large-scale approach

One of the primary applications of the community profiles is to provide baseline data for social impact assessment. Almost all of the data are available elsewhere, most of it publicly, but it is very useful to analysts to have it compiled by community in a single document. Further, the profiles can provide "cut-and-paste" text for the "Affected Human Environment" section of National Environmental Policy Act (NEPA) documents. Since this part of an Environmental Assessment or an Environmental Impact Statement is descriptive (the analytical part comes later), the profiles are appropriate. For use under NEPA, the profiles should be updated, and sections relevant to the environmental policy under consideration should be added.

The profiles are also part of a broader national project that will put together a large database of information on fishing communities throughout the United States. Both quantitative information from the selection process and quantitative and qualitative information from the narrative profiles will become part of the database.

Benefits of this large-scale approach to fishing communities include the fact that many communities were profiled that have not previously been attended to in fisheries management documents. Often these are small communities in which fisheries are very important. Such broad coverage is usually not possible during issue-driven assessments, which

often take place under a great deal of time pressure and allow only for accounts of the top few most-likely-to-be-affected communities.

Additionally, this type of profiling provides a uniform approach to assessment. This will allow for comparisons between fishing communities, both within the region and nationally. We would eventually be able to show, for example, how dependent Alaska communities are on fishing, and that a high percentage of communities is dependent on fishing, compared to other areas of the country.

Drawbacks to the large-scale approach include the fact that there was no fieldwork conducted in conjunction with this project. The profiles were sent to each community for feedback, but without an actual presence in the community, there is going to be a lack of ethnographic depth. As stated above, time and resources make it impossible to apply that sort of method to so many communities.

Another drawback is that even though the approach covered many communities, it did not cover all communities. As noted above, only about a third of the potential list of communities were selected for profiling because of time and resources. We would like to continue with additional profiles should the resources become available.

Finally, both the profiles and the selection process rely heavily on large-scale databases for information about the communities. This can be a challenge, when those databases do not accurately reflect what community members know to be the case. Issues such as seasonal population fluctuations or disagreements on community boundaries can confound the accurate portrayal of a community, especially with quantitative data.

Despite these drawbacks, the large-scale approach is a worthwhile complement to other aspects of community research. It contributes information on a wider group of communities than is normally considered. It cannot capture the nuances of living in and fishing from these communities, but it does not pretend to do that. It can help analysts, policy makers, and others get a good sense of where they should look closer when considering fishery management issues.

Commercial Fishing Crew Demographics and Trends in the North Pacific: 1993-2003

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More than half of the nation's fish harvest passes through the hands or under the eyes of crew members aboard commercial fishing vessels in the North Pacific, yet until now, very little information has been available about the individuals who make up this work force. This research analyzes primary demographic characteristics of the crew population over the past decade, focusing on such elemental features as age, gender, and residency as recorded in the State of Alaska crew member license application. Further, it derives additional information such as crew member tenure, temporal trends, and population distributions. Crew populations, while often strongly affected by regulatory changes, are frequently absent from social impact analyses because of a lack of basic information. Summarizing essential demographic characteristics represents a crucial first step in addressing this data gap.

This report is a brief summary of some highlights from our research on crew demographics. A full report with much more detailed analysis, specific numbers, supporting statistics, and methodological information will be forthcoming from the Alaska Fisheries Science Center.

Our primary source of data for this demographic profile of fishing crews in the North Pacific is the Alaska Department of Fish and Game (ADFG) Commercial Crew Member License database. This data source is the most comprehensive set of information available on individuals who are legally able to work as fishing crew in Alaska. Because Alaska is one of the few states to require a license for commercial fishing crew and has complete records for the last decade, we have a unique opportunity to profile recent demographic trends in fishing crew for this region. ADFG collects information on age, gender, citizenship, and residency. These characteristics form the basis of our analysis. The license form does

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not collect information about the specific fisheries in which licensed individuals participate, nor is this information collected by any other available source. Therefore, it is not possible to analyze these data by specific fishery in a reliable manner. Unlike the harvesting crew on deck, processing workers on board catcher-processors or floating processors are not required to have a crew license and are not part of the population analyzed here. Also, holders of State of Alaska Gear Operator Permits are not required to purchase a crew license to work as crew in other Alaska fisheries. The information below is for all State of Alaska crew license holders.

Crew population

Over 272,000 crew licenses were issued between 1993 and 2003. The total annual crew member population has decreased by about 50% over the past decade from a high of over 30,000. The number of crew-member license holders steadily decreased over the study period at an average rate of 5.7% per year. The most drastic decreases in annual licenses issued occurred between 2000 and 2001 (15% decrease), and 2001 and 2002 (another 15% decrease). Economic factors (such as drastic declines in Pacific salmon prices) and management factors (such as fishery rationalization) have both exerted a downward pressure on the number of crew jobs.

License tenure

Of the 31% of license holders for whom a unique identifier was available, the mean number of years that an individual held a crew license is 1.8 years. This finding suggests that most crew members either do not seek or are not ensured continuity in their participation in this work sector. Less than 1% of the total population bought licenses in eight or more years. Of those long-time crew members, over 98% are from either Alaska (81%) or Washington (17%). Social and economic impacts on crew members will clearly be different in scope and magnitude for long-term crew than for short-term crew. Further research is needed to explore how the demographics of long-term crew members differ from those who hold licenses only for one or two seasons.

Age and gender distribution

Over the study period, the mean age of all commercial crew member license holders is 30.2 years. The mean age of crew member license holders shows a slight but statistically significant upward trend of approximately one year over the study time period. With fewer crew jobs available, boat captains may be more selective in hiring, likely favoring age and experience. Compared to the age distribution of the total population of crew, the female subpopulation shows a bimodal distribution,

with a greater proportion of younger and older participants than the male population. Alaska resident license holders also exhibit a different distribution compared to nonresidents. For example, a larger proportion of Alaska resident crew members are children compared to very few nonresident child crew members.

The distribution of crew member licenses demonstrates the marked dominance of male labor in this work force. For the combined years of 1993 to 2003, men make up 86% of all license holders. Overall the distribution of licenses by gender has not changed much over this time period. The majority of female crew members are residents of Alaska (74%), compared to about 50% of male crew members.

Geographic distribution

The geographic breadth of crew-member residency spans all 50 states and 48 countries. Overall, residents of Alaska and Washington make up a large proportion of the crew member workforce in North Pacific fisheries. Many crew members also come from other western states, including California, Oregon, and Idaho. Crew members come from over 7,800 unique communities across the country. The majority of these communities (83%) draw ten or fewer license holders. About 1,300 communities have more than ten crew members; just over 300 have more than 100. Over the course of the study period, only 66 unique communities have supplied over 100 crew member license holders in any single year. Of these, Anchorage, Kodiak, and Seattle consistently rank as the top three home communities for crew members.

Comparison of license data to an actual sample of working crew

Some crew may not purchase licenses (although they are required to), and some may purchase a license and then not work. The crew license database was long thought to be unreliable because of these and other factors. We checked our results against a sample of crew from actual working boats, taken from U.S. Coast Guard records of fishing vessel search and rescue incidents. By supplementing the search and rescue records with media reports that contain demographic information on crew members onboard, we created a demographic picture of a sample of crew members who were actually serving on vessels, to compare with the population that purchased licenses. The results from the working-boat sample were statistically similar to the license database results. The details of the comparison between the working boat sample and the crew license data, as well as the details of all of the individual topics analyzed above, will be available in reports forthcoming from the Alaska Fisheries Science Center.

Without a more nuanced understanding of who makes up the population of North Pacific commercial fisheries crew, it is difficult for agencies like National Marine Fisheries Service and the regional councils to take account of this important work sector in their regulatory analyses and decision-making. Recording fishery-specific crew participation would allow for a detailed analysis of the general trends noted in this study. Until data are available on a fishery-specific basis, it will be more challenging to predict the impacts of regulatory change on crew members.

Salmon Management: Who Makes the Rules?

Diana Cote
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Alaska Board of Fisheries, advisory committees, proposals, public testimony, hearings, agendas, enforcement—such is the vocabulary pertaining to the establishment of fish and game regulations in Alaska. The process involves thousands of Alaskans each year as they propose changes to the rules that govern the taking, use, and protection of the fish and wildlife in this state.

Alaska has a fish and game regulatory process that, perhaps more than any other state in the country, allows for public participation in the development of regulations. Alaska's public input process for fish and game regulations is unique, and emanates from the strong emphasis placed upon fish and wildlife resources in the Alaska State Constitution.

When Alaska assumed management of its fish, wildlife, and aquatic plant resources in 1960, a single Board of Fisheries and Game was created to regulate the harvest of these resources. The separate Board of Fisheries and Board of Game were created in 1975. The boards are supported administratively by the Alaska Department of Fish and Game, but function independently. The boards are charged with making allocative decisions, and the department is responsible for management based on those decisions.

Among all government services, resource management probably generates the widest range of public opinion and the most vociferous debate. Although Alaska's regulatory system offers an extremely accessible forum, the effectiveness of this forum can only be assured if the public views both board members and the board process as unbiased and fair. Board members are appointed by the governor to serve every member of the public. Once appointed, they are to do their best to arrive at reasonable solutions in the best interest of the state.

The Board of Fisheries has a formidable task—to promulgate regulations that are reflective of the desires of varied constituencies. These myriad constituencies include sport fishermen, subsistence users, commercial fishermen, fisheries professionals, legislators, conservationists,

and the fish resource itself. The regulations must, overall, also be based on the principles of sustained yield of the resource, priority for subsistence uses, prudent management, and enforceability.

The state's local fish and game advisory committee system is established under the Boards of Fisheries and Game as a local forum to discuss and make recommendations on fish, wildlife, and habitat issues before each board. Members of advisory committees are nominated and seated through local elections. There are currently eighty-one advisory committees statewide.

The board regulatory process spans a time frame of approximately nine months. The Board of Fisheries issues a "call for proposals" requesting changes to fisheries regulations in specific areas of the state. This results in the submission of hundreds of proposals for consideration each year. These proposals are the tools for making changes to the fisheries regulations in the state. Proposals are consolidated into booklets and distributed statewide for review and comment.

The Board of Fisheries meets four to six times per year to consider proposed changes to fisheries regulations around the state. The board uses the biological and socioeconomic information provided by the Alaska Department of Fish and Game, public comment received from people inside and outside of the state, and guidance from the Alaska Department of Public Safety when creating regulations that are sound and enforceable.

The biological decision is relatively simple—can this fish stock withstand a harvest? If the answer is yes, the fundamental biological decision is essentially complete. Naturally, biological data are also used to analyze the effects of the different harvest strategies, identify sensitive life stages and sensitive habitat, and insure that to the extent possible, these surpluses are taken in the most beneficial and sustainable manner.

The next step is to decide how, when, and where to take the surplus. The Board of Fisheries is charged with making these allocation decisions. In the United States, we all expect that public policy decisions will be "fair," and that our views will be taken into account. We expect that our government officials will hear us out, take us seriously, and treat our concerns fairly. These expectations are even more intense when the issues are related to common property resources such as fisheries.

All written comments, plus any and all oral and written public testimony taken at the board meeting or formal hearing, form the basis for decision-making by the Board of Fisheries on any proposal. The testimony, deliberations, and voting of the Board of Fisheries are performed in an open public forum.

After the board meetings, the adopted proposals are written into proper legal format for regulations and submitted to the Alaska Department of Law for review. Following this review and approval, the Office of the Lieutenant Governor formally files the regulations into law.

Elements affecting the Board of Fisheries regulatory process are ever-changing. The fisheries resources are constantly in flux. A dynamic state population influences the issues considerably. Political, educational, and economic activity place emphasis on varying resource issues and stocks at any given time. The process for implementation of regulations is itself under constant review, pressured by the practicalities of accommodating such massive public input. As the sense of public ownership of fisheries resources increases, one can be assured that public input will remain an important key in regulating and managing the state's fisheries.

Overview of Process for Federal Fisheries Management

Chris Oliver
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In 1976, the U.S. Fishery Conservation and Management Act established a cooperative arrangement between the National Marine Fisheries Service and eight regional Fishery Management Councils to manage fisheries in U.S. waters (3-200 nm from shore). In the North Pacific, this partnership management arrangement has been extremely successful, largely due to the very positive working relationship between the North Pacific Fishery Management Council (Council), and the NOAA Fisheries Alaska Regional Office and Alaska Fisheries Science Center. Other state and federal agencies, including the Alaska Department of Fish and Game (ADFG), the International Pacific Halibut Commission, the Pacific States Marine Fisheries Commission, and the U.S. Coast Guard, contribute to this cooperative management structure to make the fisheries off Alaska a success story of biological and economic sustainability.

Commercial fisheries off Alaska

Fisheries are one of the most important industries in Alaska. Over 10,000 people are involved in groundfish fishing and processing alone; thousands more work in the salmon, crab, scallop, and other fisheries. In addition, thousands of people work in other fisheries and fishing support industries, such as sport fishing guides, gear and fuel suppliers, restaurants, hotels, airlines, and others. In sum, why are fisheries off Alaska so important to communities?

- Fisheries provide the economic and cultural backbone of many Alaska communities.
- The United States ranks in the top 10 producing countries.
- Landings off Alaska represent 50% of the total U.S. catch.

- For the past twenty-eight years, annual groundfish catch off Alaska is about 3-5 billion pounds.
- The fishing industry is the number one private sector employer in Alaska.
- The fishing industry is second only to oil in revenue generated for the state.

With over 47,000 miles of coastline, and 336,000 square miles of fishable continental shelf area, the waters off Alaska support a variety of fisheries, ranging from small skiffs fishing for nearshore halibut, to a 600 foot mothership and nearly 400 foot catcher/processors prosecuting mid-water pollock fisheries in the open waters of the Bering Sea. In between are mid-size vessels, anywhere from 50 to 150 feet in length, engaged in longline fisheries for halibut, sablefish, and cod; trawl fisheries for cod, pollock, and flatfish species; and pot fisheries for cod and crab. Recreational fisheries are an important part of the fisheries off Alaska, though the Pacific halibut fisheries are the only sport fisheries where Council management is directly involved.

The Council primarily manages groundfish in the Gulf of Alaska, Bering Sea, and Aleutian Islands, including Pacific cod, pollock, flatfish, Atka mackerel, sablefish, and rockfish species harvested by trawl, longline, jig, and pot gear. The Council also makes allocation decisions for halibut, in concert with the International Pacific Halibut Commission, which manages biological aspects of the resource for U.S.-Canada waters. Other large Alaska fisheries such as salmon, crab, scallops, and herring are managed jointly with the State of Alaska.

Although Alaska is well known for its salmon, the commercial landings off Alaska are dominated by groundfish. In recent history, annual landings off Alaska have been about 2.5 million metric tons. Of that total, the following species comprise the majority:

- 81% groundfish
- 15% salmon
- 2% herring
- 2% nearshore
- <1% shellfish

Groundfish landings are less predominant in terms of value; nevertheless, they continue to account for about half of the total ex-vessel value (e.g., whole, unprocessed fish at time of capture) of Alaska landings. The average annual ex-vessel value of Alaska landings is $822 million and the breakdown is as follows:

- 50% groundfish
- 28% salmon
- 1% herring
- 21% shellfish
- <1% nearshore

Another foundation for success has been the longstanding, precautionary approach embraced in the North Pacific, supported by sound science with a strict reliance on that science, and supported by a fishing industry with a priority toward long-term sustainability. Strict catch quotas for all managed target and nontarget species, coupled with an effective monitoring program, represent the forefront of the conservative management approach in the North Pacific. Since 1976, groundfish harvests have been maintained in the range of 3 to 5 billion pounds annually, and no groundfish stocks are overfished. The major groundfish species in the Gulf of Alaska and Bering Sea/Aleutians Islands make up about 4 million metric tons and over 20 million metric tons of biomass, respectively. The allowable biological catches established by the stock assessment scientists at NOAA are set significantly lower than the biomass levels, and the catch quotas (total allowable catch) are set equal to or below the allowable catch.

Background on the Council

The North Pacific Fishery Management Council is one of eight regional councils established by the U.S. Fishery Conservation and Management Act to manage fisheries in the 200-mile fishery conservation zone[1]; however, it is unique in that its jurisdiction is specific to waters off only one state. The structure of the Council process was created to allow for better public involvement in the fisheries management process. The Council receives advice at each meeting from a twenty-two member Advisory Panel (representing user groups, environmentalists, recreational fishermen, and consumer groups), and from a twelve-member Scientific and Statistical Committee of highly respected scientists who review all information brought to the Council. Public participation occurs at all levels, from proposals to change the regulations, to deliberations at the plan team and advisory panel levels. Each Council decision is made by recorded vote in a public forum after public comment. Final decisions then go to the U.S. Secretary of Commerce for a second review, public comment, and final approval. The summary below shows the mandated representation

[1]Now called Magnuson-Stevens Fishery Conservation and Management Act, and Exclusive Economic Zone, EEZ.

on the North Pacific Fishery Management Council, its primary functions, and process.

Structure

There are eleven voting members: Alaska (6), Washington (3), Oregon (1), and NOAA (1); and nonvoting members (4) (U.S. Fish and Wildlife Service, U.S. Coast Guard, Pacific States Marine Fisheries Commission, and the U.S. State Department).

Function

The Council maintains five fishery management plans (Gulf of Alaska Groundfish, Bering Sea and Aleutian Islands Groundfish, Crab, Scallop, and Salmon). Approval and implementation of these fishery management plans (FMPs) is effected through our partnership with NOAA Fisheries. Amendments to an FMP or its implementing regulations are considered at each meeting by the Council, with proposed amendments submitted by both the resource agencies and the public. As a result, the FMPs and fishery regulations are dynamic and continuously changing as new information or problems arise.

Process

The Council meets five times per year, and concurrently with its advisory groups: Advisory Panel, Scientific and Statistical Committee. Public testimony is taken at all meetings, for all issues.

Changes to fishery regulations require a number of steps including initiation of a proposal, development of alternatives, formal analysis and review, decision-making, and rulemaking. There are opportunities for public input into the process at each step. All final decisions are made by the Secretary of Commerce, and they must conform with the Magnuson-Stevens Fishery Conservation and Management Act, the National Environmental Policy Act, Endangered Species Act, Marine Mammal Protection Act, and other applicable laws including several executive orders.

The Magnuson-Stevens Act is the primary federal law governing the management of federal fisheries. Among other provisions, the Magnuson-Stevens Act includes the following requirements to consider impacts on fishing communities.

- National Standard 8—Management measures must take into account the importance of fisheries resources to fishing communities and provide for sustained participation of such communities and minimize adverse impacts.
- Section 303(a)(9)—Fishery impact statement for participants and communities is required.

- Section 303(b)(6)—Limited entry programs must take into account historical practice, cultural and social framework, and communities.

Community protection

As a result of the Alaska region's geographic and jurisdictional uniqueness, community protection has been an important component in the development of management programs, both before and since the Magnuson Fishery Conservation and Management Act was amended in 1996 to add National Standard 8. Coastal community needs are accommodated in various ways:

- Proposed management actions include an assessment of social and community impacts based on development and maintenance of coastal community profiles.
- Sablefish/halibut Individual Fishing Quota (IFQ) program designed with specific safeguards to maintain coastal community fleets.
- Sea lion protection measures modified to ease burden on small, local vessels.
- Regulations developed to recognize and maintain halibut subsistence fishery.
- Regional delivery requirements as well as individual processor quotas, built into crab rationalization program.
- Modification to the sablefish/halibut IFQ program to allow a set of small, isolated, Gulf of Alaska (GOA) communities to purchase quota share for use by community residents.
- Proposed Gulf of Alaska "rationalization" community provisions and committee process.
- Community Development Quota (CDQ) Program, which benefits sixty-five communities in coastal Western Alaska and helps those communities develop sustainable fisheries economies.

Legal Issues with Community Programs

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National Standard 8 of the Magnuson-Stevens Fishery Conservation and Management Act says

> Conservation and management measures shall, consistent with conservation requirements of this Act, take into account the importance of fishery resources to fishing communities in order to (A) provide for sustained participation of such communities, and (B) to the extent practicable, minimize adverse impacts on such communities.

Community programs in Alaska

Current programs

Western Alaska Community Development Quota Program
Community Quota Share Purchase Program

Potential future programs

- Halibut Charter IFQ (Individual Fishing Quota) Community Set-aside
- Gulf of Alaska Rationalization: Community Fisheries Quota Program
- Community Purchase Program

Legal authority

The Secretary of Commerce is vested with rulemaking authority and administrative implementation authority by the Magnuson-Stevens Fishery Conservation and Management Act. There are limits on how much of that authority can be delegated.

The general rule on delegation is that authority that has been specifically vested in an agency by Congress cannot be shifted.

> Administrative officers and bodies cannot alienate, surrender, or abridge their powers and duties, or delegate authority and functions which under the law may be exercised only by them.73 C.J.S., *Public Administrative Law and Procedure* [section] 56 a. (1983).

Bottom line

Community programs that allow a community entity to reallocate IFQ derived from initially issued quota share need to have a clearly defined set of rules, and that reallocation must be subject to agency review and Secretary of Commerce approval (unless expressly authorized otherwise by Congress). This preserves the right to appeal agency actions and to obtain judicial review of final agency actions.

The Regulatory Process for Federally Managed Fisheries

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The goal of most management policies for marine fisheries is to conserve the fishery resource for future users or to govern the distribution of benefits from the fishery. These policies are made effective by regulation. This is the administrative law with which fisherman, and sometimes the government itself, must comply. Regardless of the goal—biological conservation, economic allocation, or both—the direct effects of any government regulation is on people, primarily, and the fish or its habitat secondarily.

Another basic point to keep in mind is that regulations inherently require people to do things that they would not do without the regulations. A silly example would be that we don't need a regulation to make people walk upright on their feet, because this is what most people do anyway. However, if we had good reason to make people walk on their hands, then we may want a regulation to compel that form of walking. Most us would not like such a regulation, however, and would find it difficult to comply. My point is that because regulations ordinarily force us to do things we would not otherwise do, they impose costs on our lives. A reasonable assumption is that we conduct our lives in the most efficient way we can to conserve limited energy and financial resources. So forcing us to do something different will likely cost us something.

Federal fishery regulations are no different. They typically impose costs on one group of people or another, but we should be sure that this is done for good and defensible reasons. That is, the benefits of regulations should exceed the costs. Nevertheless, those who would be most affected by these costs may want to argue the point. In this country, we have a fishery management process that is designed to foster just that, i.e., robust analysis and debate of alternative fishery management policies that ultimately lead to regulations.

Making policy: The regional council process

The governance of marine fisheries under U.S. federal jurisdiction is somewhat unique in that it involves substantive debate, analysis, and public participation before federal agency development of regulations. This important work happens in the forum of a Regional Fishery Management Council. Eight such councils are established to recommend fishery management policy in their respective geographic regions around the nation. The North Pacific Fishery Management Council, of course, is the regional council with policy making authority over fisheries off Alaska.

All eight of the councils were established and are largely governed by the U.S Fishery Conservation and Management Act, enacted in 1976. This law, later renamed the Magnuson-Stevens Fishery Conservation and Management Act, provides detailed guidance, among other things, on the council process and its products. From a regulatory point of view, however, the critical feature of this law is that fishery management policies developed by a council are submitted for review to the U.S. Secretary of Commerce (Secretary). After this review, the Secretary's response is limited to three choices. He or she may approve, disapprove, or partially approve the recommendation. Choosing a different policy is not allowed. Moreover, the Secretary may disapprove a council recommendation only if it is inconsistent with some applicable law. Not liking the recommended policy or preferring a different one is not good enough. The Secretary must find that the recommended policy (or parts of it) would be illegal; otherwise it is approved.

This constraint on the Secretary in setting policy is significant because federal agencies are presumed to have discretion in developing policies and their implementing rules. For example, the National Environmental Policy Act presumes that a federal agency has discretion in selecting a preferred alternative from all of the alternatives analyzed. For federal fishery management actions, however, this decision is made by the council and the Secretary may only approve, partially approve, or disapprove it. Hence, council authority is more than simply advisory; it has critical effect on the form and content of the federal regulations resulting from an approved council policy.

Turning policies into regulations

Fishery management policies are only one part of the whole picture. In addition, we need effective regulations to implement the policies, and enforcement to ensure compliance with the regulations. Without any one of these three essential pieces, fishery management will be ineffectual. My focus here, however, will be on the business of making rules and regulations. This business itself has controls and limitations—in the form of statutory requirements—that fall into three principal categories: proce-

dural, substantive, and timing. Without strict adherence to these requirements in the establishment of regulations, they could be vulnerable to legal challenge and being set aside by a court. All of these requirements are designed to protect the public from undue government intervention in their lives.

Procedural requirements are those that impose certain steps in the process of implementing regulations. For example, council-recommended policies must be reviewed by the Secretary as required by the Magnuson-Stevens Act. The public must be given notice and opportunity to comment on proposed regulations as required by the Administrative Procedure Act. This is required even for policies that have had lengthy public debate and opportunity for public comment to the council.

Substantive requirements are those that constrain the Secretary's discretion. For example, the Endangered Species Act prevents the Secretary (and therefore the council) from taking an action that would jeopardize the continued existence of a listed species or adversely modify its critical habitat. If a council recommended such a policy, this also would be an example of a reason for the Secretary to disapprove it.

Timing requirements are those that prescribe when certain things have to occur in the regulatory process. For example, the Magnuson-Stevens Act requires that the Secretary decide to approve, disapprove, or partially approve a council policy recommendation within 30 days after the end of the public comment period on that policy. Another example is the 30-day delayed effectiveness requirement of the Administrative Procedure Act. This requirement is designed to allow the affected public to learn about a new regulation and adapt to it. It is routinely imposed on all federal regulations unless there is good cause to waive it.

Principles of regulations

Executive Order 12866 is well known to most council and NOAA Fisheries staff as the "law" that requires us to do an economic analysis of a policy proposal. This analysis, known as a Regulatory Impact Review, is used to assess the potential costs and benefits of the proposal and alternatives to the proposal. A less familiar feature of this executive order is its stipulation of twelve principles of regulations. Although executive orders are not statutes, per se, they are mandates of the Chief Executive of the administrative branch of the U.S. government—the President—and, therefore, all agencies must comply. Regardless of their legal standing, however, the twelve principles of regulation set forth in Executive Order 12866 provide excellent guidance in formulating fishery management policies and their implementing rules. They state that when promulgating a regulation, an agency must

1. Identify the problem that the regulation intends to address. What is the significance of the problem? Does the problem result from the

failure of private markets or public institutions? Obviously, some problems may not warrant the intervention of the federal government by regulation.

2. Examine whether existing regulations (or other law) have created or contributed to the problem. If this is the case, then the best course of action may be to change the other regulations (or other law) rather than new regulations.

3. Identify and assess available alternatives to direct regulation. Could the desired behavior be encouraged by economic incentives such as user fees or marketable permits? Information and analysis should be provided on which the decision-makers and the public can make wise choices.

4. Consider, in setting regulatory priorities, the degree and nature of risks posed by various substances or activities within its jurisdiction. This may include risks to human health and safety and environmental risks.

5. Design regulations in the most cost-effective manner. If federal regulations are necessary to achieve an objective, then agencies shall consider incentives for innovation, consistency, predictability, costs of enforcement and compliance (to government and the affected public), flexibility, distributive impacts, and equity.

6. Assess costs and benefits of the intended regulation. Recognizing that some costs and benefits are difficult to quantify, an agency should adopt only those regulations that produce benefits that justify its costs.

7. Use the best available science. Regulatory decisions should be based on the best reasonably obtainable scientific, technical, economic, and other information concerning the need for, and consequences of, the intended regulation.

8. Assess alternative forms of regulation. Alternative forms of regulation should be identified and evaluated and, to the extent feasible, specify performance objectives, rather than the behavior or manner of compliance that the affected public must adopt.

9. Seek review by, and assess the impact on, other government entities. Agencies have an obligation to seek the views of appropriate state, local, and tribal officials before imposing regulatory requirements that may significantly affect those government entities. More specifically, this assessment should consider the availability of resources for which other government entities may have to carry out federal mandates.

10. Avoid regulations that are inconsistent, incompatible, or duplicative with other regulations.

11. Impose the least burden on society. Regulations should be tailored to minimize compliance costs taking into account the relative ability to absorb these costs by individuals, businesses of different sizes, and other entities, including small communities and governments. Agencies also should consider the cumulative effect of adding new regulations to existing ones.

12. Keep them simple! Last but certainly not least, regulations should be drafted to be simple and easy to understand. The goal here is to minimize the potential for uncertainty and litigation that may arise from uncertainty. This principle is made challenging by complex fishery management policies.

Conclusion

Federal fishery management policies that are designed to benefit Alaska coastal communities will derive from the North Pacific Fishery Management Council (Council) policy development process. Recommended policies of the Council, along with their potential implementing regulations, are then reviewed by the Secretary for compliance with applicable law. Secretarial review includes an additional opportunity for public comment, before the Secretary decides to approve, disapprove, or partially approve the proposal. This is often a lengthy and somewhat duplicative process. But this is by design. This process assures ample public involvement and prevents the federal government from intervening too much in the lives and businesses of the affected public. How much is too much is something best resolved at the Council level. Hence, the best place to affect the ultimate outcome of fishery management regulations is at the policy development stage in the Council forum.

The Fundy Fixed Gear Council: Implementing a Community Quota —Case Study 1

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One of the most promising approaches to fisheries management to emerge in recent years is community-based management (CBM). This approach places fisheries management in the context of sustainable community economic development, integrating ecosystem-based planning with strategies that support sustainable and viable futures for fishing communities. This paper describes the work of one fishermen's association, the Fundy Fixed Gear Council, to move toward this kind of management approach.

The Fundy Fixed Gear Council (FFGC) was created in April 1996, to manage the fixed gear fishery on the Nova Scotia side of the Bay of Fundy, as one of seven geographic management areas in the fixed gear sector in Scotia-Fundy region. Two fishermen's organizations, The Maritime Fishermen's Union Local 9 (MFU) and the Bay of Fundy Inshore Fishermen's Association, were to be represented on this new council. FFGC's management area is composed of Digby, Annapolis, Kings, Colchester, and Cumberland counties. The 1996 season was FFGC's first season.

Before describing the FFGC's work, I would like to make a few general points about the FFGC situation in 1996. First, FFGC inherited various positive factors that helped it get off on the right foot. These included:

- A well-defined geographical area (the Nova Scotia side of the Bay of Fundy).
- A relatively united membership and good working links between the two organizations involved.
- A great deal of groundwork that was done by both area organizations (mostly by MFU), and by other organizations (such as the Coastal Communities Network).

- Planning work on CBM in other geographic areas such as Sambro, Nova Scotia, and the province of New Brunswick as well.

These factors made it possible to initiate a new community-based approach in an extremely short time in the spring of 1996.

Second, it is important to realize that the FFGC in no way thinks of the 1996 season as an example of community-based management in any full sense of the term. Rather, it is a kind of hybrid system, combining a new approach within an old management system. This initiative represents only a first step toward a community-based system and should certainly not be taken as an example or model of a complete CBM approach. In all probability this approach will have to evolve over years.

The best way to describe the initiatives taken by the FFGC is to describe its structure, since they embody its various functions. By outlining its organizational structure—the committees and their functions—this will serve to illustrate how the FFGC managed the fishery since 1996. This also highlights the FFGC's belief that organizational development leading to democratic decision-making processes is the key element in a community-based management initiative.

The council is the governing body for the FFGC, and is made up of three representatives from each of the two organizations, plus two co-chairs. The council's responsibilities include:

- Overall management of the plan.
- Policy development and planning.
- Coordinating the committees.
- Administration, including financial administration, personnel, maintaining an office, etc.
- Liaising with DFO and other organizations.
- Implementing an infractions system.

Three gear committees—handline, longline, and gillnet—do the actual hands-on management of the plans. This includes setting weekly, or trimester, limits and managing the plans in a way that they will reach the goals set by the membership. The committee's recommendations on their plans then go forward for approval to the council. These three committees are elected by the membership, and are constituted so that they reflect the geographic areas in FFGC's region. Essentially the work of these committees was to manage what was called "an ongoing effort control system." Limits were set for specific time periods and adjusted according to the amount of effort. In the handline and longline plans this means that weekly limits were set by the committees every week depending on

the landing of the previous week. In the gillnet plan a similar system was used except with trimester instead of weeks.

The Infractions Committee is responsible for ensuring compliance to the plans by the membership. When a fisherman joined a plan he or she signed a contract that included an outline of the plan, the FFGC Terms of Reference, and an agreement to be subject to the Infractions Committee if he or she contravenes any part of the plan. The Infractions Committee is made up of one representative of each gear type and is chaired by a council member. To ensure fairness the membership of the committee, as well as the chair, changes each time it meets and is unknown to anyone except the FFGC secretary. In addition the files of fishers under review by the committee are unlabeled so that the committee members do not know whom they are sanctioning. This system seems to work well, producing fair and appropriate sanctions for overruns to the weekly quotas or any break of contract.

The Advisory and Research Committee is made up of about twenty people and includes community development workers, locally and regionally based environmentalists, academics from various disciplines and universities, marine scientists (including DFO scientists), and community members and fishers. The role for this committee is twofold. First, the committee assists the FFGC with long-term policy development and strategic planning. This creates a forum for discussion of longer term planning away from the pressure of everyday crises (of which there were many). Second, the committee advises the FFGC on identification, planning, and implementing of research, including research on stocks, habitat, and fishery patterns. Ten research projects were either initiated or planned in 1996, with committee members playing an advisory role, and in some cases helping with implementation of the project. The Advisory and Research Committee's contribution is critical to the work of the council and also was the beginning of FFGC's efforts to address important questions about non-fisher involvement in community based management schemes.

In addition to the committees, there is a system of port representatives. Each port in the area has a representative, plus one alternate, who acts as the contact between the council and its committees and the fishermen at the wharf. The port representatives have two roles: (1) to bring news and information from the council to the membership and (2) to bring the views and opinions of the fishermen to the council, and to the gear type committees.

The FFGC's aim is to establish a sustainable community-based, ecosystem-based fishery that brings maximum benefit to the coastal communities. A first step toward this goal has been to create organizational structures that ensure a democratic decision-making processes. The FFGC has taken this empowerment as fundamental to the development of community-based management, in a sense the "engine" that drives

its development. This kind of fisheries management is new in Canada and there are many critical issues to be sorted out—about the nature of management agreement, about who should be involved in the management organization, about how it relates to integrated coastal zone management, and so forth. Before these issues can be addressed, the people who are working in the fisheries need to build the organizational means to participate in the policy development, planning, and decision-making. This approach might be summed up by the phrase "empowerment precedes partnership."

The Community Panels Project: Institutionalizing Social Science Data Collection—Case Study 2

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As most of you are surely aware, there are several federal regulations that require fishery management agencies to take into account how their actions are likely to affect fishing communities. The Magnuson-Stevens Act defines fishing communities, and National Standard 8 of that act demands that the management agencies "minimize adverse economic impacts" as well as provide for fishing community "sustained participation."

In 2001 my colleagues and I published a compilation of profiles of eleven subregions and thirty-six fishing communities between Lubec, Maine; and Bridgeport, Connecticut. This was the final report for a project funded by NOAA's MARFIN. Since then, this document has been incorporated into the "human dimensions" sections of several of the New England Fishery Management Council (Council) fishery management plans.

For a number of reasons, I was not satisfied to simply provide the profiles to the Council. While I do think that community profiles are a fine place to start when considering the social impacts of regulations, there are limits to their value unless information from primary research is used to supplement the profiles. I also felt that it was important to find out if members of the communities we studied agreed that the profiles were accurate, and more importantly, covered the topics or issues they considered significant.

Fortunately, the Northeast Consortium was created in 1999 to "encourage and fund effective, equal partnerships among commercial fishermen, scientists, and other stakeholders to engage in cooperative research and monitoring projects in the Gulf of Maine and Georges Bank." Linking up with the Massachusetts Fishermen's Partnership (MFP), an umbrella organization of seventeen fishermen's associations representing all gear groups and geographic areas in Massachusetts, we prepared a proposal

to "institutionalize the collection of social science data." Our goal was to involve communities in the collection and analysis of socioeconomic data, hoping that by doing so the communities themselves would develop the capacity to provide this information to management agencies as necessary.

Six of the place-based communities identified by the MARFIN-funded project, Beals Island and Portland, Maine; Gloucester, Scituate, and New Bedford, Massachusetts; and Pt. Judith, Rhode Island, were selected for the project that eventually became known simply as the "Panels Project."

Our first step was to form an advisory group of representatives from each of the six communities. At our kickoff meeting, we asked our advisory group to list categories of individuals they thought should participate in the project. Later, we asked them to suggest actual individuals from each of the study communities who they thought would be representative of the identified categories. A coordinator for each of the panels was also sought from the communities. For each of the six communities, we formed a core group of seven to ten members who were willing to meet together to discuss issues of primary importance to the fishing industry sector of their community. We had more difficulty finding coordinators. We ended up hiring three graduate students and three individuals associated with the fishing industry. Each panel met separately and set their agenda. The coordinators organized the meetings and supplemented the work done in the groups with individual interviews.

One of the initial tasks of the Community Panels was to review the data about their communities that was already compiled. We hoped that they would look at the profiles from the MARFIN-funded study and update them or at least critique them since they represent what outsiders "know" about their communities. Before this task was accomplished, however, emergency funds were allocated for the groundfish fishermen of the region to soften the blow of increasingly strict regulations. In response, the panels focused their discussions and interviews on an identification of the immediate economic needs of the industry. A report was prepared and presented to the Massachusetts Governor's Task Force and circulated among officials in the other states of the region.[1]

The practical application of their work was viewed as a high priority for the panels. No one wanted to spend time on a product that ultimately would "sit on a shelf." One of the topics that kept coming to the fore was the threat to the infrastructure of the fishing industry by consolidation of the industry and gentrification of the waterfront. "What happens when the fish rebound and there's no waterfront access left for the fishing boats?" asked some of our panelists.

This query led us to suggest that each panel independently consider the infrastructure, identify the services they considered essential, and

[1]See MFP Web site, http://www.fishermenspartnership.org.

document the services that are available in their community. Rather than trying to tell you about all six communities, I've selected two that illustrate some of the diversity that characterize fishing communities in the Northeast. The differences in what two of the panels found will be used here to illustrate the importance of paying attention to the details of fishing communities that may be recognized only by the community members.

These two examples highlight different degrees of "fishing dependency" in individual ports, but also point to the links between the ports. We can see that an assessment of impacts on communities will be more realistic if communities are broadly defined. Rather than focusing simply on fisheries-dependent places, the analysis must look at the movement of goods, services, and humans, as well as the effects of regulations, over space and time. Furthermore, the mutual reliance of fishing "places" on each other for sustainability emphasizes the necessity of also considering the spaces between places.

A full-service hub port

The Gloucester panel identified a whole host of goods and services they consider essential to the sustainability of their fishing sector. Gloucester has identified itself as a fishing community since its founding 350 years ago by English fishermen. In cycles typical of Northeast fishing ports, the species sought and gear used have frequently changed over time. Gloucester was founded and thrived on the harvesting and processing of cod (salt cod). Before the U.S. Fishery Conservation and Management Act of 1976 (which established the 200 mile fishery conservation zone, now called the Exclusive Economic Zone, EEZ, set up the fishery management councils, and forbade the distant water fleets from Europe and the Soviet Union to work off our shores), Gloucester was dominated by pelagic fishing. Later, Italian-Americans and Sicilian fishermen redeveloped the groundfish fishery. For years, Gloucester had groundfish vessels in the large, medium, and small categories fishing with gillnets, longlines, and trawls. Today, the groundfishing fleet calling Gloucester their home port has shrunk, both in the numbers of vessels and the diversity of sizes and gear. However, pelagic (i.e., herring and mackerel) fishing and lobstering have expanded. The infrastructure boasts at least "one of everything" upon which industry participants rely.[2]

[2]The landings of groundfish in Gloucester remain high because vessels from Maine and elsewhere in Massachusetts land their catch at the display auction. It is said that the Maine boats that land in Gloucester rather than the display auction in Portland, Maine, do so because the trawl fishermen can land lobsters in Massachusetts but not in Maine (by state law).

Infrastructure Needs for a Commercial Fishing Port

(A) Businesses, structures, and space

- Mooring space for fishing vessels
- Facilities to maintain and repair fishing vessels
- Gear and supply shops
- Open space for working on gear
- Fueling facilities
- Ice plant(s)
- Fish buyers/auction for fish buyers
- Fish processors
- Transportation for fish and fish products
- Coast Guard/port security

(B) People (labor)

- Experienced fishermen, including captains
- Young fishermen, including young captains
- Gear technicians: people who understand gear, and can fix and design gear (usually such people are also fishermen)
- Lumpers
- Skilled trades
- Welders
- Electricians
- Woodworkers

(C) Intangibles

- Markets for fish
- Financing for shoreside operations
- Fishing industry organizations
- A voice for the city in the fishery management process

- A vision for the harbor
- Positive public relations for the fishing industry
- Clear lines of communication among decision-makers in the city, industry, and government

Gloucester's definition as a place-based fishing port is further insured by an active processing sector. While the processors in Gloucester do not rely on fish landed in Gloucester, but instead import frozen blocks of fish from Canada or perhaps Alaska for preparing breaded, frozen servings for the retail and restaurant trade, their presence fulfills one of the requisites of fishing ports as defined by the Magnuson-Stevens Act.[3] In addition, the services that are required by the processors such as trucking, labor, fuel, cold storage, and other supplies create a demand that can accommodate multiple businesses, thus potentially increasing the supply or availability of such services to the harvesting sector.

Cultural norms and values also support the definition of Gloucester as a fishing community. A large Sicilian- and Italian-American population have made up a significant proportion of the groundfishing fleet for five or more decades. Their festivals, public art, churches, and associations all contribute to the inculcation of values that support the fishing industry. City officials and state representatives of the area are frequently vocal in their support of the industry in local and regional venues. A major harbor planning effort is committed to maintaining the working waterfront.

Nevertheless, Gloucester may or may not be truly "dependent" on the fishing industry. A convenient train to Boston has encouraged the development of a large commuter population. Constant changes in the status of fishing have made diversification of the city's economic base an imperative. Industrial parks are expanding and housing prices have sharply escalated in the past few years, indicating a demand that exceeds supply.

What was not obvious from the outset of the Panels Project was the importance of Gloucester to the region's fishing industry. Despite the concern that Gloucester fishing industry members expressed about the vulnerability of their community to changes in fishing regulations, Community Panel members learned that fishermen from as far away as Maine and New Hampshire will drive to Gloucester to pick up gear or obtain services unavailable in their home ports. The display auction also attracts vessels from all over the region. Gloucester is therefore considered a full-service hub port in our region.

When the project began focusing on the infrastructure, industry members expressed their fears that if any one of the services now

[3]Clarence Birdseye, known as the father of frozen foods, set up the General Seafoods Company in Gloucester in 1924 and later formed the General Foods Company.

available to the industry were lost due to the diminution of business associated with management regulations, there would be a domino or cascading effect upon the remaining businesses. This would lead to other failures and eventually the loss of the fishing industry in Gloucester. As the report was being developed that documented industry needs and existing businesses, Gloucester was also undergoing a harbor planning process. Fortunately, the Community Panel's report is being incorporated into the harbor planning, thus giving the panelists a strong voice in the design of the harbor's future. While the debates are not yet concluded, there is a great deal of informed discussion about how to maintain the working waterfront while seeking creative ways to help property owners overwhelmed by the costs of pier and wharf repairs; to what degree recreational interests can be accommodated; and other services that could be provided to ensure both the fishing industry's sustainability and the town's appeal.

Satellite ports

In an early series of panel meetings, fishing industry participants from Scituate, a small community south of Boston, quickly established that their interests and concerns paralleled those of other small ports in the region. Panel members invited representatives of various gear types, businesses, etc., from Hingham to Sandwich to join their Community Panel. The fishing industry member who became the coordinator also interviewed a variety of key industry participants in seven of these ports.[4]

Although the individual ports can be considered "place-based," and indeed have some significantly different characteristics, the fact is that the participants from these ports emphasized the similarities among the ports. The "Scituate Panel" became the "South Shore Panel" and the linkages among the ports became the focus.

When asked to identify the minimum features essential to sustain their involvement in the fishing industry, participants from the small ports settled on the following.

- A mooring (to tie up their vessel).
- Access to a winch (to facilitate unloading their catch).
- A parking place (for their trucks and/or cars).
- Access to a wharf sufficiently sturdy to allow a fueling truck and/or dealer's truck to come alongside the vessel.
- Access to a full-service port.

[4]Representatives from Cohasset, Hingham, Hull, Marshfield, Plymouth, Sandwich, and Scituate were included in the South Shore panel.

The difficulties of retaining even these modest services were obvious in some of the small ports. None of these ports could be considered fisheries dependent using an analysis that suggests that the economic base of the town would be decimated by a loss of the fishing industry. In many cases, the town cannot even calculate exactly how much economic benefit it gains from the industry's activities. But because these small ports are generally associated with small towns, the industry plays an important role in maintaining the economic diversity of the town. Unfortunately, the towns do not always recognize the value of the industry.

In the Northeast, as elsewhere, tourism is sometimes viewed as a panacea for small-town finances. Marinas, recreational boat moorings and launching ramps, parking lots for tourists, and hotels are in some cases pushing the commercial fishing industry out of their most basic need, that is, physical access to the shoreline. Some question remains about the feasibility of mixed use areas that include recreational boating and commercial fishing. One interviewee commented, "As the yacht people come in and they can afford to pay more money than the fishermen, and then all of a sudden they [the town managers] don't want the fisherman there, even if he could pay, because he smells. Of course he smelled before the other guy came." However, with the tourist season as short as it is, communities need a year-round economic base. Fishing produces a valuable product and demands a variety of services, all of which help sustain these small ports.

Along the South Shore of Massachusetts, the increase in property taxes and competition for space (some people put their newborns on the waiting list for moorings) are making fishing industry participants feel vulnerable in some towns, whereas in others, the town or government agencies have decided that it serves the public good to come up with innovative ways to subsidize the commercial industry. For example, the U.S. Army Corps of Engineers set aside forty-two slips for commercial vessels in Sandwich. The fees are low and the space reserved for industry boats. In other places, the towns have developed "enterprise-funding" based on fees for slip rental, launching ramp, excise taxes, and fuel revenue. The Massachusetts Seaport Advisory Council also has been tapped for funds in some communities for renovations of piers or other structures serving the industry. Dredging has been made possible through federal funding in some ports. At the various levels of associations, fishermen play a role in advising towns, their state, or their region on issues of importance to the industry.

Crossing boundaries

There are fifty-two places listed as home ports for Massachusetts' fishing vessels. Only two of these are considered full-service hub ports, but access to a full-service hub port is absolutely necessary to the fishing

businesses. Of the 1,314 multispecies vessels active in the groundfish fishery in the region in 1996-2001, 855 were active in fishing in Massachusetts, though only 687 landed groundfish. New Bedford has about 250 groundfish boats, though 386 vessels landed their catch in New Bedford in 2001 (of these, 232 landed groundfish). In Gloucester, 159 vessels were active.[5] In 2000 1,518 lobster permit holders in the state reported landing over 15 million pounds.[6] At an average of $3.65 per pound, the value to the Commonwealth of Massachusetts was almost $55 million. (This does not even touch on the multitude of other fisheries in the Commonwealth.) Approximately 202 lobstermen fished out of Gloucester in 2000 and about 200 fished out of New Bedford-Fairhaven. That leaves almost 1,000 actively fished lobster permits in the rest of the state. Even these numbers alone should reveal the importance of the links among the small and large ports in the state and region.

Four of the six Community Panels were established in what their members consider full-service hub ports. Portland, Maine; Gloucester and New Bedford, Massachusetts; and Pt. Judith, Rhode Island all maintain sufficient access to goods and services to be able to supply all the needs of their own fishing industry participants and attract a selection of industry members from smaller ports. Convenience, price, and reputation play a role in determining from which other port customers will be attracted. Of these four ports, New Bedford not only has the largest fleet of vessels, but also in many cases has multiple suppliers of the essential goods and services.

The full-service ports are essential to the smaller fishing communities in the region, but so too are these small ports important to the full-service ports. Already noted above is the importance of the landings that come into the auction in Gloucester. New Bedford and Portland also attract landings to their display auctions from elsewhere. Portland, however, does face stiff competition because trawlers are forbidden to land lobsters in Maine, whereas they can land 500 in Massachusetts. The financial consequences of losing landings to the ports in Massachusetts have had a ripple effect on other fishing industry businesses in Portland. Lately, the price per pound that the auction charges fishermen and dealers for handling the fish has been raised.

Some fishermen from outside the full-service ports reveal that they consider these hub ports important for "one-stop shopping" for gear and other requisites. If these ports were to lose one or more of the requisite services, the fisherman would most likely drive to an alternative full-service hub port to obtain all necessities at one time.

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[5]Final Amendment 13, Human Environment.

[6]H.M. McBride, M.J. Dean, and T.B. Hoopes. 2000. 2000 Massachusetts Lobster Statistics. Massachusetts Division of Marine Fisheries Technical Report TR-9.

As noted earlier, the communities based on voluntary associations (as opposed to place) also strongly influence local and regional responses to regulatory change. For example, the Northeast Seafood Coalition developed an innovative plan to make Amendment 13 to the New England Fishery Management Council's Multispecies Fishery Management Plan more adaptable to changing environmental (or stock) conditions. The Fishermen's Survival Fund hired scientists who were able to show that the scallop beds were in much better shape than previously believed so they were able to successfully lobby NOAA Fisheries to open an experimental fishery in previously closed areas. The MFP successfully created a health plan for fishing industry participants in Massachusetts.

Consequences

What is the significance of the obvious interrelationship, or indeed, mutual dependency, among the ports? Managers, whether of fisheries or towns, must be made aware of these links. These days when the fishing industry is beleaguered with regulations, but shows signs of surviving and rebuilding, it is critical to recognize the ripple effect of regulations and anticipate the negative impacts so there is the potential for mitigation. Conversely, the place-based communities should consider the costs and benefits of providing services or facilitating the activities of their commercial fishing fleets. In addition, they should analyze the costs and benefits of extending their boundaries to accommodate industry members from outside their "place."

The choices communities make about their own members' economic activities and those of people "from away" have consequences for, among other things, zoning decisions, infrastructure construction and/or maintenance funding, and facilities for transient use. Statewide agencies such as Massachusetts' Seaport Advisory Council make choices for the use of public funds that while granted to place-based communities can affect other communities.

Fishermen often talk about the importance of being flexible in their business. Some maintain that the only way to survive economically is to be prepared to change gear, species, and/or fishing grounds depending on the season, weather, water temperature, migration of stocks, and/or spawning behavior—not to mention regulations! In one survey of fishing industry participants, all but one argued that maintaining "diversity" in the fleet into the future is critical. In this case they were referring to diversity in vessel size, gear used, and species sought. Different size vessels (and gear types) exploit different grounds, supply different markets, fish at different times, and in general, help insure that there is fresh fish available year-round.

Rather than treating communities as though they were isolated—as though they were single species—recognize that fishing communities

are diverse with fluid boundaries. This diversity contributes to the resilience of the industry and the region. While the place-based community is a useful construct, it may be that a community's value relies in part on its interactions with other communities. In New England, the fates of full-service hub ports and the satellite ports (or ports on the periphery) are intertwined.

Collaboration and participation

Social scientists working in place-based fishing communities usually make an effort to probe the interactions within the community, identify and interview key participants, and record the activities or roles of organizations and other institutions. However, the synergy that stems from a group of people knowledgeable about the industry and communities working together with an anthropologist is very powerful. Questions and observations that an outsider would not necessarily pursue can arise in the collaborative group process.

Furthermore, as community and industry members become more sophisticated about the impacts of regulations, presumably they will be able to better communicate their results to managers. When managers have improved information that they recognize as credible and dependable, they can begin to reflect their understanding through decisions that mitigate the negative impacts of regulatory change.

Challenges and lessons

One problem is that when we talk about communities in the common sense, we have the feeling that "communities" have similar ideas, values, and goals. Perhaps it is true that occupational groups are more likely than not to share common concerns, vocabulary, and similar goals. The paths to those goals might be radically different, however, for the various individuals. Furthermore, vessel owners may not agree with crew members; shoreside businesses that provide essential services to the industry may have different goals or values from those of vessel owners, captains, or crew; and other residents in the area may have quite a different vision of what makes an appealing community. Ultimately, what we have found effective is to identify and focus on common interests that crosscut individual or special interests.

Beyond the difficulty of achieving consensus on some topics, another challenge we have faced is simply the amount of time this process takes. The collaborative process takes much more time than other forms of research. Just recruiting the participants, and finding appropriate talent and sufficient commitment to the study, can be time consuming.

Certain constraints apply to both collaborative and more traditional social science research. Confidentiality, lack of long-term, consistently

collected data, lack of willingness to divulge information to the researcher (or in this case, other panel members), fear that the data will be "used against us," and biases and/or political manipulation are just some of the potential problems.

Nevertheless, collaboration can yield results that are beneficial to fishing communities but both the community members and the social scientist must be committed to spend time with the effort. The social scientist is likely to have access to secondary data that the community members may not have the time or expertise to locate. If the social scientist supplements the group meetings with individual interviews, more detail can sometimes be obtained. However, all participants must discuss all data that are collected and agree on the analysis.

Epilogue: recent outcomes

We recently learned that our work on the South Shore led to the retention of a lobster pound in Cohasset that was being forced out of business by new landowners. Also, the town of Plymouth may subsidize parking for their fishermen, as a result of our collaborative work.

Sustaining Fisheries—Sustaining Communities

McKie Campbell
Commissioner, Alaska Department of Fish and Game, Juneau, Alaska

I have been gone from the Alaska Department of Fish and Game for about ten years. Now back, one of the things that slightly surprised me was how many of the issues are the same. Several things are different, however. I do see an increased presence of the federal government in fisheries management. There is also an increase in the number of acronyms—TAC, PAC, and RAC; "NPFMC never sets the TAC above the ABC set by the SSC."

Another one of the things that has changed is the legislature's understanding of the importance of fish and game in our state. I started working with fish and wildlife issues twenty-five years ago as legislative staff. At that time, a substantial number of legislators were commercial fishermen. They understood the importance of fish and wildlife and the importance of the Department of Fish and Game. Perhaps it's because of the population shift to the railbelt, but fewer and fewer legislators seem to understand that fish and wildlife are principal economic engines of our state and that ADFG can be a profit center for Alaska.

Even more critical is the importance of fish and wildlife to rural development in this state. I know that in many of Alaska's coastal communities, our fisheries are the primary economic engine. Sustainable, productive fisheries translate into jobs for Alaskans, revenues for coastal communities, and a healthy statewide economy. I appreciate that Alaska's economy relies heavily on its fisheries and therefore, that long-term sustainability is a cornerstone of our fisheries management systems. I need your help to make sure all our legislators understand this.

ADFG has responsibility for managing fish and game resources that are critically important to the Alaskans who rely on them; we take that responsibility very seriously.

But we can't do an effective job alone—partnerships between stakeholders, communities, scientists, and managers promote stable and productive fisheries in Alaska's waters to the benefit of all.

Now let me talk specifically about the concerns of this conference. The North Pacific Fishery Management Council (Council), because it is not

governed by the Alaska State Constitution, has much wider discretion than the State of Alaska when it comes to allocating fishery resources. Some of the Council's undertakings inspire envy on the part of some Alaska citizens who wonder why the state cannot create the same opportunities. Examples include community development quotas, community shares (where coastal communities are authorized to purchase and hold individual fishing quota shares in halibut and sablefish and then lease those shares to community members), leasing of shares, and cooperatives (where actual harvesting can be limited to a small number of vessels, while other members go off and collect a check).

Other Council endeavors have inspired fear and loathing among Alaska fishermen—for example, processor shares (or requirements that fishermen deliver a portion of their catch exclusively to an identified processor).

Alaska cannot undertake measures similar to the more creative actions by the Council without running afoul of Alaska's unique constitutional constraints. Under Article VIII, Section 15 of the Alaska Constitution (as interpreted by our Alaska Supreme Court), Alaska may undertake limiting access to any fishery only if the program:

1. Serves conservation of the resources;

2. Prevents economic distress among fishermen and those dependent upon them for a livelihood; and

3. (from the Alaska Supreme Court in the *Johns* case) Impinges as little as possible on the open fishery principles of the Alaska Constitution.

No other state operates under similar constitutional constraints. Alaska's constitution is the only state constitution with a section devoted entirely to natural resources. Additionally, the federal government has even broader discretion than the states—especially when it comes to Alaska Natives and Alaska Native communities.

Good news

No processor shares

As related by Alaska State Senator Ben Stevens and others, there is widespread fear and resentment of processor shares as created and contemplated by the North Pacific Fishery Management Council. To put aside those fears when it comes to state-managed fisheries, there is no plausible argument that can be made for processor shares in a state fishery under the Alaska Constitution. In particular, when one considers the anti-processor motivation behind the drive to statehood and the 1972 constitutional amendment that authorized limited entry, there is no way to bring processors under the language authorizing limited entry.

Bad news

Community Development Quotas

People often ask why the state cannot provide Community Development Quotas (CDQs) from state-managed fisheries. The first hurdle would be to demonstrate how such a program would serve conservation and help prevent economic distress among fishermen. The chances of getting past this first hurdle are nearly nonexistent. However, if one could, the next issue would be whether the state could select certain, deserving coastal communities. Not likely, under our Alaska Supreme Court's decisions in the *McDowell* case (striking down the rural subsistence preference) and *Enserch* (striking down local hire on public works projects in areas of economic distress). Alaska cannot discriminate for or against people based on where they live.

In contrast, it is worth noting that, when CDQs were attacked by Paul Seaton and others in the *Alliance Against IFQ* case, the Federal District Court (Judge Singleton) upheld the federal government's authority to establish CDQs in part, based on the federal government's plenary authority over Native Americans under the Indian Commerce Clause of the United States Constitution. The State of Alaska has no similar authority; the state cannot direct benefits exclusively to Alaska Native Communities.

Communities holding and leasing quota shares

In response to the Gulf of Alaska Coastal Community Coalition, certain gulf communities have been authorized to purchase halibut and IFQ shares and then to lease them to fishermen. This would not be practicable in Alaska-managed fisheries, because one would have to prove that authorizing communities to hold Alaska fishing privileges would serve conservation and help prevent economic distress among fishermen. Even if one could get past that constitutional hurdle, most proponents have certain selected communities in particular locations in mind. Choosing certain communities for the exclusive privilege could again be challengeable under *McDowell* (striking down the rural subsistence preference) and *Enserch* (striking down local hire).

Cooperatives

The federal government has authorized cooperatives for the Bering Sea crab fisheries and is contemplating similar cooperatives for the Gulf of Alaska groundfish fisheries. In the recent *Grunert* case, our Alaska Supreme Court struck down the Chignik co-op created by the Alaska Board of Fisheries (with its own allocation) on statutory grounds (they did not reach the constitutional issue). The majority of the court (Justice Carpeneti disagreed) struck down the co-op based on the reading of the Limited Entry Act as requiring active participation by all limited entry permit holders. The majority of the court appeared so hostile to the idea of a

nonparticipating co-op member simply drawing a check from the fishery, there is reason to believe they might strike down cooperatives under the Alaska Constitution, if they were required to reach that issue.

The State (represented by Assistant Attorney General Lance Nelson) and the Chignik Co-op (represented by Greg Cook) have motions for a rehearing and a stay pending before the Alaska Supreme Court in *Grunert*.

Similarly, except for temporary emergency transfers (for example, due to injuries) leasing of Alaska limited entry permits is prohibited by the Limited Entry Act, but some people advocate for legalizing the practice. The *Grunert* decision suggests such a change of law might be struck down on constitutional grounds. The issue would be whether an individual whose only connection to a fishery is to pick up a check remains entitled to protections as a fisherman under Article VIII, Section 15, authorizing limited entry.

Opportunities

When it comes to communities and regions helping their residents get and keep Alaska limited entry permits, the Commercial Fisheries Revolving Loan Program headed by Greg Winegar (907-465-2625), director of the Division of Investments (in Alaska Department of Commerce, Community and Economic Development), has provided a great opportunity. A local or regional group can come to the loan program and ask to participate in a loan guarantee program. The local or regional group would be required only to maintain some money on deposit as a loan guarantee fund. In turn, the local and regional group can select promising local candidates for loans (and promising local candidates to assume the loans if the original borrower fails to perform). The loan program does all the administrative work and (due to the guarantee) can extend loans on more favorable terms. We understand that Bristol Bay Economic Development Corporation and the Bristol Bay Native Association are in the process of developing such a program.

Additionally, with depressed prices for salmon permits, a part of the state's Commercial Fisheries Revolving Loan Program known as the "Old Nels Anderson Type B Loan" is now available for almost all rural residents, including those of Bristol Bay. These loans are available at very favorable rates.

Another opportunity is Alaska SB 113, sponsored by Senator Ben Stevens, which would establish the state's authority to create a dedicated access privilege program (DAP) for the state-managed Gulf of Alaska groundfish fisheries. A dedicated access privilege would be an individual share in the fishery quota that could be awarded to participants based on their level of past participation. This could be an important refinement to the state's ability to manage its fisheries, because our existing

permit limitation program (designed for salmon) is a very inadequate tool to apply to a fishery managed by quota. We believe there are strong arguments that a well-crafted program (designed to provide access opportunities as well as to avoid becoming too exclusive) could satisfy the Alaska Constitution.

As I said before, ADFG can be a profit center for you and the state of Alaska as we work to maximize the economic engine that utilization of Alaska's fish and game can be. I look forward to working in partnership with you to explain to legislators and other policymakers about the importance of that effort.

You all have spent the last two days grappling with the important community concerns that fishery regulators and managers should consider when making management decisions. As you go back to your communities to discuss and identify key issues, we hope that you will provide your input to ADFG, the Board of Fisheries, the North Pacific Fishery Management Council, your village councils, your local governments, your state legislators, and your congressmen/women. Each of these entities plays an important role in the decisions that affect your livelihoods as fishermen, and as community members.

In Alaska, state and federal agencies coordinate closely on fisheries management issues. Together, the North Pacific Fishery Management Council and the Alaska Board of Fisheries develop fisheries management plans that are grounded in independent science and ensure conservation and sustainable management of resources. Please advise us how government can provide opportunities for community input and community development, and how we can support your efforts as we make those fisheries management decisions that so affect you and your communities. Help us sustain fisheries and communities by identifying processes, information needs, programs that work and those that don't—by working in partnership with us to assure that the people who are sustained by our fisheries resources are as important as sustaining the stocks that they depend upon.

Good luck today as you learn from each other's efforts and discussions. We look forward to continuing to work with you to assure the future of Alaska's vast fisheries resources and another valuable resource—her great people. Thank you for this opportunity to meet with you.

Breakout Group Discussion Points and Recommendations

"Green" Work Group

What is a community?

- Different communities have different goals.
- Communities within communities may have different goals.
- Place-based vs. activity-based.
- Small vs. large; hubs and satellites.
- Community can be defined broadly:
  - Place
  - Interests
  - Historic linkages
- Dependency—commercial vs. traditional way of life (subsistence).
- The community will change depending on what it is you are trying to do (e.g., Chignik cooperative).
- Situational definition (Native, subsistence, resource).
- Subsistence is a word that has been handed down; describes a traditional way of life.
- Communities need money to maintain existence to keep future generations in the community; economic underpinning to support/survive in small communities vs. ability to compete in global market and find economic efficiencies for large communities.

What are Alaska's coastal community needs? What are we trying to protect, sustain, or promote?

- Fishery resources—stocks, access.
- Population—school enrollment.

- Stability—quality of life, economic.
- Support industries—harvesting, processing, community services.
- Culture/historical use.
- Tax dollars = economic vitality, landings, local multiplier, critical mass/threshold.
- Jobs—as good as, or better than other opportunities elsewhere, quality of job has different definition depending on community.

What are community goals?

Small communities

- Access to the resource
  - Especially in a rights-based system
- Tool: allocate percent of the resource
  - The cost of staying in the game is high
- Tool: either fishing or leasing the access right, hire locally, review use of money
- Subsistence emphasis
- Current and future participation for residents
- Revenue
- Jobs: numbers
- Maintain culture
- Socioeconomic efficiency
- Traditional way of life

Large communities

- Access to the resource
- Commercial emphasis
- Current and future access for residents
- Revenue, including tax
- Jobs: quality
- Maintain culture

- Focus on economic efficiency: value vs. volume
- Traditional way of life
- Healthy satellite communities

How do communities participate effectively in a regulatory regime?

- Internal consensus building.
- Building umbrellas of interests.
- Collaborate on information gathering—pre-regulatory forum.
- Facilitation process can be served by several entities—government, NGOs, etc.
- Objective and design phase; position/negotiation phase; implementation phase.
- "Drawing down" the information to the most local level most effective to allow understanding, participation; there are multiple institutions: BOF, NPFMC, NMFS, ADFG, Alaska State Legislature, Congress, etc. You have to figure out how to do business with them to get what you need!

Concern

Can economic efficiency (increased value) result in a way that does not forego access for smaller communities? Increase value, and then look at distribution to get increased value to spread. What is the distribution? Where does the increased value go? Therefore, increase the value, then provide allocation from the additional value

Figuring out how to distribute the increased value fairly is critical!

"Yellow" Work Group

The meeting of the yellow breakout group was characterized by good participation, with intense and emotional discussion. Clearly, many participants believe that communities are not being heard in the fisheries management process.

What makes a fishing community?

- A long history of a fishing lifestyle in the community.
- Economic stability over the long term (not currently being achieved).

- Preservation of cultural historic values of community residents.
- Communities want the opportunity to participate in use of fisheries resources where they live.

Problem areas discussed included

- A frequently mentioned concern was the loss of fishing permits and opportunity to enter the fishery in the communities.
- Neither state nor federal fisheries management are working to preserve opportunities for community residents.
- Programs such as salmon limited entry did not serve Alaska coastal communities well. Residents ended up selling their permits. The HUD housing payment system encouraged people to sell permits to reduce their payments.
- Small scale community fisheries were historically self-limited by need. People only fished to get what they needed to provide sufficient income. For many years, this meant fishing only for salmon. When salmon income opportunities declined, moving into other fisheries was precluded by management systems.
- Fisheries regulations create intra-regional resource disputes for fisheries resources at the Board of Fisheries and NPFMC. An example discussed was the different boundaries that exist in state and federal Pacific cod regulations between Chignik and Sand Point.
- What is the role of federally recognized tribes in fisheries management?
- Statewide regulations on subsistence do not fit all situations faced by coastal communities in Alaska.

Recommendations

- Communities need to be able to hold and own fishing permits for fisheries in their respective areas.
- Residents do not want to be forever precluded from fishing resources near them simply because they did not happen to fish for that species during a short set of "qualifying years."
- Better communication will assist residents from being caught "out of the loop" as fishing opportunities are closed.
- Communities need reliable fishing employment to allow young people to remain. Currently, communities are "training kids out of the fishery" due to lack of opportunity.

- Participation in CDQ fisheries allows a community to leverage its existing level of fisheries utilization—using the example of Atka.
- Instead of IFQ, make geographical CFQs that would tie residents to the resource.
- Make sure that a provision exists in all quota or other limitation systems to provide an opportunity for an entry-level component.
- Strengthen National Standard 8 in the Magnuson-Stevens Act.
- Improve the ability of the state to make allocation decisions affecting communities. They currently do not have the data, resources, or information to make informed decisions.
- The state is not devoting sufficient resources and effort to restructuring the salmon fishery. The current small committee will not have the data, analysis, or finding to be able to complete this difficult task.
- Resource allocation should require consultation with tribal groups or from another perspective; the state and federal governments should be required to negotiate with sovereign entities such as tribes.
- Local area management plan (LAMP) designated zones are important for entry level fisheries. This may require some change in the law to implement.
- Community quota systems should have an apprenticeship requirement to help provide opportunities. For example, some communities in Nova Scotia have established apprenticeship programs.

Ending thought

We need to make sure that young people in the communities are trained and interested in fishing, because that can provide a future for them.

"Pink" Work Group

Two areas for community focus

1. Do we need to change the process?
2. Do we need to change the way we participate in the process?

Adopting a collaborative process to build capacity

- Community level collaboration.
- Collaboration among communities.
- Collaboration between communities and other interests or stakeholders.

Through these collaborations communities can gain influence in both state and federal decision-making. Be prepared to compromise to build consensus. Underlying premise—community is a geographic location.

Community consensus can be used to

- Develop a sense of community values, purpose, vision. Include all interests (recreational, commercial, subsistence, Alaska Natives).
- Building community capacity.

Process to build community consensus

- Get together (consider using structured processes).
- Establish goals.
- Identify common ground (strength in numbers)
- Use logical and emotional arguments to support positions

"Orange" Work Group

Topics discussed

- How to define a community
- Identification of problem
- Tools
  - Communication
  - Regulatory
- Recipes for success

Identify problems before solutions

- Have you systematically identified the problem(s) of the communities at issue?
- Need a clear "diagnosis" in order to get the right "prescription" (to avoid one size fits all approach)

- Can we come to consensus as a community on the primary problems?

Identification of problems

- Property rights are not well-defined in fisheries (federal, state or private; subsistence vs. commercial).
- Lack of local control.
- Lack of enforcement.
- Overcapacity.
- Overregulation breeds confusion.
- Lack of capacity to get involved in decision-making process (e.g., costs to attend/travel, time, lack of understanding of process, intimidation factor).
- Difficult to determine adequate representation for a community (sub-communities; everyone wears many hats).
- Inadequate recognition of smaller user groups by regulators (e.g., on committee formation, few alternative opportunities to be heard).
- Ineffective communication.
- Inadequate information dissemination (and information changes quickly, hard to stay informed).

Communication tools

- The "study tour." Board of Fisheries (BOF) visits the Alaska Native regions on a regular basis; North Pacific Fishery Management Council visits more coastal communities, holds informational meetings.
- Consider developing advisory committees in more remote locations.
- Process starts with community developing a written, well-articulated problem.
- Concept of a course—"bureaucrats do work if you know how to use them."
- Communication has to be two-way.

Regulatory tools

- Local area management plans can be used as more than a "crisis tool." Process could be initiated through the BOF.
- Buybacks.
- Resource control (community allocations, quotas, etc.).
- Comanagement systems.
- Control of the local geography (local fishing areas).

Potential tool: creation of a code of community resource access

- Communication guidelines.
- Assistance/impacts distribution.
- Fairness principles.

Recipes for success

- Establish short and long-term priorities (e.g., subsistence area, economic base, development of infrastructure). Resources are limited so sometimes you go for the "low-hanging fruit" to gain community consensus, experience, and trust. You can't get everything you want.
- Document the problem ("the paper trail wins").
- Be persistent (squeaky wheel).
- Request the data to make your case.
- Know the regulatory bodies.
- Use the local advisory committees available to you.
- Communicate with individuals you know have been successful in the process.
- Collaborate within and among communities when possible.
- Be patient: success happens slowly and incrementally.

"Blue" Work Group

Recommendations

- Immediate organization of coastal communities, in order to form consensus on issues to convey to decision-makers.
- Permanent resource allocation to communities.
- Strengthen National Standard 8 of Magnuson Stevens Act.

Potential forms of community management

- "Community-based" management (CBFM).
- Comanagement.
- Territorial management.

Considerations for share-based programs

- Create a viable entry-level opportunity (e.g., small communities buying into an already established IFQ program at a high QS price may not be economically feasible).
- Auctions may be a valid method of allocating QS.
- Fixed duration of the resource privilege.
- Acknowledging all participants in the harvesting sector: skippers, crew, communities, vessel owners, etc.
- Provisions for initial recipients of shares to use some portion of benefits to fund new entrants.
- Recognize that "protection" for one community may hinder another (winners and losers from specific provisions).

Process suggestions

- Establish an "indigenous panel" similar to the North Pacific Fishery Council's Advisory Panel and Science and Statistical Panel.
- Adequate representation for community interests in Council and Board of Fisheries actions.

Recreational fisheries

- Reconsideration or elimination of halibut charter IFQ.

- Potential for state recreation quota.
- Additional state controlled groundfish fisheries.

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