

A Summary of Views Presented during
the Pacific Regional Roundtable

**Improving
Federal Fisheries Management
in the
Pacific Region**

The H. John Heinz III Center
for Science, Economics and the Environment

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BACKGROUND

ABOUT THE HEINZ CENTER

Founded in 1995 to carry on the work of Senator John Heinz, The H. John Heinz III Center for Science, Economics and the Environment is a nonpartisan, nonprofit institution dedicated to improving the scientific and economic foundation for environmental policy through multisectoral collaboration. Focusing on issues that are likely to confront policymakers within two to five years, the Center fosters collaboration among industry, environmental organizations, academia, and government in each of its program areas and projects. It uses the best scientific and economic analyses to develop viable options for solving problems, and its findings and recommendations are widely disseminated to public and private sector decision makers, the scientific community, and the public.

ABOUT THE MANAGING U.S. MARINE FISHERIES PROGRAM

Initiated in March 1998, The Heinz Center's Managing U.S. Marine Fisheries program seeks to increase the effectiveness of U.S. fisheries management. A primary goal of the program is to identify present concerns and possible courses of action for key decisionmakers, especially as Congress considers amendments to the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA).

In addition to numerous documents and reports, the program has produced the book *Fishing Grounds: Defining a New Era for American Fisheries Management*, which is available through Island Press. Susan Hanna, Professor of Marine Economics at Oregon State University, led the program with support from Assistant Manager Heather Blough. Four senior advisors—Captain R. Barry Fisher of Midwater Trawlers Cooperative, D. Douglas Hopkins of Environmental Defense, Dr. Andrew A. Rosenberg of the National Marine Fisheries Service, and Professor Michael Orbach of Duke University—provided oversight to the program.

ABOUT THE REGIONAL ROUNDTABLE SERIES

The Heinz Center hosted eight roundtable meetings in the federal fishery management council regions between July and October 1999. The purpose of the meetings was to identify problems the councils have encountered in implementing the 1996 amendments to the MSFCMA and to solicit input on how fisheries management can be made more effective in the regions. The original intent was to focus on improvements to the system that could be made through congressional reauthorization. Participants also offered many ideas about administrative actions that the National Marine Fisheries Service (NMFS) and the regional fishery management councils could take to make the system work better.

The roundtable meetings were limited to a small number of participants to keep the discussion focused and productive. They were attended by industry members, environmentalists, fishery managers and scientists that participate in the fishery management system at the regional level. Assistance in identifying qualified participants was provided by council directors and leadership of the Marine Fish Conservation Network. Participants were familiar with the full range of issues facing their region, but practical limitations did not allow for representation from every fishery, gear type, or other specific interest group.

The booklet *Reauthorizing the Magnuson-Stevens Fishery Conservation and Management Act: A Handbook and Discussion Guide for Regional Fishery Management Councils*, produced during the first phase of The Heinz Center's Managing U.S. Marine Fisheries program, provided background for the regional roundtable discussions.

Each roundtable lasted two days and was guided by a similar agenda. The first day was devoted to discussing the implementation of four mandates added to the MSFCMA in 1996, including: (1) end overfishing and rebuild overfished stocks; (2) minimize bycatch; (3) identify and protect essential fish habitat; and (4) minimize adverse economic impacts to fishing communities. The second day's discussions were focused on identifying how the fisheries management system can be improved. They too were divided into four segments, including (1) background conditions; (2) decisionmaking; (3) management implementation and administration; and (4) "new" management tools.

ABOUT THE REGIONAL ROUNDTABLE REPORTS

Each roundtable discussion was recorded and transcribed by a professional reporting service. We then produced summary minutes from each transcript, which participants reviewed for accuracy. We incorporated these materials into a report for each region, which summarizes the discussions and outlines the participants' recommendations.

The Heinz Center's goal for the reports was to capture as much information as possible about federal fishery management problems and potential solutions in the various regions. Throughout the roundtable discussions, the knowledgeable and diverse participants identified many specific concerns and options for improving federal fisheries management. We did not attempt to evaluate, prioritize, or forge consensus on the issues and recommendations that were raised. We did, however, note areas of strong agreement or dissent. Although participants did not necessarily characterize proposed actions as most appropriate for Congress, NMFS, or the councils, we did so in the final reports in the interest of making the information more useful.

In addition to the regional reports, we produced a national summary, *Improving Federal Fisheries Management: A National Report*, which synthesizes information derived from the regional roundtable series. The handbook, regional and national reports, and other documents stemming from The Center's fisheries program are available online at www.heinzctr.org.

This report was prepared by Susan Hanna and Heather Blough. It summarizes views presented during the This report summarizes views presented during the Pacific Regional Roundtable held August 3-4, 1999 in Portland, Oregon.

ROUNDTABLE PARTICIPANTS

DISCUSSANTS

Ralph Brown	Fishermen's Marketing Association
Mark Cedergreen	Executive Director, Westport Charterboat Association; Chairman, Salmon Advisory Panel, Pacific Fishery Management Council
Bob Eaton	Executive Director, Pacific Marine Conservation Council
Paul Engelmeyer	NW policy analyst, Living Oceans Program, National Audubon Society
R. Barry Fisher	President, Midwater Trawlers Cooperative
Rod Fujita	Marine ecologist, Environmental Defense
Jim Hastie	National Marine Fisheries Service
Rod Moore	Executive Director, West Coast Seafood Processors Association
David B. Sampson	Associate Professor of Fisheries, Oregon State University
Larry Six	Executive Director, Pacific Fishery Management Council
Gil Sylvia	Marine resource economist, Coastal Oregon Marine Experiment Station, Oregon State University

INVITED, UNABLE TO ATTEND

Phil Anderson	Washington Department of Fish and Wildlife
Jim Harp	Quinalt Indian Nation; member, Pacific Fishery Management
James Ponts	California fixed gear
Bill Robinson	National Marine Fisheries Service, Northwest Region

FACILITATOR:	Susan Hanna
ASSISTANT:	Heather Blough
RECORDER:	Craig Martin Hess, Martin Enterprises

EXECUTIVE SUMMARY

The Pacific Fishery Management Council manages fisheries in federal waters off the coasts of California, Oregon, and Washington. There are 109 stocks under its direct authority. The Council is tasked with implementing new fisheries management provisions added to the Magnuson-Stevens Fishery Conservation and Management Act through the Sustainable Fisheries Act of 1996. These provisions relate to ending overfishing and rebuilding overfished fisheries, minimizing bycatch, identifying and protecting essential fish habitat, and minimizing adverse impacts to fishing communities.

The Heinz Center convened a roundtable August 3-4, 1999, in Portland, Oregon, to identify problems the Pacific Council is experiencing in implementing these new provisions and to solicit recommendations to improve fisheries management in the region. Participants included members of industry, environmental organizations, academia, and government agencies.

Roundtable participants recognized the following as primary problems the Pacific Council faces in meeting the new provisions:

- inadequate federal/state coordination;
- inadequate and infrequent at-sea surveys;
- confusion over congressional intent of the bycatch provision;
- allocation conflicts among gear groups;
- inadequate documentation of bycatch and discard mortality;
- insufficient authority over nonfishing impacts on essential fish habitat;
- poor understanding of ecological relationships;
- lack of long-term goals for fishing communities;
- inadequate social and economic data; and
- insufficient funding.

The participants offered the following general recommendations for change:

- fund legislative mandates of the MSFCMA;
- better understand and account for natural variability in fisheries management;
- clarify management goals and objectives;
- improve the scientific basis of management;
- strengthen social science research;
- reduce fishing capacity and provide transition assistance;
- improve federal/state interface in fisheries management;
- increase collaborative research with the fishing industry;
- improve education and outreach;
- improve National Marine Fisheries Service (NMFS)/industry relations;

- develop and implement incentive-based approaches to management; and
- improve decisionmaking.

The two-day discussions that led to the identification of these problems and recommendations are summarized on the following pages. A more comprehensive list of detailed actions that could be taken by Congress, NMFS and the Pacific Council to improve fisheries management in the region is included in the back of this report.

THE PACIFIC REGIONAL CONTEXT

The Pacific Fishery Management Council manages fisheries in federal waters off the coasts of California, Oregon, and Washington. In addition to these three states, it represents the state of Idaho. The Council has 14 voting members—one from NMFS, one from an Indian tribe with federally recognized fishing rights, four from state fishery agencies, and eight public members appointed by the Secretary of Commerce. The Canadian Department of Fisheries and Oceans and the U.S. Fish and Wildlife Service are also involved in fishery management in the Pacific region.

The Port of Seattle, Washington, is the highest producing in the region, where an estimated 313 million pounds of fish valued at \$22.3 million were landed in 1998. Most of the fish landed in Seattle were caught in the North Pacific. Of those caught in the Pacific region, the greatest volume was landed at Los Angeles, California—145 million pounds, valued at almost \$26 million.¹

Participants indicated that compliance with federal fishery management regulations has been, and continues to be, notable in the Pacific region. They attributed the cooperation of industry to good communication with enforcement officers. Some noted that high rates of compliance have not resulted in well-managed, healthy fisheries, as some would presume, because scientific advice on sustainable catch levels has often been erroneous. Fisheries in the Pacific region can be dramatically affected by oceanographic variability. Changes in water temperatures, although somewhat predictable, can change fish migration patterns and increase natural mortality rates, which increases scientific uncertainty.

Some participants noted that salmon listings under the Endangered Species Act have greatly affected how fisheries are managed in the Pacific region. The attention that these species require can cause other important fisheries, such as groundfish, to be overlooked in terms of research, personnel, and funding allocations. Although salmon fisheries are politically popular at present, salmon catch constitutes a relatively small percentage of commercial and recreational catch in the region, whereas the groundfish fishery is by far the most economically valuable. Some find it troubling that salmon fisheries have produced far more economic impact since reaching endangered status.

¹ NMFS. 1999. *Fisheries of the United States, 1998*. Current Fishery Statistics No. 9800, U.S. Department of Commerce, National Oceanic and Atmospheric Administration.

IMPLEMENTING PROVISIONS OF THE 1996 SUSTAINABLE FISHERIES ACT

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The 1996 Sustainable Fisheries Act (SFA) added new provisions to the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA). Four of these provisions contain significant new requirements for the Pacific Fishery Management Council that relate to ending overfishing and rebuilding overfished stocks, minimizing bycatch, identifying and protecting essential fish habitat, and minimizing adverse impacts on fishing communities. Participants' views on challenges the region faces in implementing these provisions are summarized below.

1. OVERFISHING/REBUILDING

Background

The MSFCMA's overfishing/rebuilding provision requires that fishery management plans contain measurement criteria for overfishing, actions to prevent overfishing, and plans to rebuild overfished stocks. The Act defines both "overfishing" and "overfished" as "a rate or level of fishing mortality that jeopardizes the capacity of a fishery to produce the maximum sustainable yield on a continuing basis" (16 U.S.C. 1802(29)).

There are 109 stocks under the direct authority of the Pacific Council. Of these, 16 are overfished, 17 are not overfished, one is approaching an overfished condition, and 75 are of unknown status. Most stocks are managed under the Salmon, Groundfish, or Coastal Pelagic Species fishery management plans.²

The Pacific Council shares limited management over Pacific halibut with the North Pacific Council. That fishery is managed primarily by the International Pacific Halibut Commission and is not overfished.³

Because the life history traits of many stocks of unknown status make them susceptible to overexploitation, it is believed that the number of overfished stocks in the Pacific region is likely to increase as additional data become available. By diverting stock assessment resources away from new or maintenance assessments, some participants are concerned that requirements to rebuild overfished fisheries under the overfishing/rebuilding provision increase the likelihood of this trend.

² NMFS. 1999. Report to Congress: Status of Fisheries of the United States. September.

³ Ibid

Implementation Issues

Overfishing Definition: Participants noted that use of the term “overfishing” to describe stocks that are unable to produce maximum sustainable yield fails to reflect the many factors that contribute to the status of fish stocks and creates public misperceptions.

Reliance on Maximum Sustainable Yield: Participants noted that reliance on maximum sustainable yield as an indicator of stock status fails to acknowledge the dynamic nature of fish populations and fisheries, as well as the limitations of science. Some believe that fundamental change is needed to create a more simplified fishery management system that moves away from the concept of maximum sustainable yield toward something that is easier to estimate and manage. They recommended that to work better with available resources, the Council needs flexibility to consider more qualitative measures of sustainability.

Despite its shortcomings as a management objective, other participants noted that maximum sustainable yield provides a much-needed numerical restriction on total allowable catch. Many support such a cap because the Pacific Council has not dealt cautiously with uncertainty in the past.

Use of the Precautionary Approach: Some participants noted that scientific uncertainty could be better incorporated into fishery management decisions by formally adopting a precautionary approach to fishery management—something the Council has shied away from in the past. Such an approach could take various forms, such as establishing marine protected areas to protect important fish stocks and habitat from poor management decisions; allowing specific fractions of populations to be removed based on broadly estimated biomass levels of low, medium, or high; or simply adopting more conservative allowable catch levels.

Some participants suggested that a precautionary approach should be mandated in the form of a national standard, accompanied by a complete definition and guidelines. Others suggested that the Council should improve the adequacy of scientific information, rather than move to a process that works independent of such information. They noted that an alternate, and less defeatist, approach to dealing with scientific uncertainty is to reduce it by collecting more and better data, including anecdotal information. Managers could learn which sources of anecdotal information are reliable by spending more time with industry. They added that fishermen’s support for short-term precautionary management would be enhanced if they knew that managers were collecting the information necessary to make better choices in the future.

Federal/State Coordination: Participants believe that eliminating overfishing and rebuilding overfished stocks will not be successful absent a coordinated state and federal effort to rebuild federally designated overfished stocks. They said that the coordination and integration of federal and state fishery management are currently inadequate.

Research and Data Needs: At-sea surveys are performed only once every three years in the Pacific region. Consequently, many participants view the stock assessments informed by these data as inaccurate and outdated. They said that deficiencies in stock assessment information make it difficult to meet the requirements of the overfishing/rebuilding provision, noting that the Council is forced to rely on scientific information that is difficult to obtain and subject to great uncertainty.

Data necessary to assess tradeoffs among ecological, social, and economic impacts are also scarce, making it difficult for managers to define appropriate rebuilding goals and strategies. Some participants said that rebuilding plans should communicate the extent of uncertainty involved and allow for flexibility in implementation, so that managers can adjust the plans as more information becomes available.

2. BYCATCH

Background

The MSFCMA's bycatch provision requires that fishery management plans establish standardized bycatch reporting methodology, as well as measures to minimize bycatch and bycatch mortality. The Act defines "bycatch" as "fish which are harvested in a fishery, but which are not sold or kept for personal use, [including] economic discards and regulatory discards." The legislative definition excludes "fish released alive under a recreational catch and release fishery management program" (16 U.S.C. 1802(2)).

Implementation Issues

Interpretation of Bycatch Objective: Participants commented that people tend to hold one of two very different views on bycatch. Some view bycatch as waste. When considered from this viewpoint, the resolution of the bycatch issue is not a scientific, but rather a political matter. Society at large must decide what level of bycatch is tolerable. Others recognize bycatch as an integral component of fishing operations, but one that must be accounted for in fishery management decisions. Most participants supported this second view of bycatch, noting that understanding and accounting for bycatch and discard mortality will help managers to reduce scientific uncertainty in stock assessments, improve fishery management decisions, and conserve fishery resources. They said it has been difficult for the Pacific Council to define bycatch objectives for the fisheries because the intent of the bycatch provision is unclear. It was noted that the Pacific Council's bycatch amendment was rejected by the Secretary of Commerce.

Effects on Allocation: Participants indicated that the bycatch provision has exacerbated allocation conflicts in the Pacific region. Managers are constantly lobbied by those who wish to use the mandate as a rationale to reallocate scarce fishery resources among gear groups. Some participants said that because allocations are so contentious, anecdotal information should never

be a sufficient determinant of bycatch and discard mortality—there is too much at stake. To limit the influence of politics in the implementation of this provision, it was suggested that managers should develop and establish mandatory performance standards that apply to all current and future gear types, rather than reallocate fishery resources among gear groups. In addition to maintaining equity, this approach would create incentives for innovation in the right direction.

Relationship to Other Stated Goals and Objectives: To some participants, the bycatch provision appears to be in conflict with National Standard 5, which requires that management consider efficiency where practicable. They suggested that bycatch should be examined in terms of the costs and benefits of fishing operations, rather than simply the costs of discarding dead, unutilized fish. For example, they questioned whether it is less wasteful to require industry to minimize bycatch by changing to a gear that costs much more and increases the price of the consumer product with no similar increase in quality. Others countered that the 1996 amendments provide evidence that the protection of ecosystem integrity is on par with economic efficiency and other fishery management objectives. They also suggested that it would be very difficult to quantify the full range of costs that bycatch presents to society and marine ecosystems, as well as the benefits that would accrue from a further reduction in bycatch. One participant noted that some companies may choose to spend an additional 2 to 3 percent to minimize bycatch in exchange for the benefits provided by a marketing campaign that shows their role in ocean conservation.

Use of Incentives: Participants said that the Pacific Council should develop a list of incentive-based tools that will work to achieve bycatch objectives without imposing additional costs on the industry. Some suggested that the internalization of costs under an individual fishing quota program would provide an incentive to reduce bycatch.

Regulatory Discards: Some participants indicated that regulations, such as trip limits, result in an unnecessarily high number of discards. They recommended that regulations that promote bycatch be examined and rectified when possible. Others noted that regulatory discards could be automatically reduced to some extent by matching fishing capacity with resource availability.

Research and Data Needs: Many participants would be satisfied if bycatch and discard mortality were kept within limits that sustain the fisheries, but to do so requires an accounting of bycatch and associated mortality, as well as research on the ecosystem effects of species removals—information that does not exist. Many fear that the absence of this information will be used to strengthen the argument of bycatch as waste and that regional bycatch will be assumed to occur at the level reflected in global statistics.

Data on the extent of bycatch and discard mortality could be obtained through an observer program, but participants said there are many important issues that must be addressed. First, present standards make it impossible for much of the fleet to carry observers. Second, a successful observer program will require industry buy-in, which will occur only if fleets are convinced that the program is equitable and that their participation and cooperation will be

beneficial to both themselves and the resource over the long term. Third, a properly designed observer program will be expensive, and current trends in quota cutbacks suggest that the industry will not be able to subsidize such a program. Finally, there is much confusion at present regarding the use of observers for monitoring and research, as opposed to enforcement. In designing such a program, the objectives of observers must be made explicit early on.

3. ESSENTIAL FISH HABITAT

Background

The MSFCMA's habitat provision requires that fishery management plans describe and identify essential fish habitat, minimize fishing effects on habitat, and identify actions to encourage conservation and enhancement of habitat. The Act defines "essential fish habitat" as "those waters and substrate necessary to fish for spawning, breeding, feeding or growth to maturity" (16 U.S.C. 1802(10)).

Implementation Issues

Breadth of Definition: Some participants believe that the guidelines provided by NMFS to assist with defining "essential fish habitat," along with a poor scientific understanding of links between fish habitat and productivity, forced the Pacific Council to define "essential fish habitat" too broadly. In their opinion, such a broad definition is inconsistent with the original intent of Congress which, they believe, was to focus on specific areas where crucial problems exist. They think that the broad designation will reduce the impact of essential fish habitat identification and make it impractical for Council to follow through on requirements related to nonfishing and fishing activities in designated areas. But others supported the Council's "essential fish habitat" designation on the grounds that the magnitude of species and life stages to consider make a broad designation essential.

Fishing Gear Impacts: Because the impacts of fishing gear have not yet been documented in the Pacific region, participants noted that discussions related to minimizing gear impacts on essential fish habitat tend to quickly degenerate into gear wars and allocation battles. Some consider it unfair to restrict the fishing activity of a certain gear type without scientific evidence indicating that the gear is in fact damaging to habitat. They criticized the essential fish habitat provision for burdening industry with having to prove that their gear is benign and claimed that this will eventually limit fishing industries to very large corporations that can afford to undertake expensive research. Others countered that the burden of proof has been on fishery managers for much too long. They suggested that a better understanding of fishing gear impacts should be required before fisheries are permitted to expand or even remain at status quo. In their view, an adaptive management scheme would then allow management measures to be modified as more information becomes available.

Some participants suggested that fish habitat could be protected from potentially harmful gear impacts by placing some of each major habitat type into a reserve system. In addition to buffering species and habitats against future problems, these protected areas could serve as control areas for research on fishing gear impacts.

Nonfishing Impacts: Participants commented that the essential fish habitat provision is not likely to be helpful in minimizing adverse impacts to fish habitat from nonfishing-related activities. They said that a coordinated coastal/ocean management strategy is long overdue, but indicated that the essential fish habitat provision provides too little by failing to afford the Council any real authority. Because the consultation requirement has no “teeth” and because land-use and property rights issues are so political, they believe Council recommendations related to nonfishing activities are sure to be steamrolled.

Research and Data Needs: Participants noted that inadequate data present the Pacific Council with a particular challenge in implementing the essential fish habitat provision. Directives that require an understanding of the life history of managed stocks, links between fish habitat and productivity, and the impacts of both fishing- and nonfishing-related activities on habitat present important and expensive research questions about which little information exists. Participants said the Council has neither the time nor the resources necessary to collect and analyze these data. They believe that a systematic, long-term research program backed by a long-term funding commitment is needed. They believe that incorporating the knowledge of fishermen into such programs will help to better define research questions and resolve those questions cost-effectively. They added that to make collaborations successful, the information provided by industry must be verifiable, and scientists must communicate clearly to industry how that information will be used.

4. COMMUNITIES

Background

The MSFCMA’s communities provision requires that the effects of management measures on fishery participants, fishing communities, and fisheries in adjacent areas be assessed. The Act defines “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” (16 U.S.C. 1802(16)).

Participants said the Pacific Council is behind in meeting legislative requirements for social and economic and, in particular, community analyses. They noted that the Council is currently involved in an effort to develop profiles of fisheries coast-wide, but that this is a long-term effort that will require many more years to complete.

Implementation Issues

Definitions: Participants said that forging agreement on long-term goals for fisheries will require that the terms “sustain” and “communities” be more clearly defined. Currently, questions regarding the meaning of these terms have created an opportunity to debate what is equitable.

Use of Socioeconomic Data and Analyses: Participants said that the limited socioeconomic data that are collected tend to be analyzed after management decisions have already been made. They believe these data should be used to better understand community dynamics, provide insight about the future of fisheries, and develop incentive-based policies. Analyses should be proactive—used to inform decisionmaking, rather than provide doomsday reports. Used properly, socioeconomic information will enable managers to offer advice to communities about probable outcomes and will provide the industry with advance warning so that people have sufficient time to make alternative plans if future profits are questionable.

Long-Term Goals: It was noted that the Pacific Council is currently undergoing a strategic planning process for the west coast groundfish fishery. In developing a long-term vision for this and other fisheries, participants said the Council should not try to envision a certain social structure over the long term, but rather it should identify long-term biological and economic goals, be honest with communities about what it will take to achieve those goals, and then provide individuals the freedom to prepare for future outcomes as they see fit. Most participants envision fisheries of the future as comprised of smaller, more economically viable fleets. They indicated that this would improve the stability of yields, allowing for effective business planning and an improved quality of life for industry members. Such improved certainty and consistency in management is important.

Research and Data Needs: Participants indicated that enormous social and economic data deficiencies make it impossible for the Pacific Council to meet the requirements of the communities provision. They emphasized the importance of improving the socioeconomic basis of fishery management but acknowledged that doing so will be costly. They believe that Council decisions should not be based on assumptions and beliefs related to the socioeconomic impacts of fishery regulations, but rather on scientific data.

Participants suggested the need to employ more trained social scientists at both the regional and the national levels, and noted that these scientists should be involved in fishery management decisions early on. Currently, NMFS is generally given only a few months to calculate and assemble information on the community impacts of a regulation before a final decision is made—an unrealistic time schedule, given the extent of work involved. Some suggested increasing Council interaction with communities and asking others, such as Sea Grant extension agents, for help in collecting social and economic information. Others proposed establishing a socioeconomic research fund that would be paid into by participants in state and federal fisheries.

Participants recommended that research should focus on collecting and recording qualitative information about the fleets, such as where fishermen live, bank, pay taxes, and purchase equipment; identifying key links that support community infrastructures; and developing predictive models of fishing behavior that describe decisionmaking under a set of circumstances. Some participants asserted that because strict management actions are often delayed to maintain employment at status quo, the socioeconomics of employment should also be examined more meaningfully—employment that is below a meaningful level should not be considered worthy of sustaining. They noted that allowing industries to hover at a point nearing total economic ruin creates excessive pressure on the system.

IMPROVING FISHERIES MANAGEMENT IN THE PACIFIC REGION

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Roundtable participants reviewed background conditions in the Pacific region's fisheries, existing decisionmaking and implementation processes, and possible new tools to identify administrative and legislative actions for improving fisheries management in the region.

1. BACKGROUND CONDITIONS

Present-day fisheries are a product of their management history. Regional roundtable participants identified the following background conditions as important factors influencing the current state of fisheries and fisheries management in the Pacific region. They also discussed how these conditions could be better addressed.

Capacity

Participants said that dealing with excess fishing capacity is a priority issue in the Pacific region. Some suggested that a region-wide fishery management plan would help to limit access to fisheries across the board and would prevent effort from simply being displaced from one fishery to another. They emphasized that such a plan must cover both state- and federally managed fisheries and include participants from all sectors, including processing, commercial, tribal, charter boat, and recreational operations. Some participants indicated that educating fishermen regarding the need for, and benefits of, limited access would increase support for such a plan.

It was noted that limiting access to fishery resources is necessary but not sufficient: existing fishing capacity must also be reduced. Some participants questioned whether the fishery management system is appropriately structured to provide the Council and NMFS the authority necessary to develop and implement capacity-reduction programs, noting that a perceived inability to survive the short-term impacts of capacity reduction creates fierce opposition to such programs. They recommended that managers provide support through outreach, education, counseling, training, and/or compensation in the form of a one-time buyout.

Participants said a voluntary and permanent buyback program should be designed and implemented to assist commercial and charter boat industries with capacity reduction. They indicated that the development of such a program should take into account the experiences of others, such as the salmon buyback program. They also said the program should offer a spectrum of options for dealing with supporting industries, such as fuel dealers, processors, and motels and restaurants, and should outline alternatives for determining vessel value, using purchased vessels, and dealing with latent capacity. They stressed that potential participants in the program should be involved in the selection of particular options.

Some participants believe the buyback program should be federally funded, arguing that fleet reduction is a national goal and that the New England buyback program was funded through appropriations. Others believe the industry should be responsible for bearing those costs. An alternate option suggested would be to fund the program through disaster-relief funds provided under section 312 of the MSFCMA, but the Council has been discouraged from applying for such funds in the past. Some participants are concerned that an inability to agree on a funding mechanism will delay the development of a buyback program. They suggested that, rather than allow this to occur, industry should offer to provide the resources necessary to implement such a program.

Some participants emphasized the need to incorporate flexibility into capacity-reduction programs to enable managers to adjust capacity goals as the optimal level of capacity in each fishery becomes better understood. Others identified the need to define the terms “processor” and “processing” in the MSFCMA to improve understanding of these entities and to assist in discussions related to capacity reduction, as well as community issues, collaborative research, and user fees.

Institutions

Participants believe that to sustain the transition to a sustainable fishery, capacity reduction must be followed by major institutional changes in the fishery management system. They noted that management tools currently employed create incentives for overcapitalization and economic inefficiency and suggested that a new management philosophy is needed that creates incentives for stewardship and economic health. They recommended that fishermen be retrained to strive for efficiency, rather than an ability to catch the most fish the fastest—a radical philosophical change from existing management. They believe that fishery managers be retrained to strengthen their leadership skills. Participants stated that in the past NMFS and the Council have been hesitant to take strong action to reduce capacity for fear of conflict.

Some participants noted that individual transferable quota programs provide an effective means of achieving efficiency goals. But, it was pointed out that such programs should not be viewed as the solution to all problems because quotas do not exist—and are not wanted—in all fisheries. And, although a good goal for individual operations, efficiency should not be determined to be the primary goal of fishery management.

Other participants suggested that subsidies that serve to increase fishing capacity should be examined and eliminated where possible, noting that this is a very contentious issue in the Pacific region. They said advocates of preserving fishing subsidies argue that those provided to the U.S. fleet have been small in comparison to other countries, that they help to level the playing field for U.S.-flagged fishermen participating in international fisheries, and that some, such as the diesel fuel tax exemption, are well targeted.

Science

Participants agreed that the scientific basis for fishery management in the Pacific region is inadequate. They believe that deficient information on stock health, appropriate harvest rates, and the effects of natural variability on stock productivity, along with the failure to recognize these deficiencies, has negatively affected the status of fisheries. Some participants noted that simply increasing the frequency of trawl surveys will not be enough. They suggested that a long-term commitment of resources is needed to conduct scientific investigations, improve methodologies, and search for creative alternatives.

2. DECISIONMAKING

Decisionmaking is a key component of the fishery management system. All biological, ecological, social, and economic conditions in the fisheries are influenced by decisions made at the regional and federal levels that form the basis of fishery management plans and amendments. The discussion that follows summarizes the challenges and opportunities to improving decisionmaking identified by participants.

Status

Participants said that the past performance of both NMFS and the Pacific Council has been dissatisfying to some extent. They observed that at present, the fishery management system appears to be focused on trying to get too many diverse interests to agree. They urged managers to learn to break through the paralysis in decisionmaking and show more leadership, rather than wait for consensus.

Training and Education

Participants said that the part-time status of fishery managers causes the quality of management decisions to suffer at many levels. The attention of regional NMFS staff is divided among the Pacific Council, the Alaska region, and endangered species issues. It was pointed out that part-time Council members do not have time to become familiar with all of the issues on which they vote.

Participants believe that council members should be fairly well informed about common components of fishery management and should be required to have a basic understanding of important issues, such as stock assessments, scientific uncertainty, how to contend with multispecies management, and the state and federal services available to those faced with difficult socioeconomic impacts. They think that this knowledge would improve the ability of council members to make sound decisions and would enable them to better discern truthful from untruthful testimony on the council floor. It was observed that the optional orientation program

currently offered by NMFS does not adequately educate new members on these issues or sufficiently prepare them for the tasks ahead.

Some participants suggested that fishery managers must also be better trained. They said that NMFS and other agencies have not adequately trained their staff in the skills of management or selected staff with management experience. Instead, they have focused on other skills important to these positions. Some questioned whether universities are appropriately training future managers for the management process.

Council Representation

Some participants suggested that the decisionmaking process should be restructured to represent a broader array of interests. They think it is difficult for the Pacific Council, as currently composed, to make the tough decisions necessary to sustain fishery resources. It was suggested that equal representation at the table would help to ensure that management decisions represent the full range of public values, which are not represented by the environmental community alone. One participant noted that, theoretically, the Secretary of Commerce oversees council composition. Some questioned whether it is appropriate to have the Secretary dictate the number of representatives from each sector.

Science

Participants agreed that the scientific basis for fishery management in the Pacific region is seriously inadequate and dangerously underfunded. They pointed out that it is virtually impossible for the Council to meet all scientific requirements; particularly those imposed by the 1996 SFA amendments. Expectations to fulfill requirements with an insufficient amount of time, personnel, and funds result in much frustration. Participants agreed that investment in science is long overdue in the region.

Some participants said that the Council's relationship with regional scientists is eroding. They indicated that researchers are becoming tired of the intensive review process and are less willing to volunteer valuable time to attend week-long panel sessions. Some participants believe that compensating reviewers for their time may increase their participation in the process, but others suggested that the review process is simply too strict and that scientific data are held to too high a level of scrutiny.

Despite an intense process of scientific review, participants believe the scientific credibility of the fishery management system is suffering in the Pacific region. Some suggested that credibility could be improved by broadening biological databases to include information not traditionally used, such as industry-generated information and data on oceanographic conditions. Others suggested that it is a mistake to believe that additional data collection and research will make

everything better. They noted that there are limits to both science and funding and, at some point, the cost of science will exceed the benefits derived from scientific research.

Alternative Models of Decisionmaking

A question was raised about whether the Pacific Council, as currently structured, is capable of examining the fishery management system objectively and considering alternate governance options that may be more successful in managing fishery resources. Participants believe that decisionmakers should think creatively about ways to resolve institutional problems, rather than simply apply Band-Aids to old wounds through MSFCMA reauthorization.

One participant suggested that alternative models of natural resource decisionmaking, such as the public utility, corporation, and co-management models, could incorporate greater accountability into the decisionmaking process. Others suggested replacing the current democratic decisionmaking process with one ruled by a fishery “czar,” or moving oversight for marine fisheries out of NMFS and the Department of Commerce into another sphere that may be able to handle the issues more effectively.

Still others believe that the existing decisionmaking framework could be improved by requiring both NMFS and the Council to develop and prioritize measurable goals and objectives and, more important, holding each accountable for meeting those goals and objectives through independent reviews. But some noted that formulating strategies, goals, and objectives will be worthless unless accompanied by an institutional system of incentives that reinforce those outcomes.

3. MANAGEMENT IMPLEMENTATION AND ADMINISTRATION

The implementation of management decisions is an important part of the fishery management process. Roundtable participants exchanged views on management implementation and identified problems with the current system and how the process could be improved. Their discussion is summarized below.

Council/Council Interface

Some participants noted that activities of the Pacific and Western Pacific councils must be better integrated and coordinated, particularly with respect to management of highly migratory species. Lack of trust, personality conflicts, and cultural differences were cited as obstacles to the development of joint plans to manage stocks throughout their range. The development of separate plans was noted as an alternative that would eliminate the need to forge consensus, but participants noted that such a management technique would run contrary to the need to manage stocks throughout their range.

Council/State Interface

Coordinating state and federal fishery management was noted as a significant structural problem. Participants asked how integrated, coordinated management can be ensured.

Participants acknowledged that fishery management is moving into an era where the allocation of fish between the commercial and recreational sectors will be extremely critical. Some suggested that the Pacific Council must have the ability to enact controls on recreational fisheries in state waters to equitably achieve the new, sustained fishery that it envisions. They noted that there is no mechanism to do this under the current framework. While NMFS has the authority to preempt a state's decision, this authority can be over-ridden through the political process. Some participants suggested that it is a gross conflict of interest to make state agencies responsible for fishery conservation when their budgets are tied directly to the issuance of fishery licenses and permits. They suggested eliminating this conflict by redirecting license and permit revenues to a general account. But others disagreed with this proposition.

Council/NMFS Interface

Participants agreed that the working relationship between NMFS with the Pacific Council must be improved. Some noted that the agency was very late in publishing guidelines to assist the Council with implementation of the 1996 SFA provisions, and it continually rejects the Council's fishery management plans and amendments without providing adequate guidance as to what changes are needed. Some participants perceive agency staff as difficult to reach and unresponsive—characteristics that cause particular problems for the Council because it is unable to act independent of the agency.

Funding

Participants concurred that the Pacific Council is grossly underfunded and understaffed. Some said that resource limitations restrict creativity and innovation, and force the Council to prioritize activities, which, at times, prevents them from addressing important issues. Others noted that resource limitations also inhibit collaboration between council staff and industry by making travel difficult and between the Council and the public by requiring that meetings be held in inconvenient locations, such as airport hotels, where it is very difficult for the public to attend. Participants proposed several options for addressing funding limitations.

First, regional funding priorities should be re-examined. Salmon listings under the Endangered Species Act have defined the region's spending priorities at the expense of other requirements imposed on the Council and NMFS.

Second, the Council should take a more collaborative approach to obtaining, analyzing, and paying for scientific data. NMFS, too, should begin to collaborate more with states, universities,

environmental groups, and the various components of industry. This may require reviewing and revising ethics and gift requirements in the statute and regulation to allow NMFS to accept industry contributions.

Third, although the imposition of industry fees lacks universal support in the Pacific region, the current restriction on fee collection should be removed through MSFCMA reauthorization to provide the Council the authority to impose fees if and when it chooses to do so. Some participants noted that resistance to fees would be lessened if revenues were returned directly to the region and if managers waited to impose fees until fisheries are in better shape.

Fourth, “service districts,” consisting of groups of people from all sectors who vote on self-imposed taxes, could be used as a means to increase funding for buybacks, research, and other Council activities. Participants recommended that Congress add a provision to the MSFCMA to enable the use of service districts as a funding mechanism, but cautioned against dictating a specific purpose for these districts.

Fifth, legislation that would allow revenues from outer continental oil and gas to fund fishery management activities should be passed.

Finally, some suggested that the Council could make better use of available resources by devolving management. According to this view, the Council would be required to spend much less time micro-managing and allocating fishery resources if industry were responsible for the development of fishery management plans.

4. “NEW” MANAGEMENT TOOLS

Several tools and approaches not traditionally used in fishery management have been receiving increased attention across the nation for their potential to address problems associated with traditional management, such as overfishing, overcapacity, bycatch, and habitat degradation. Roundtable participants discussed the regional application of each of the following fishery management tools and approaches.

Individual Fishing Quotas

It was noted that the Pacific Council has formally recommended that Congress rescind the moratorium on the development of individual fishing quota programs. Participants noted that some people in the region remain opposed to the implementation of such programs, but that they are fewer in number than in the past. Some participants said that many of those opposed have a poor understanding of how individual fishing quota programs work and the benefits they provide, indicating that education will be critical to gaining widespread support for the use of this tool.

Some participants who supported rescinding the moratorium do so conditionally. Concerns remain about the transferability of quota, fear of creating compensable property rights, doubts about the likelihood of quantifiable conservation benefits, the impacts of quota programs on communities, and, probably most important, how initial quota shares will be allocated, particularly among the commercial and recreational sectors. Some are opposed to including the recreational fisheries in an individual fishing quota program, while others consider it unrealistic not to do so. Participants noted that involving both sectors in program design and development will be critical, as will program monitoring—observers will be necessary. Some participants also questioned how the processing sector will be integrated in individual fishing quota programs, noting that this subject elicits a variety of strong views and must be resolved.

Participants generally agreed that concerns regarding individual quota programs are best addressed at the regional level, but opinions diverged as to whether the Pacific Council or an independent body should resolve them.

Marine Protected Areas

There was general agreement about the potential benefits of designating marine protected area as a tool for managing fisheries under uncertainty. But participants indicated that support begins to dissipate when design and management specifics, such as siting and use restrictions, are discussed. It was noted that the inability to come to consensus on these issues has prevented the Pacific Council from implementing a reserve system in the past.

Some participants believe that the conservation benefits of various placement options should be established prior to implementing a marine reserve system. Others view such research as wasteful in light of literature indicating that placement of marine reserves in any location is sure to provide some benefits. They indicated that the best scientific evidence of the usefulness of a particular reserve will come about as a result of its establishment and argued that reserves should not be compared with some ideal management regime, but rather with the status quo or viable alternatives.

Some participants questioned whether the Council has sufficient authority to effectively implement a marine reserve system, noting that it lacks the authority to establish reserve areas in waters under state or international jurisdiction, even though such areas may provide the greatest benefits. They indicated that the ability to control nonfishing uses of marine reserves will also be critical in ensuring that the management of these areas is equitable. Some suggested that authority-related issues could be addressed through memoranda of understanding between all affected parties.

There was general agreement that the many concerns about the use of marine reserves make it imperative that stakeholders are involved in the process of designing, developing, and siting reserve systems. In addition to increasing public buy-in, participants believe that incorporating public input into reserve design and development will improve the Council's ability to select

areas that are capable of providing the greatest net benefit. Some emphasized the importance of being straightforward with the public about the costs and benefits of marine reserves, including distinguishing the actual benefits of such areas from the potential benefits..

The Council has established a Marine Reserve Committee, which is working to develop a list of options for marine protected area management in the Pacific region, based on the primary goal of rebuilding depleted fish stocks. If the Council adopts the preferred option, the Committee plans to enlist stakeholder input and create a viable reserve system. Some participants cautioned that the Committee should pay attention to lessons learned in other regions related to goals, objectives, funding, and timelines. Others indicated that both performance standards and a research plan must be an integral part of a marine reserve program to enable the effectiveness of these tools to be evaluated and baseline data collected.

The Marine Reserve Committee established by the Council was criticized by some for not adequately following through with its charge to identify means to compensate fishermen and communities that are displaced as a result of marine reserve programs. They noted that failure to compensate those who lose is likely to limit support for marine protected area management. Others challenged the common assumption that the creation of marine reserves will result in negative economic consequences, noting that reserves may be able to provide short- as well as long-term benefits by increasing yield outside their borders and enhancing catch per unit effort.

Pacific Fisheries Reform Act

According to participants, the federal applicability of the MSFCMA causes problems specific to the Pacific region to become entwined with those of other regions. They said the needs of the Pacific region should be examined and addressed independently. There appeared to be broad support for a one-time fix for the region in the form of a “Pacific Fisheries Reform Act” to redesign the fishery. Participants believe that such an initiative would help to coordinate and integrate management at the regional scale.

Data Collection

The Pacific Council relies heavily on the states for fishery data, which vary significantly among states. Because each state is so different, it is believed that attempting to standardize data would be unrealistic. Participants recommended that the procedures that each state uses in the data collection process, the statistical methodologies, and the quality of resulting data should be routinely monitored and evaluated. They noted that, currently, the system lacks the institutional framework necessary to do so. They recommended that the official data committee, the Pacific Council, or NMFS should be required to establish and implement a program for monitoring and evaluating fishery data collection systems.

Some participants asserted that a program that provides logbook data in real time and in an electronic format should be considered as a valuable new management tool with great potential. In addition to providing scientists and managers with information that has previously been difficult and time-consuming to access, such a program would enable them to sort the information based on gear type, depth, bottom configuration, species mix, and more. It was noted that an electronic logbook program is currently under consideration in the Pacific region. Participants urged fishery managers not to allow it to fall through the cracks.

Pacific Insular Areas

Participants noted that there appears to be very little monitoring of the application of the MSFCMA's Pacific Insular Area provisions. Many unresolved issues exist related to autonomy, sovereignty, the appropriate cost of fishing rights, and distant water fleets. They indicated that these issues will be very important when dealing with straddling stocks, such as tuna and swordfish.

ACTIONS RECOMMENDED BY ROUNDTABLE PARTICIPANTS

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General recommendations offered by roundtable participants to assist the Pacific Council with implementation of the 1996 amendments to the MSFCMA and to improve the effectiveness of fisheries management in the Pacific region include:

- Fund legislative mandates of the MSFCMA.
- Better understand and account for natural variability in fisheries management.
- Clarify management goals and objectives.
- Improve the scientific basis of management.
- Strengthen social science research.
- Reduce fishing capacity and provide transition assistance.
- Improve federal/state interface in fisheries management.
- Increase collaborative research with the fishing industry.
- Improve education and outreach.
- Improve NMFS/industry relations.
- Develop and implement incentive-based approaches to management.
- Improve decisionmaking.

Many specific actions to implement these recommendations were identified by participants throughout the roundtable discussion. Those with apparent support of the majority are listed below. Although participants did not necessarily characterize proposed actions as most appropriate for Congress, NMFS, or the councils, we have done so here in the interest of making the information more useful. A more detailed discussion of the issues leading to these recommendations can be found in earlier sections of this report.

1. WHAT CONGRESS CAN DO

- Fund biological, ecological, social, and economic data collection and analysis.
- Fund an electronic logbook program.
- Eliminate the prohibition on user fees.
- Fully fund the mandates of the MSFCMA.
- Establish the use of “service districts” as a potential funding mechanism in the MSFCMA.
- Fund transition assistance programs.
- Provide a mechanism to reconcile state and federal fishery management goals, standards, and requirements.
- Establish a more comprehensive approach to essential fish habitat protection.
- Fund training and education programs.
- Provide a mechanism to facilitate council agreement on joint plans for highly migratory species management.
- Build into the MSFCMA funding for routine monitoring and evaluation.

2. WHAT THE NATIONAL MARINE FISHERIES SERVICE CAN DO

- Employ more social science staff in the regions and headquarters.
- Expand social science data collection and analysis.
- Develop and implement cooperative research projects with the fishing industry.
- Require management staff to acquire more at-sea knowledge and experience.
- Collect more and better biological and ecological data.
- Incorporate fishery-dependent data into stock assessments.
- Incorporate oceanographic information into stock assessments.
- Support the continued development and implementation of an electronic logbook program.
- Re-examine funding priorities.
- Design and implement transition assistance programs.
- Develop and require formal, more comprehensive training and orientation courses for new council members.
- Improve the management skills of fishery managers.
- Provide the Council with more feedback and guidance.
- Improve leadership and oversight.
- Focus research on developing alternate, less information-intensive management mechanisms.
- Incorporate incentives for stewardship and economic health into the fishery management system.
- Promote monitoring and evaluation.

3. WHAT THE PACIFIC FISHERY MANAGEMENT COUNCIL CAN DO

- Request help from Sea Grant extension agents and others in social science research.
- Involve social scientists early on in the development of fishery management plans and amendments.
- Consider compensating scientific reviewers for their time and/or relaxing scrutiny of the scientific peer review process.
- Reduce fishing capacity.
- Limit entry in all fisheries.
- Design and support transition assistance programs.
- Broaden council composition and/or align long-term fishery management goals with those of NMFS.
- Penalize witnesses who provide dishonest testimony.
- Improve public outreach and education.
- Hold council meetings in accessible locations.
- Require new council members to undergo formal training and orientation.
- Develop a framework for monitoring and evaluation.
- Develop and support an observer program.
- Develop conservation incentives.

- Identify and eliminate regulations that provide disincentives for stewardship.
- Continue the examination of marine protected area management, making certain to include the public in all facets of design, development, and implementation.