

Executive Director's Report

Smile!

Pictures of the Council, SSC, and AP will be taken on Tuesday between 11:30 a.m. and noon. We will need to go to the Fireweed Room on the first floor, northwest corner of the hotel.

April Meeting

This is scheduled for the week of April 19th in Anchorage. It will be a long meeting. Now scheduled among other things, are initial review of AFA and Steller sea lion amendments, halibut charter GHL, shark management and observer regulatory package. Final action is expected on seabird protection. The SSC and AP will meet on Monday and Tuesday, and the Council will begin on Wednesday and run through the following Monday.

August Meeting?

AFA and Steller sea lion issues will both come to a head for a final decision at the June meeting. One idea we have been tossing around to give additional time for Council consideration and analysis is to postpone final consideration of one or the other of the issues until a special single-topic August meeting. But, if both of those issues have to be resolved at that meeting, another way to free up time would be to move other issues that don't need to be resolved in June to a special August meeting. Is there any need or interest in doing so? If so, we probably need to make a decision at this meeting so we can schedule hotel space.

Reports, Reports, Reports!

There has been a flurry of reports generated by NMFS and the National Research Council lately. They include a report to Congress by NMFS on Proposed Implementation of a Fishing Vessel Registration and Fisheries Information System, and three NRC reports: Sustaining Marine Fisheries, CDO Program in Alaska and Lessons for the Western Pacific, and Sharing the Fish: Toward a National Policy on IFOs. Item B-1(a) has the executive summaries of these reports and I need to know if you would like me to try to schedule a formal presentation by the primary authors at some future Council meeting.

Ecolabelling

Item B-1(b) is a draft U.S. position paper on the latest initiative on ecolabelling from Norway and how the U.S. should proceed. The FAO Committee on Fisheries is meeting February 15-19 to discuss the issue. Prudence Fox is the U.S. representative.

Passing of an Old Friend and Colleague

Harry Rietze, 78, passed away on January 24, 1999 in Seattle (item B-1(c)). Many of you may have known him in his capacity as regional director for NMFS from 1960-1980. I first met him when I started coming to North Pacific Council meetings in the late 1970s. He passed the baton to Bob McVey upon retirement after his last Council meeting in April 1980. Cards may be sent to the family at 405B Sunset West, 6535 Seaview Avenue NW, Seattle, Washington 98117.

National Fisheries Issues

Rick Lauber and I just attended a Council chairmen's meeting on January 19-20 in D.C. Several issues should be called to your attention. First, it looks like there may be oversight hearings on implementation of the Sustainable Fisheries Act in late spring/early summer. House hearings likely will precede the Senate in holding hearings. Reauthorization of the Magnuson-Stevens Act most likely will not be finalized until next year. NMFS is now assessing how it and all the councils are doing in responding to the mandates of the SFA. Environmental groups have completed their own assessment in a document entitled "Missing the Boat", appended here as item B-1(d). The North Pacific Council evaluation is on page 16, authored by Steve Ganey. I would be happy to schedule a presentation by him if you so choose. The Council also may want to discuss how it is going to go about identifying issues for the coming reauthorization. Do you want to establish a committee to do this and report back, or just react to proposed amendments as they become known? I need your input on this.

Second, timely review of Council actions by NMFS has been a problem in most regions. Considering the workloads, I think our Region has done a pretty good job in most cases, but there still is considerable variation in lengthiness of review for plan regulatory amendments. I will be working with the Region to determine how to make the process more efficient, and then we will meet with other Council and Regional Office representatives in early May to develop policy recommendations for the chairmen's meeting scheduled for late June in Rhode Island.

Third, fisheries monitoring is a nationwide issue. NMFS is working on developing a national policy stance on observer programs. Most councils want some sort of observer program, but they also want NMFS to foot the bill, in contrast to how things are done in the North Pacific. There is also much talk about vessel monitoring systems. As you will recall, our Council has considered VMS several times, for sablefish seamount fisheries, Atka mackerel in the Aleutians, and for pollock vessels in context of protecting Steller sea lions and also monitoring potential incursions into salmon savings areas in the BSAI. NMFS has the assets to implement VMS regionally, but is in the process of building a national database. NMFS indicated that councils will have input regarding defining who will have access to the database before a final decision is made. There will be an update at our June chairmen's meeting.

Fourth, concerning the issue of state designees being voting members on the Council, NMFS is no longer contending that the designee has to be an employee of the state, an issue we have fought for several years now. On another issue, we were assured that the vessel buyback regulations and guidelines are under review by OMB to ensure they comply with a recent "plain English" executive order. They have been there for a month now; and of course, OMB sets its own deadlines for finishing review.

And finally, we have asked for NMFS to hold several workshops on the Endangered Species Act and how the councils play into the process. Hopefully those will be scheduled this spring sometime before the late June Chairmen's meeting so we can make recommendations for any needed changes in the way we do business. My goal is to make any draft biological opinion available to the Council and to ensure that any RPAs developed by NMFS come back to the Council before NMFS makes any regulatory changes in our management regime. I'll keep you posted.

PROPOSED IMPLEMENTATION OF A FISHING VESSEL REGISTRATION AND FISHERIES INFORMATION SYSTEM

REPORT TO CONGRESS

Submitted to

The Committee on Resources
of the House of Representatives

And

The Committee on Commerce, Science, and Transportation
of the Senate

PREPARED BY:

National Marine Fisheries Service
National Oceanic and Atmospheric
Administration
U. S. Department of Commerce



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1 EXECUTIVE SUMMARY

The National Marine Fisheries Service (NMFS), fishery management councils, and states rely on fishery data to make decisions regarding the stewardship of the Nation's living marine resources. Citizens of the United States also rely on fishery statistics to make decisions regarding their participation, investment in, and use of commercial and recreational fisheries. In addition, fishery statistics can be used to measure how effectively governmental agencies are meeting stewardship goals and objectives. The quality of resource stewardship decisions and the predictability of the outcomes are strongly dependent on the quality of the data being used.

Given the increasing complexity of fisheries management, the current state of fisheries statistics needs to be greatly improved. Despite some regional successes, it is clear that the current overall approach to collecting and managing fisheries information needs to be re-thought, revised, and reworked. The quality and completeness of fishery data are often inadequate. Data are often not accessible in an appropriate form or a timely manner. Methods for data collection and management are frequently burdensome and inefficient. These drawbacks result in the inability to answer some of the most basic questions regarding the state of the Nation's fisheries, such as: How many vessels and people participate in various fisheries? Do our policy decisions improve the economic and biological sustainability of our fisheries - by how much? How are different people (harvesters, consumers, coastal residents, non-consumptive users) affected by these stewardship decisions? An ability to answer these kinds of questions is essential to sound resource stewardship. Simply put, to manage fisheries at local, state, regional, or national levels requires a much better fisheries information system than the one in place.

To address these shortcomings, the 1996 amendments to the Magnuson-Stevens Fishery Conservation and Management Act required NMFS to "develop recommendations for implementation of a standardized fishing vessel registration and information management system" to improve the state of our fisheries statistics programs. This Report to Congress provides the recommendations for implementation of this "System."

The benefits of such a system would be seen on several levels. At the most basic level, answers to fishery performance questions similar to those above would be immediately available. The ability to evaluate the status of all managed fish stocks would be enhanced. Scientists working with fishery data would be freed of the inordinate amount of time now spent on searching for, cleaning, checking, and reconciling data prior to use. Fishery participants would have an enhanced ability to make decisions on their participation and production. The entire system would be more efficient in the collection of data and the delivery of useful information to those who need it. Just as a business requires data on raw materials, inventory, cash flow, employees, product quality, and capital investments to be successful, this fisheries statistics system is designed to deliver the analogous decision-making information to those who manage and depend on the Nation's living marine resources for their livelihood, food or recreation.

The Magnuson-Stevens Act required that the system be implemented on a regional basis. Since several major regional information systems already exist or are being planned, NMFS recommends creating a system that improves, expands and integrates ongoing regional activities under a nation-wide "umbrella."

As specified in the Magnuson-Stevens Act, the system will have two main components. The first component, the Vessel Registration System (VRS) will enable fisheries managers to uniquely identify every US vessel engaged in commercial and recreational for-hire fishing. To implement the VRS component of the system, NMFS recommends utilizing a system already being developed by the U.S. Coast Guard (Coast Guard). The Vessel Information System (VIS), includes nearly all of the information

needed for the VRS and is based on combining data from the Coast Guard vessel documentation and state vessel numbering files into one Coast Guard database. A pilot implementation of the VIS, with data from two states and the Coast Guard, is now online and undergoing testing. State participation in the VIS is currently voluntary. However, an expansion of this system to require coastal states and territories to participate would fulfill the requirements for a VRS as set forth in the Magnuson-Stevens Act in the least costly and least burdensome manner. The modifications to the Coast Guard VIS that would allow it to serve as the VRS include:

- Requiring that coastal states and territories participate in the VIS
- The placement of a Hull Identification Number (HIN) on all undocumented vessels participating in commercial or charter fishing that did not have one upon manufacture
- Creation of a "charter fishing" endorsement and principal use category

A new separate system to include recreational vessels in the VRS is not recommended. However, since pleasure craft are already in the VIS, conditionally including them in the VRS is recommended. The recommendation is contingent on there being no additional costs or burdens to participants or the state numbering agencies to include VIS pleasure craft in the VRS. Otherwise, the net benefits of inclusion would no longer outweigh the costs.

The VRS design requirement includes obtaining the identity of the owner and operator of each fishing vessel at the time of registration, but vessel operator data changes frequently over time. Several resource management agencies, regional statistics planning groups and industry members suggested that tracking vessel performance over time without information regarding the operator, and in some cases the crew, was insufficient to meet their needs. During development of the VRS proposal, it became clear that better data on fishermen, in addition to fishing vessels, was an important design criterion for many stakeholders. While many federal and state permitting and licensing programs contain information on vessel operators, there is no universally accepted means to identify fishermen across fisheries or states. More frequently than not, fishery performance data are not linked to the operator. While various regional statistics planning efforts have identified this issue for resolution, there has yet to be a consensus on how to do this. NMFS proposes that the regional statistics bodies be asked to continue to investigate the development of a regional operator identifier that would be included as part of the catch information.

The second component, the Fisheries Information System (FIS), will be implemented by integrating and expanding on the current regional fisheries cooperative statistics activities. Some of these regional activities are well developed, while others are in the early stages of implementation. Present control and management of these regional programs will remain local. The FIS will simply link and harmonize the data from these programs to each other to form a virtual national system. FIS implementation details are addressed under three major areas: Data Collection; Information Management; and Institutional Arrangements. Under the recommended FIS, regional detail data would continue to be collected locally with minor adjustments in content, coverage, and quality control as required to meet both the Act's requirements and regional requirements. Access to data will be controlled regionally to ensure a balance in the need for access to data with the confidentiality constraints under which they were collected. Routine summaries of detailed data will be made available for the most frequent uses of data. Reciprocity agreements to satisfy multiple state and federal data submission and user access requirements are recommended. Adoption of common codes or creation of bridges between coding systems is recommended.

Using the unique vessel identifier from the VRS/VIS as a link, the FIS will associate with each vessel a record of its fishing activities, including landings, fishing location, gear used, time periods of fishing, and other data recorded in the regional data collection systems. In addition, data in the VRS/FIS system

will be available as necessary to assist in the issuance of permits and for other systems requiring vessel and ownership data so that an applicant will not have to submit identifying information more than once.

Resolution of issues arising among the states, the marine fisheries commissions, and federal agencies (including NMFS) concerning the development of agreements, policies, regulations, and laws to collect and share information, or concerning budgets and planning for cooperative development of the System, will be jointly resolved by the System partners. Statistical committees and work groups, plus an annual statistics meeting of all System partners, are proposed for bringing together the relevant parties. These groups would:

- Facilitate coordination of data sharing among states, regions and NMFS, where such outcomes support fisheries stewardship; and
- Facilitate consensual formulation of regional and national policies concerning data collection and management.

The plan relies on existing regional statistics, industry advisory and marine fisheries policy groups to facilitate solutions rather than the creation of new entities.

Section 401(a)(5) of the Magnuson-Stevens Act requires that the Report to Congress provide for "funding (subject to appropriations) to assist appropriate state, regional or tribal entities and marine fisheries commissions" for implementing activities associated with this Report. The total cost for the nation-wide VRS/FIS system is projected to be \$51.9 million. This is the total incremental cost of implementing the system over and above current funding levels, and was derived through an extensive consultative process with the states, Regional Fishery Management Councils, and Marine Fisheries Commissions. Overall, \$43.1 million are for data collection, integration and harmonization, \$7.2 million for information technology and management and \$1.7 million for institutional infrastructure costs. Eighty percent of these costs are annually recurring, with full implementation phased in over a period of 5-7 years. The totals include \$23.7 million to fix or redesign data collection programs to fill gaps in current needs, including state-level commercial trip ticket systems, \$3.4 million for data quality and data integration improvements, \$6.8 million for economic and socio-cultural data collection, and \$1.7 million for improvements in state/federal information management communication and computer technology.

Three legislative/regulatory considerations associated with VRS/FIS implementation are recommended: 1) implement a fisheries statistics confidentiality sunset provision of 10 years coincident with the next Magnuson-Stevens Act reauthorization; 2) create a temporary VRS/FIS System liaison office within the Office of Management and Budget to obtain any Paperwork Reduction Act approvals coincident with VRS/FIS implementation in a comprehensive and expedited manner; and 3) strike prohibitions on collecting economic and financial fisheries statistics data in the Magnuson-Stevens Act coincident with its next reauthorization.

Sustaining Marine Fisheries

**Committee on Ecosystem Management for Sustainable Marine Fisheries
Ocean Studies Board
Commission on Geosciences, Environment, and Resources
National Research Council**

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EXECUTIVE SUMMARY

Marine ecosystems are being perturbed by fishing and other human activities. Many marine fisheries are in decline, and the effects of fishing on other ecosystem goods and services¹ are beginning to be understood and recognized. In recent years, global marine catches appear to have reached a plateau of about 84 million metric tons² per year, although total fish production, which includes aquaculture, has continued to increase. In some cases, fisheries have been entirely closed, and in many others it takes increasing effort to maintain catch rates. Fishing is also an economically important international industry, with first-sale revenues of approximately \$U.S. 100 billion per year for all fishery products. (Farm-raised and freshwater fisheries account for approximately 25 percent by weight of all fishery products.) Globally, fishery products directly provided approximately 14 kg of food per person in 1996; approximately 28 percent of global fishery products was used for animal feed and other products that do not contribute directly to human food. Although in recent years total fish production has increased faster than the human population, the total from marine-capture fisheries has increased little if at all.

To evaluate whether current marine-capture fisheries are sustainable, to determine to what degree marine ecosystems are affected by fishing, and to assess whether an ecosystem approach to fishery management can help achieve sustainability, the National Research Council's Ocean Studies Board established the Committee on Ecosystem Management for Sustainable Marine Fisheries. The committee was directed to "assess the current state of fisheries resources; the basis for success and failure in marine fisheries management (including the role of science); and the implications of fishery activities to ecosystem structure and function. Each activity [was to] be considered relative to sustaining populations of fish and other marine resources" (Statement of Task). This report is the product of the committee's study.

Sustainability and Ecosystem-Based Management

The sea was long viewed as an inexhaustible supply of protein for human use. But recently, as the potential and actual adverse effects of human activities have become apparent, our views of marine ecosystems have changed. It has become increasingly clear that the ocean's resources are not inexhaustible. And, in addition to direct societal benefits from fishing,

¹ Ecosystem goods and services are those ecosystem products and processes that directly benefit humans. They include food, breathable air, clean water, fiber, medicines, quality of life, and many other items.

² One metric ton, usually abbreviated t, is 1,000 kg, approximately 2,205 lbs.

ecosystem goods and services have become recognized as valuable and irreplaceable natural resources. These insights have led to a concern regarding sustainability and an interest in the potential of ecosystem-based approaches to fishery management—two major themes of this report.

In its simplest sense, *sustainable* use of a resource means that the resource can be used indefinitely. But even a depleted resource can be used indefinitely at an undesirably low level, and perhaps with undesirable consequences. Therefore, by *sustainable fishing*, the committee means fishing activities that do not cause or lead to undesirable changes in biological and economic productivity, biological diversity, or ecosystem structure and functioning from one human generation to the next. Fishing is sustainable when it can be conducted over the long term at an acceptable level of biological and economic productivity³ without leading to ecological changes that foreclose options for future generations. The desired levels of biological and economic productivity are in part societal decisions, but it is clear that both could be greater than they are today. In many cases, of course, sustainable fishing implies a need to rebuild populations of exploited species and to promote recovery of ecosystems from effects of overexploitation. *Ecosystem-based management* is an approach that takes major ecosystem components and services—both structural and functional—into account in managing fisheries. It values habitat, embraces a multispecies perspective, and is committed to understanding ecosystem processes. Its goal is to achieve sustainability by appropriate fishery management.

Humans are components of the ecosystems they inhabit and use. Their actions on land and in the oceans measurably affect ecosystems, and changes in ecosystems affect humans. Thus, sustainability of fisheries at an acceptable level of productivity and of the ecosystems they depend on requires a much broader understanding of appropriate and effective management than has been encompassed by traditional, single-species fishery management.

The Status of Marine Fisheries

Marine-capture fisheries include commercial, recreational, subsistence, and various small-scale fisheries, with total landings dominated by the commercial sector. In addition to recent reported annual landings of about 84 million t of marine animals (including fish, molluscs, crustaceans, and some other species), marine plants (seaweeds) also are used for food, as well as some marine mammals and turtles. Fishing as a source of food and revenue in less-industrialized countries, traditionally important, has become even more important recently and accounted for 65 percent of the world's catch in 1993.

In addition to fish and invertebrates that were caught and landed, approximately 27 million t of nontarget animals (bycatch) were discarded each year in the early 1990s (discards

³ Economic productivity means the generation of net economic benefits or profits.

were probably less in the late 1990s). Furthermore, fishing causes mortality that is never observed because of illegal fishing, animals that die after escaping from fishing gear, or animals that are killed by abandoned fishing gear. Thus, the biomass of fish and invertebrates killed by ocean fishing (not including aquaculture) probably exceeds 110 million t per year.

Various estimates have been made of the total productivity of ocean ecosystems and the maximum long-term potential catch of marine animals. Many of the latter estimates are near 100 million t per year, suggesting that the current annual landings of 84 million t plus unreported mortality are near the maximum sustainable. However, considering species interactions, variations in the ability of individual species to withstand fishing mortality, global overfishing, and ecosystem degradation, it is possible that, under present management and fishery practices, the current catch cannot be exceeded or perhaps even continued on a sustainable basis. Considering individual stocks, about 30 percent globally are overfished⁴, depleted, or recovering, and 44 percent are being fished at or near the maximum long-term potential catch rate.

In the United States, commercial marine fishery landings in 1996 were 4.5 million t, worth \$3.5 billion (exvessel value, the value of first sales from a vessel). The total economic contribution of recreational and commercial fishing were each approximately \$20 billion per year. However, approximately 33 percent of stocks that commercial and recreational fishers depend on were overfished or depleted in 1994, while 49 percent were fished at or near the level where they could yield the maximum long-term potential catch. In 1994, only about 2 percent by weight of total marine landings were from recreational fishing, but for several species recreational landings exceeded commercial landings.

Fishing and Marine Ecosystems

Fishing and ecosystems interact, and both are affected by environmental changes and other human activities. Fishing obviously has direct effects on fished stocks. It can alter abundance, age and size structure, sex ratio, genetic structure of fished populations, and species composition of marine communities. Many important commercial species are at high trophic levels (they eat other fishes), and their removal can have especially large effects on ecosystems, perhaps out of proportion to their abundance or biomass. Fishing can also affect habitats, most notably by destroying and disturbing bottom topography and the associated benthic communities. Large-scale mariculture activities (farming of fish, shrimp, and other marine organisms)—especially if they are poorly managed—also can affect marine ecosystems through damage to coastal wetlands and nearshore ecosystems associated with the construction of shore-based or

⁴ By *overfishing* the committee means fishing at an intensity great enough to reduce fish populations below the size at which they could provide the maximum long-term potential (sustainable) yield (see Chapter 2), or at an intensity great enough to prevent their recovery to that size. As described in this report, it follows that overfishing is a function of population size.

nearshore facilities; through contamination of the water with food, antibiotics, and waste; and through the introduction of diseases and exotic genotypes.

Fishing has had significant effects on many marine ecosystems, including changes in productivity, biological diversity, and provision of ecosystem goods and services. For example, fishing has contributed to large changes in coral-reef ecosystems in the Caribbean, including the death of corals, and it has resulted in significant changes in community structure in the Bering, Barents, and Baltic seas, on Georges Bank, and elsewhere. In combination with environmental changes and other human activities that have led to the degradation of habitats, pollution, and the introduction of exotic species, fishing has had major effects in the Laurentian Great Lakes, San Francisco Bay, and Chesapeake Bay. It seems likely that, unless fishing and other activities are managed better, human effects on marine ecosystems will increase.

Long- and short-term environmental fluctuations have major effects on the abundances of marine organisms. Some well-known environmental fluctuations are those precipitated by El Niño events, which change the patterns of Pacific Ocean currents and affect global weather every few years. El Niños lead to the intrusion of warm water into high latitudes and major changes in the distribution and abundance of many species. Other environmental fluctuations affect marine areas at varying spatial scales and periods ranging from a few weeks to decades and perhaps centuries. Environmental changes can produce effects similar to those of fishing, and it is often difficult to distinguish them from the effects of fishing. Although they cannot be controlled directly, environmental fluctuations exert a fundamental influence on the behavior of marine ecosystems and must be taken into account by managers. To be sustainable, fishing and fishery management must be flexible and responsive to environmental changes as well as conservative of ecosystem components. Uncertainties about effects of environmental variability should not be used to excuse continued overfishing.

Conclusions and Recommendations

Conclusions

Many populations and some species of marine organisms have been severely overfished. There are widespread problems of overcapacity: there is much more fishing power than needed to fish sustainably. Fishing affects other parts of the ecosystem in addition to the targeted species, and those effects are only now beginning to be understood and appreciated. Other human activities, such as coastal development, have adverse effects on marine ecosystems as well. The effects of these human activities, combined with ecosystem effects of fishing, may well be more serious in the long term than the direct effects of fishing on targeted species. Although societies have been concerned about the effects of fishing on particular populations and species for centuries, recent recognition of the ecosystem effects of fishing has resulted in part

from research on ecosystem approaches and has led to calls for the adoption of ecosystem approaches to fishery management to achieve sustainability at a high level of productivity of fish and of ecosystem goods and services.

The committee concludes that a significant overall reduction in fishing mortality is the most comprehensive and immediate ecosystem-based approach to rebuilding and sustaining fisheries and marine ecosystems. The committee's specific recommendations, if implemented, would contribute to an overall reduction in fishing mortality in addition to providing other protective measures.

The committee recommends the adoption of an ecosystem-based approach for fishery management whose goal is to rebuild and sustain populations, species, biological communities, and marine ecosystems at high levels of productivity and biological diversity, so as not to jeopardize a wide range of goods and services from marine ecosystems, while providing food, revenue, and recreation for humans. An ecosystem-based approach that addresses overall fishing mortality will reinforce other approaches to substantially reduce overall fishing intensity. It will help produce the will to manage conservatively, which is required to rebuild depleted populations, reduce bycatch and discards, and reduce known and as-yet-unknown ecosystem effects. Although this approach will cause some economic and social pain at first, it need not result in reduced yields in the long term because rebuilding fish populations should offset a reduction in fishing intensity and increase the potential sustainable yields. Reducing fishing effort in the short term is necessary to achieve sustainable fishing. The options lie in deciding how and when to reduce effort so as to reduce economic and social disruption. The options, however, can be exercised only if decisions are made before the resources are depleted.

Adopting a successful ecosystem-based approach to managing fisheries is not easy, especially at a global or even continental scale. That is why the committee recommends incremental changes in various aspects of fishery management. The elements of this approach, many of which have been applied in single-species management, are outlined below. They include assignment of fishing rights or privileges to provide conservation incentives and reduce overcapacity, adoption of risk-averse precautionary approaches in the face of uncertainty, establishment of marine protected areas, and research.

When overfishing (including bycatch) has been effectively eliminated, other human activities will be the major threat to fisheries and marine ecosystems. Although those effects are not a major focus of this report, they cannot be totally separated from fishing, and mechanisms involving cross-sectoral institutional arrangements will be needed to protect fisheries and marine ecosystems.

Recommendations

The following are recommendations to achieve the broad goals and approach outlined above. Appropriate actions need careful consideration for each fishery and each ecosystem.

Conservative Single-Species Management

Managing single-species fisheries with an explicitly conservative, risk-averse approach should be a first step toward achieving sustainable marine fisheries. The precautionary approach should apply. A moderate level of exploitation might be a better goal for fisheries than full exploitation, because fishing at levels believed to provide the maximum long-term yield tends to lead to overexploitation. Many species are overfished and their productive potential is impaired, even without considering the ecosystem effects of fishing for them. Expanding fisheries to include previously unfished or lightly fished species, such as deep-sea species, is unlikely to lead to large, sustainable increases in marine capture fisheries. Therefore, the committee recommends that management agencies adopt regulations and policies that strongly favor conservative and precautionary management and that penalize overfishing, as called for in the Magnuson-Stevens Fishery Conservation and Management Act of 1976 and the 1996 amendments to that act, often referred to as the Sustainable Fisheries Act of 1996.

As described in Chapter 5, the committee's recommendation for more conservative and precautionary management requires that the concept of maximum sustainable yield be interpreted in a broader ecosystem context to take account of species interactions, environmental changes, an array of ecosystem goods and services, and scientific uncertainty. This step, although important, will not by itself sustain marine fisheries and ecosystems at high levels of productivity.

Incorporating Ecosystem Considerations Into Management

Fishery management should take account of known and probable goods and services of marine ecosystems that are potentially jeopardized by fishing. The aim is to sustain the capacity of ecosystems to produce goods and services at local to global scales and to provide equitable consideration of the rights and needs of all beneficiaries and users of ecosystem goods and services.

Dealing with Uncertainty

Fisheries are managed in an arena of uncertainty that includes an incomplete understanding of and ability to predict fish population dynamics, interactions among species, effects of environmental factors on fish populations, and effects of human actions. Therefore, successful fishery management must incorporate and deal with uncertainties and errors. The

committee recommends the adoption of a precautionary approach in cases of uncertainty. Management should be risk-averse. Although research and better information can reduce uncertainty to a degree, they can never eliminate it.

Many of the problems that fishery managers face are issues concerning long-term versus short-term goals and benefits. Uncertainty in stock assessments and in future allocations of those stocks has led to an emphasis on short-term benefits at the expense of long-term solutions. Uncertainties over shares when allocations allow open competition can compel individuals to adopt a short-term horizon for decisions related to fishing effort and investment. Management incentives and institutional structures must counteract these responses to uncertainty that jeopardize sustainability. This is especially true when stock assessments are uncertain, which makes it harder for managers to hold the line on conservation.

Reducing Excess Fishing Capacity and Assignment of Rights

Excess fishing capacity (fishing capacity is the ability to catch fish or fishing power) and overcapitalization (capitalization, related to capacity, is the amount of capital invested in fishing vessels and gear) reduce the economic efficiency of fisheries and usually are associated with overfishing. Substantial global reductions in fishing capacity are of the highest priority to help to reduce overfishing and to deal with uncertainty and unexpected events in fisheries. Overcapacity is difficult to manage directly, and usually evolves in management regimes that encourage unrestricted competition for limited fishery resources. Consequently, managers and policy makers should focus on developing or encouraging socioeconomic and other management incentives that discourage overcapacity and that reward conservative and efficient use of marine resources and their ecosystems.

At the core of today's overcapacity problem is the lack of, or ineffective, definition and assignment of rights in most fisheries. In addition, subsidies that circumvent market forces have contributed significantly to the overcapacity problem in many fisheries. Therefore, the committee recommends for many fisheries a management approach that includes the development and use of methods of allocation of exclusive shares of the fish resource or privileges and responsibilities (as opposed to open competition) and the elimination of subsidies that encourage overcapacity. A flexible and adaptive approach is essential, and careful attention must be given to equity issues associated with such approaches. The committee recommends experimental approaches to community-based fishery management, including the development of virtual communities. This would include research into the establishment of management groups in which participation is based on shared interests in a fishery and its associated ecosystem, with diminished emphasis on where participants live or their direct financial interests.

Marine Protected Areas

Where they have been used, marine protected areas—where fishing is prohibited—have often been effective in protecting and rebuilding ecosystems and populations of many (but not all) marine species. They often also lead to increases in the numbers of fish and other species in nearby waters. Importantly, they can provide a buffer against uncertainty, including management errors. Permanent marine protected areas should be established in appropriate locations adjacent to all the U.S. coasts. It will be important to include highly productive areas—that is, areas in which fishing is good or once was—if this management approach is to produce the greatest benefits.

Protected areas will make the most effective contribution to the management of species and ecosystems when they are integrated into management plans that cover the full life cycles and geographic ranges of the species involved. Smaller, fixed protected areas will be most effective for species with life stages that are spent in close association with fixed topography, such as reefs, banks, or canyons. For other species, the degree of effectiveness of protected areas will be related to the importance of fixed topography in various stages of their lives. Wholly or largely pelagic species move according to ocean currents or other factors that are not necessarily related to fixed topographic structures and are thus likely to benefit less from small protected areas.

The design and implementation of marine protected areas should involve fishers to ensure that they believe the resulting systems will protect their long-term interests and to improve operational integrity. Because attempts to develop marine protected areas in the United States have been strongly opposed by some fishers, the broad involvement of users is a key strategy. Current theory and experience make clear that marine protected areas must be established over a significant portion of the fishing grounds to have significant benefits. Recent calls for protecting 20 percent of potential fishing areas provide a worthwhile reference point for future consideration, and emphasize the importance of greatly expanding the areas currently protected.

Marine protected areas are not alternatives to other techniques of fishery management and to the other recommendations in this report. They should be considered as only one of a suite of important ecosystem approaches to achieve sustainable fisheries and protect marine ecosystems. For marine protected areas to be most successful as fishery-management tools, their intended purposes must be clearly defined.

Bycatch and Discards

Bycatch and discards add to fishing mortality and should be considered as part of fishing activities rather than only as side effects. Estimates of bycatch should be incorporated into fishery-management plans and should be taken into account in setting fishing quotas and in understanding and managing fishing to protect ecosystems and nonfished ecosystem

components. Reducing fishing intensity on target species can reduce bycatch, often with no long-term reduction in sustainable yield. In some cases, technological developments and careful selection of fishing gear (e.g., bycatch-reduction devices) can be effective in reducing bycatch, and those options should be encouraged, developed, and required where appropriate. More information is needed on discards and on bycatch and their fate (i.e., whether bycatch is retained or discarded and whether discards survive or die).

Institutions

Effective fishery management requires structures that incorporate diverse views without being compromised by endless negotiations or conflicts of interest. The committee recommends developing institutional structures that promote

- effective and equitable reduction of excess capacity,
- sustainable catches of targeted species,
- expansion of the focus of fishery management to include all sources of environmental degradation that affect fisheries,
- consideration of the effects of fishing on ecosystems,
- development and implementation of effective monitoring and enforcement, and
- the collection and exchange of vital data.

To achieve these goals, the spatial and temporal scales at which the institutional structures operate should better match those of important processes that affect fisheries. Participation in management should be extended to all parties with significant interests in marine ecosystems that contain exploited marine organisms. Institutions should allocate shares in or rights to fisheries, rather than allowing openly competitive allocations. The clear explication of management goals and objectives is a prerequisite to achieving effective and equitable management.

Information Needs

Better understanding is needed of the structure and functioning of marine ecosystems, including the role of habitat and the factors affecting stability and resilience. This includes attempting to understand mechanisms at lower levels of organization (i.e., populations and communities), long-term research and monitoring programs, development of models that incorporate unobserved fishing mortality and environmental variability (e.g., El Niño events) into fishery models, multispecies models, and trophic models. More research is also needed on the biological effects of fishing, such as the alteration of gene pools and population structures as a consequence of fishing. More research is needed on the conditions under which marine protected areas are most effective, and marine protected areas themselves should be used as research tools as well as for conservation.

More information is needed on the effects and effectiveness of various forms of rights-based management approaches and other management regimes, on the way people behave in response to different economic and social incentives, and on barriers to cooperation and sharing of information. The committee recommends research into the roles of communities in fisheries management, including the use of community-based quotas and other assignments of rights to communities, and explorations into the feasibility of granting management responsibilities to those engaged in a particular fishery, regardless of their geographical community ("virtual communities").

The need for more information should not be used as an excuse for inaction; that excuse has contributed significantly to current problems. Enough is known to begin taking action now.

The Community Development Quota Program in Alaska and Lessons for the Western Pacific

PREPUBLICATION COPY

Committee to Review Community Development Quotas

Ocean Studies Board

Commission on Geosciences, Environment, and Resources

National Research Council

NATIONAL ACADEMY PRESS

Washington, DC 1999

This prepublication version of *The Community Development Quota Program in Alaska and Lessons for the Western Pacific* has been provided to the public to facilitate timely access to the committee's findings. Although the substance of the report is final, editorial changes may be made throughout the text, and citations will be checked prior to publication. The final report will be available through National Academy Press in early 1999.

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SUMMARY

The Community Development Quota (CDQ) program was implemented in December 1992 by the North Pacific Fishery Management Council. The CDQ program allocates a portion of the annual fish harvest of certain commercial species directly to coalitions of villages, which because of geographic isolation and dependence on subsistence lifestyles have had limited economic opportunities. The program is an innovative attempt to accomplish community development in rural coastal communities in Western Alaska, and in many ways it appears to be succeeding. The CDQ program has fostered greater involvement of the residents of Western Alaska in the fishing industry and has brought both economic and social benefits. The program is not without its problems, but most can be attributed to the newness of the program and the inexperience of participants. Overall the program appears on track to accomplishing the goals set out in the authorizing legislation: to provide the participating communities with the means to develop ongoing commercial fishing activities, create employment opportunities, attract capital, develop infrastructure, and generally promote positive social and economic conditions.

STRENGTHS AND WEAKNESSES OF THE CDQ PROGRAM

Because the program is still relatively new, the data necessary for detailed evaluation are limited and it is not yet possible to detect long-term trends. The six CDQ groups, organized from the 56 eligible communities (later expanded to 57), were of varying sizes and took varying approaches to harvesting their quota and allocating the returns generated. Although not all groups have been equally successful, there were significant examples of real benefits accruing to the communities. All six groups saw creation of jobs as an important goal and stressed employment of local residents on the catcher-processor vessels and shoreside processing plants. All incorporated some kind of education and training component for residents, although to different degrees and with different emphases. Another benefit of the program is that the periodic nature of employment in the fishing industry preserves options for the local people to continue some elements of their subsistence lifestyles. The CDQ program generates resources that give local communities greater control of their futures. The State of Alaska also has played its part relatively effectively—it was efficient in reviewing the Community Development Plans, monitoring how the communities progressed, and responding to problems. Some of these responses, like reallocating quota share among communities, have been controversial, as might be expected.

Perhaps the greatest weakness of the CDQ program as implemented is a lack of open, consistent communication between the CDQ groups and the communities they represent, particularly a lack of mechanisms for substantial input from the communities into the governance structures. There has also been a lack of outreach by the state to the communities to help ensure that the communities and their residents are aware of the program and how to participate. For the CDQ program to be effective there must be a clear, well-established governance structure that fosters exchange of information among the groups' decisionmakers, the communities they represent, and the state and federal personnel involved in program oversight.

Some debate has centered on uncertainty about the intended beneficiaries of the program. It is unclear whether the program is intended primarily for the Native Alaskan residents of the participating communities or, if not, whether the governance structures should be modified to ensure that non-Native participation is possible. Similarly, there has been dissatisfaction among segments of the fishing industry that are not involved, either directly or as partners of CDQ groups, who believe that the program unfairly targets a particular population for benefits. This conflict is inevitable, given that the CDQ program is designed to provide opportunities for economic and social growth specifically to rural Western Alaska. This policy choice specifically defines those to be included and cannot help but exclude others.

Although it is logical to require initially that all reinvestment of profits be in fishery-related activities because the initial objective of the CDQ program is to help the participating communities to establish a viable presence in this capital intensive industry, over time there should be more flexibility in the rules governing allocation of benefits—perhaps still requiring most benefits to be reinvested in fishing and fisheries-related activities but allowing some portion to go to other community development activities. This will better suit the long-term goal of the program, which is development of opportunities for communities in Western Alaska.

The main goal of the CDQ program—community development—is by definition a long-term goal. Thus there is a need for a set and dependable program duration and the certainty that brings to oversight and management. This will allow CDQ group decisionmakers to develop sound business plans and will reduce pressures to seek only short-term results. However, calling for the program to be long-term does not mean it must go on indefinitely nor that it must never change. Periodic reviews should be conducted, and changes made to adapt rules and procedures as necessary. There can be a balance between certainty and flexibility if the program is assured to exist for some reasonable time (e.g., ten years) and if major changes in requirements are announced in advance with adequate time to phase in new approaches (e.g., five years). The appropriate time scales will of course vary with the nature of the change, with minor changes requiring little notice and major changes requiring enough time for decisionmakers and communities to plan and adjust.

Another long-term issue is environmental stewardship. The CDQ program as currently structured is, in large part, about economic development, but economic sustainability is dependent upon long-term assurance of a sound resource base—the fisheries. Thus, to be successful over the long-term the CDQ program will need to give more emphasis to environmental considerations.

While this report reviews the CDQ program in a broad way, there remains a need for periodic, detailed review of the program over the long term (perhaps every five years), most likely conducted by the State of Alaska. Such a review should look in detail at what each group has accomplished—the nature and extent of the benefits and how all funds were used. For a program like this, care must be taken not to use strictly financial evaluations of success. Annual profits gained from harvest and numbers of local people trained are valuable measures, but they must be seen within the full context of the program. It is a program that addresses far less tangible elements of "sustainability," including a sense of place and optimism for the future.

LESSONS FOR OTHER REGIONS

What emerges from a review of the western Alaska CDQ program is an appreciation that this program is an example of a broad concept adapted to very particular circumstances. Others interested in the application of CDQ-style programs are likely to have different aspirations and different contexts. Wholesale importation of the Alaska CDQ program to other locales is likely to be unsuccessful unless the local context and goals are similar.

One region where the expansion of the CDQ concept has been considered is in the Western Pacific, but such an expansion would need to be approached cautiously because the setting and communities are very different. The major differences between the fisheries and communities of the two regions are: the general lack of management by quota or total allowable catch (TAC) in the Western Pacific; the pelagic nature of the valuable fisheries in the region; and the lack of clear, geographically definable "native" communities in most parts of the region. Application of the CDQ program to the Western Pacific would require the Western Pacific council to define realistic goals that fit within Council purposes and plans. Definitions of eligible communities would need to be crafted carefully so the potential benefits accrue in an equitable fashion to native fishermen.

Any new program, especially one with the complex goal of community development, should be expected to have a start-up period marked by some problems. During this early phase, special attention should be given to working out clear goals, defining eligible participants and intended benefits, setting appropriate duration, and establishing rules for participation. There should be real efforts to communicate the nature and scope of the program to the residents of any participating communities, and to bring state and national managers to the villages to facilitate a two-way flow of information. In addition to these operational concerns, those involved—the residents and their representatives—must develop a long-term vision and coherent sense of purpose to guide their activities.

*Sharing the Fish:
Toward A National Policy on Individual Fishing Quotas*

Committee to Review Individual Fishing Quotas

**Ocean Studies Board
Commission on Geosciences, Environment, and Resources
National Research Council**

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EXECUTIVE SUMMARY

For centuries, fish in the sea were assumed to be a limitless resource, available to all for the taking. More recently, however, depleted stocks and increasing competition for fish have led to a reexamination of this assumption and a search for new ways to manage marine fisheries. The challenge has been to maintain fisheries at sustainable levels, with due regard to productivity, employment, and the cherished way of life in many coastal communities.

With passage of the Fishery Conservation and Management Act of 1976 (now the Magnuson-Stevens Fishery Conservation and Management Act, MSFCMA), Congress for the first time mandated a national program for the conservation and management of fishery resources, to be developed by eight regional fishery management councils and implemented by the Department of Commerce through the National Marine Fisheries Service (NMFS). Councils have implemented measures to limit inputs *to* the fisheries and outputs *from* fisheries. *Input* controls limit such things as the number of participants in fisheries, the type and amount of gear, and methods of fishing. They may close certain areas to fishing and restrict the length of fishing seasons. *Output* controls use various means to limit catch to some level determined to be sustainable over the long term. Limits on overall catch, including total allowable catch (TAC), are set by the regional fishery management councils based on recommendations of stock assessment scientists. A range of input and output controls can be used separately or together, and many of these measures are discussed in Chapter 4.

Output controls typically consist of some mechanism for closing the fishery after the target harvest level has been achieved. One form of output control is the individual fishing quota (IFQ), a system under which harvesting privileges are allocated to individual fishermen. The Magnuson-Stevens Act defines an IFQ as "a Federal permit under a limited access system to harvest a quantity of fish, expressed by a unit or units representing a percentage of the total allowable catch of a fishery that may be received or held for exclusive use by a person" (MSFCMA, Sec. 3[21]). Individual fishing quotas have been used worldwide since the late 1970s. A few countries, particularly Canada, New Zealand, and Iceland, have significant experience in the benefits and problems of developing, implementing, and managing IFQs.

This tool has been adopted in four U.S. fisheries (Alaskan halibut and sablefish, wreckfish, and surf clams/ocean quahogs), and programs were about to be implemented in two other fisheries when Congress intervened through enactment of the Sustainable Fisheries Act of 1996, establishing a moratorium on new programs. Congress asked the National Academy of Sciences to study a wide range of questions concerning the social, economic, and biologic effects of IFQs and other limited entry systems and to make recommendations about existing and future IFQ programs.

A committee with expertise in fisheries biology and management, anthropology, economics, law, political science, and business was established to study all aspects of IFQs in response to the request from Congress. Over a seven-month period, the committee held hearings in Anchorage, Seattle, New Orleans, Washington, D.C., and Boston. It heard testimony from fishermen, processors, state and federal regulators, academicians, environmental groups, and members of the public, and received a large amount of written material. This report is the result of the committee's deliberations.

The many witnesses who addressed the committee at its five hearings provided a broad view of the real and perceived effects of existing and proposed IFQ programs. Just as there is tremendous variation among U.S. fisheries, the mechanisms applied to them vary according to perceived necessities in each region and the dynamics of the regional fishery management councils. Again and again, the committee was warned against a "one-size-fits-all" approach. The committee was entreated to respect the individual needs of fisheries, fishing communities, and fishing regions, and to refrain from endorsing rigid blueprints at the expense of hard-won measures, carefully crafted to address unique local biologic and social conditions.

Critics as well as supporters of IFQs recognized that this tool arose in response to real and pressing fishery problems—situations in which other types of regulation had failed to prevent a race for fish and overharvesting, and in which economic efficiency, safety, and product quality suffered. For example, in Alaska's halibut fishery prior to implementation of the IFQ programs, the season was progressively reduced in an attempt to maintain the annual catch of halibut within the TAC. In response, fishermen increased the number of vessels in their fleets and used larger and larger vessels, with more and more gear. The frenzied *derbies*¹ sometimes forced the fishing fleet to operate in dangerous weather, exacerbated *ghost fishing* from gear lost in the race for fish, and created incentives to waste other species caught in the process. The cyclical nature of the fishery left consumers facing occasional gluts of fresh halibut for a few weeks each year and buying frozen fish for the remainder of the year.

The Alaskan IFQ programs for halibut and sablefish addressed and reduced these problems. Evidence from the Alaskan IFQ programs suggests that the derby has been eliminated, safety has improved, and ghost fishing has been reduced. At the same time, these IFQ programs have left the halibut and sablefish fisheries with fewer fishermen (as intended) and have enriched many of those whose catch history qualified them for quota shares.

¹See glossary (Appendix F) for definition of terms.

The capacity of IFQs for transferability, consolidation, and leasing has led to a general concern that independent owner-operators of fishing vessels or crew members will be led into economic dependence on absentee owners as quota shares increase in value and small investors are excluded from the field. Consequently, some programs (i.e., Alaskan halibut and sablefish) have adopted owner-on-board and other provisions intended to prevent absentee ownership.

Other fisheries in which IFQ programs have been used—for Atlantic surf clams and quahogs, for example—displayed an entirely different effect stemming from initial conditions and program designs that were substantially different from the Alaskan programs. Although the Atlantic surf clam/ocean quahog fishery did not suffer from derbies, excessive effort threatened to collapse the clam populations and led to inefficient harvesting practices. The surf clam/ocean quahog IFQ program was based on free-market principles with few restraints on ownership, transfer, or consolidation. Although this IFQ program achieved the desired effect of eliminating excessive effort and protecting clam stocks, it also produced levels of consolidation and aggregation of shares that some individuals believe are undesirable.

Concerns About the Use of Individual Fishing Quotas

The National Marine Fisheries Service and other agencies routinely estimate the size of marine fish populations to determine the amount of fish that can be harvested in a given year so that fisheries can be sustained; this amount is the *allowable biological catch*. The catch level that fishermen are allowed to take is the TAC, which must be equal to or lower than the allowable biological catch. TACs are set for many fisheries. Most other fishery management measures are designed to help fisheries meet, and not exceed, the TAC. Reliance solely on TAC-based controls can induce fishermen to apply excessive inputs of labor and capital to a fishery as they compete for their share. Thus, arguments have arisen in recent years for controlling fishing activity, restricting access to fisheries, and relying on input controls, such as gear restrictions and trip limits, and output controls such as quotas. Without controls on the amount of fishing, many fisheries are plagued by overcapitalization, waste, and pressures for management measures that place fish stocks at risk. Different methods of limited entry have been developed to control access to fisheries.

The IFQ is one means to limit entry in order to reduce overcapitalization and the wasteful practices that occur under other systems. A major intended effect of IFQs is to create economic incentives for owners of vessels to decrease their inputs of labor and capital to a fishery. Thus, in fisheries with excess harvesting or processing capacity, vessels may be laid up and some crew members may lose their jobs, although others may increase their employment from a few days to several months per year. Processing plants may require fewer workers when processing is spread across a longer period of time. On the other hand, with IFQs, economic resources are no longer wasted through overinvestment in capital and labor. Changes in the harvesting and processing patterns resulting from IFQs could be beneficial to

consumers favoring year-round fresh product. Decreased costs and increased profitability can benefit consumers and the nation.

Although Congress requested a review of IFQs at a *national* level, it is difficult to discuss the implementation of these programs without consideration of the specific nature of each fishery and the social and economic communities associated with it, as the cases of the existing U.S. IFQ fisheries demonstrate. Each region can be unique in terms of its biologic, social, and economic characteristics. To accommodate this regional uniqueness, Congress has delegated the development of fishery management plans to regional councils.

A number of advantages and concerns were identified from the range of IFQ programs implemented in U.S. fisheries, through comments in favor of and against IFQs at the committee's public meetings, examination of published information, and the committee's knowledge of IFQs and other management techniques:

- **Advantages**—IFQ programs are widely identified as being a highly effective way of dealing with overcapitalization in the fishing industry. Removing the race for fish has reduced the incentive to buy ever-larger vessels and more equipment and to fish during unsafe conditions. Consumers have been able to purchase fresh fish during longer periods of the year. Many fishermen testified that IFQs provided the opportunity to utilize better fishing and handling methods, reducing bycatch of nontargeted species and maintaining higher product quality. Gear conflicts may also be reduced by IFQs.

- **Concerns**—A number of problems were identified in operative IFQ programs during the committee's work. Prominent among them are concerns about the fairness of the initial allocations, effects of IFQs on processors, increased costs for new fishermen to gain entry, consolidation of quota shares (and thus economic power), effects of leasing, confusion about the nature of the privilege involved, elimination of vessels and reductions in crew, and the equity of gifting a public trust resource.

Summary of Recommendations

IFQs can be used to address a number of social, economic, and biologic issues in fisheries management. Alternative management approaches can achieve some, but not all, of the objectives that can be achieved with IFQs. There are no general threshold criteria for deciding when IFQs are appropriate; the use of IFQs should be considered on a fishery-by-fishery basis. IFQs can be used to remedy the effects of overcapitalization and overfishing or to prevent the development of these negative effects. As discussed in greater detail later, decisions to develop IFQs or to use alternative methods of fishery management should be the responsibility of the regional councils. The following recommendations are directed separately to Congress, the Secretary of Commerce and the National Marine Fisheries Service, the regional fishery management councils, and states and others. However, some of the following recommendations overlap because different institutions share responsibilities related to the specific issues of fisheries management.

IFQs should be allowed as an option in fisheries management if a regional council finds them to be warranted by conditions within a particular fishery and appropriate measures are imposed to avoid potential adverse effects. The issues of initial allocation, transferability, and accumulation of shares should be given careful consideration when IFQ programs are considered and developed by regional councils and reviewed by the Secretary of Commerce.

What Should Congress Do?

Because the committee believes that most decisions about IFQs are most appropriately made at the regional level, rather than the national level, the committee's recommendations to Congress relate primarily to changes that should be made to the Magnuson-Stevens Fishery Conservation and Management Act to govern the use of IFQs by regional councils. Congress should recognize that the design of any limited entry system in relation to concentration limits, transferability, and distribution of shares will depend on the objectives of each specific fishery management plan. This underscores the importance of providing flexibility for regional councils in developing IFQ and other limited entry programs. Congress should do the following:

Lift the Moratorium. Congress should lift the moratorium on the development and implementation of IFQ programs established by the Sustainable Fisheries Act of 1996.

Encourage Cost Recovery and Some Extraction of Profits. Congress should permit (1) assessment of fees on initial allocations of quota and first sale and leasing of it; (2) imposition of an annual tax on quota shares; and (3) zero-revenue auctions (see Box 5.1). The Magnuson-Stevens Act presently imposes limits on various fees that may be used to recover the cost of IFQ management and enforcement, but Congress should increase these limits so that costs of IFQ management and other forms of limited entry can be recovered fully. Additionally, revenues extracted from IFQ fisheries could be used to mitigate some of the potential negative impacts of IFQs and to support research to improve fishery management. Two forms of new value can be created by IFQs: windfall gain available immediately and rents² generated later. The committee recommends that the Magnuson-Stevens Act be amended to

- Allow the public to capture some of the windfall gain sometimes generated from the initial allocation of quotas in new IFQ programs;
- Recover the incremental costs of IFQ management by authorizing the collection of fees from the transfer and/or holding of IFQs, even if these costs are greater than the existing limits; and

²See Chapter 1 for an explanation of resource rent.

- Authorize the extraction of some of the fishery profits (rents) in excess of cost recovery. Priority should be given to dedicating such revenues to improving the fisheries rather than to the general treasury.

Support the Council Process. The Magnuson-Stevens Act gives responsibility for developing fishery management plans to the regional councils. The Secretary of Commerce bears the burden of implementing fishery management plans. Councils must consider conflicting interests and weigh competing considerations. In many cases, councils have spent years developing management plans, including those involving IFQs. Congress should recognize that the design of an IFQ or other limited entry system in relation to concentration limits, transferability, distribution of quota shares, and other design questions will depend on the objectives of a specific plan, requiring flexibility for regional councils in designing IFQ programs. Regional councils should have flexibility to adjust existing IFQ programs and develop new ones.

Require Accumulation Limits. Congress should require any council considering an IFQ program to define "excessive share" for the program and use limits on accumulation of quota share or other measures to prevent excessive shares from developing. These limits should be fishery specific and may also be specific to areas and classes of vessel.

Support Additional Study and Routine Data Collection. All fishery management systems, particularly those that limit entry, require accurate social and economic appraisal for both planning and evaluation. In addition to analyzing the impacts of regulatory actions, the data should be used to monitor the health of fisheries. Monitoring the status of the industry should be as routine and systematic as monitoring the status of the stocks. To date, the regional councils and NMFS have not had access to the data and studies required. Congress should ensure that funding is available to NMFS and the states for the routine and nationwide collection of social and economic information on U.S. marine fisheries in state and federal waters. Where possible, these efforts should be coordinated with cooperative statistics programs being carried out by the states and specific local studies funded through the National Sea Grant College Program and NMFS. It is crucial that all data collection and social and economic research be subject to objective, peer-reviewed selection processes.

Determine Rules for Foreign Ownership. Although foreign ownership was an issue on which comment was specifically requested by Congress, little concern was expressed over it at the committee's hearings. This may have resulted because extensive restrictions on foreign ownership in U.S. waters already exist (by virtue of limits on vessel registration) or because other legislative remedies are being sought to reduce foreign participation in U.S. fisheries (e.g., passage of the American Fisheries Act [S. 1221] in 1998, increasing the minimum ownership requirements for U.S. fishing vessels). It appears that the imposition of further limits on foreign ownership would have profound implications on the holding of quota by processors and harvesters in fisheries where significant levels of foreign ownership already exist. Assessing the extent to which profits from U.S. fisheries are expropriated by foreign nations is beyond the scope of this evaluation of IFQs and limited access systems. If Congress

were to decide to control foreign ownership, criteria could be established for IFQ-based and other fisheries. Enforcement would require careful analysis of financial and corporate records and the economic conditions of the fishery, and improved access by regulators to certain types of proprietary data.

Delegate Decisions About the Transferability of Quota Shares. The decision about whether quota shares should be transferable, one of the most critical elements in the design of an IFQ program, should be delegated to the regional councils because it depends entirely on the specific goals and objectives of the management regime.

Define the Nature of the Privilege. Other amendments to the Magnuson-Stevens Act should include provisions to

- Make it clear that the nature of the interest embodied in an IFQ encompasses the right of a quota holder to protect its long-term value through civil action against the private individuals or entities whose unlawful actions might adversely affect the marine resource or environment. However, the Magnuson-Stevens Act should be clear that the IFQ privilege does not authorize actions by quota holders against government agencies for decisions designed to protect marine resources and the environment through TAC reductions, area closures, or other restrictions that could affect the amount of fish available for capture. Actions should be available to councils to discourage behavior that degrades the productivity of resources and to reward exemplary behavior without disrupting the security of the harvesting privilege.
- Authorize regional councils to decide on a case-by-case basis whether to limit the duration of IFQ programs through the inclusion of sunset provisions.

What Should the Secretary of Commerce and National Marine Fisheries Service Do?

The committee encourages NMFS to implement the central registry system for limited access system permits (as required by the Sustainable Fisheries Act of 1996) as soon as possible to increase the confidence of lenders in the security of loans for purchase of IFQs and provide opportunities for individuals to obtain financing to enter or increase their stake in IFQ-managed fisheries. NMFS should establish adequate monitoring and enforcement programs once limited entry systems are in place.

Limited entry is becoming more standard in marine fisheries management and NMFS and the regional councils seem ill-prepared to meet the requirements of the Magnuson-Stevens Act for limited entry programs. Funds should be made available through NMFS to strengthen research on the design and impacts of IFQ programs and limited entry systems of all types. NMFS should review its priorities and practices to give greater weight to the social and economic data collection and studies mentioned earlier.

The Secretary of Commerce should consider the following issues in reviewing proposed IFQ programs before implementation:

- *Delegated management authority*—In considering the range of potential management options, regional councils should not be precluded from considering proposals to delegate management authority to other entities within a region that would operate within the framework of the Magnuson-Stevens Act's national standards and NMFS regulatory guidelines.

- *Long-term, routine data collection*—The regional councils and the Secretary of Commerce should ensure that data collection and studies are undertaken as part of long-term, routine activities, separate from the consideration of specific management alternatives for a fishery. It is significant that the committee was unable to analyze the full set of costs and benefits of any U.S. IFQ program because of the unavailability of the necessary information (see Appendix H).

- *Regular review and evaluation*—The Secretary of Commerce should ensure that each fishery management plan that incorporates IFQs includes enforceable provisions for regular review and evaluation of the performance of IFQ programs, including a clear timetable, criteria to be used in evaluation, and steps to be taken if the programs do not meet these criteria. Provisions should be made for the collection and evaluation of data required for such assessments. This process could include review by external, independent groups.

- *Inclusion of fishing communities in initial allocations*—Councils should consider including fishing communities in the initial allocation of IFQs (as community fishing quotas), where appropriate. The Secretary of Commerce should interpret the clause in the Magnuson-Stevens Act pertaining to fishing communities (National Standard 8) to support this approach to limited entry management.

What Should Regional Fishery Management Councils Do?

The committee directs most of its recommendations to the regional fishery management councils because they are in the best position to involve regional stakeholders and design management programs appropriate to the species they manage. The committee proposes several mechanisms, including IFQs, that could be useful in considering choices among the range of mechanisms available to deal with problems such as overcapitalization and costly races for fish.

Regional fishery management councils should address the following issues or perform these actions in developing and implementing IFQ programs:

- Many individuals and groups have a stake in the development, implementation, and management of IFQ programs. Such stakeholders include vessel owners, hired skippers, crew members, processors, communities, fishery managers, environmental groups, and others. Councils should review the adequacy of stakeholder representation on advisory panels and other bodies and take steps to broaden representation, if necessary, to include representatives of stakeholders potentially affected by limited entry programs.

- The biologic, social, and economic objectives of each fishery management plan and the means for achieving these objectives through IFQs (if they are deemed appropriate), should be specified clearly through a process that encourages broad participation by stakeholders.
- Priority should be given to the question of social, economic, and biologic consequences of a proposed IFQ program and alternatives to it. The councils and NMFS must allocate more resources and attention to impact assessments, which are now required by law but often are given inadequate attention.
- IFQ programs should include a commitment to monitor both (1) short- and long-term impacts and (2) the political, financial, and administrative ability to make changes as required to meet program objectives.
- Control dates³ should be set early in the development of an IFQ program and be strictly adhered to throughout the development of the program, with a minimum amount of time between the control dates and the initial allocation of quota.
- Councils should demonstrate that a wide range of initial allocation criteria and allocation mechanisms has been considered in the design of IFQ programs. Councils could avoid some of the allocation controversies encountered in the past by giving more consideration to (1) who should receive initial allocation, including crew members, skippers, communities, and other stakeholders; (2) how much they should receive; and (3) how much the potential recipients should be required to pay for the initial receipt of quota (e.g., auctions, windfall taxes).
- Councils should avoid taking for granted the "gifting" of quota shares to the present participants in a fishery, just as they should avoid taking for granted that vessel owners should be the only recipients of quota and historical participation should be the only measure for determining initial allocations.
- When designing IFQ programs, councils should be allowed to allocate quota shares to communities or other groups, as distinct from vessel owners or fishermen. For existing IFQ programs, councils should be permitted to authorize the purchase, holding, management, and sale of IFQs by communities. Such quota shares could be used for community development purposes, treated as a resource allowing local fishermen to fish, or reallocated to member fishermen by a variety of means, including loans.
- Leasing of quota shares should generally be permitted but, if necessary, with restrictions to avoid creation of an absentee owner class. Making shares freely transferable is generally desirable to accomplish the economic goals of an IFQ program. However, if it is desired to promote an owner-operated fishery or to preserve geographic or other structural features of the industry, it may be necessary to restrict long-term transfers of quota shares to

³The date established for defining the pool of potential participants in a given management program. For example, in preparing to establish a limited entry program, a council might decide to establish a date that would serve as a cutoff for eligibility. With such a control date established, the council could proceed to assess alternative limited entry systems and other program design characteristics without the fear of stimulating speculative entry into the fishery. Unfortunately, because councils may be influenced by industry or required by NMFS to change the control date, there is often some speculative entry even when the control date is widely publicized. In the case of the Alaskan halibut and sablefish IFQ programs, delays in program implementation led to speculative entry by a sizable group that actively participated in the fishery between 1990 and 1994 but was left out of the initial allocation of quota shares.

bona fide fishermen or to prohibit transfers away from certain regions or among different vessel categories.

- Issues such as shifting distributions of quota share holdings among firms or communities can be addressed through setting upper limits on accumulation of quota shares. If important objectives include maintaining owner-operated fisheries and fishery-dependent coastal communities, greater attention may have to be given to equity considerations in setting upper limits on ownership, limiting transfer of quota shares outside communities, and similar measures.

- In any fishery for which an IFQ program is being considered, attention should be given to the implications of recreational participation in the fishery and, where appropriate, to potential application of the IFQ program to both commercial and recreational sectors.

- Councils should design IFQ programs in such a way as to enhance enforcement by (1) ensuring the fairness of program design and (2) using design principles to reduce the incentives to cheat. Programs that are considered fair and desirable by participants are most likely to be respected. Such programs produce higher compliance rates with less necessity for increased enforcement. IFQ programs are more likely to be perceived as fair and desirable if affected stakeholders participate in their creation.

- Councils should proceed cautiously in changing existing programs. Many individuals have made substantial investments in IFQ programs, even if they received little or no quota initially. Changes should be designed in a way that maintains the positive benefits of IFQs that result from their stability and predictability.

- Councils should explore the use of individual and pooled bycatch quotas to control overall bycatch and encourage fishermen to minimize their bycatch rates.

What Should States and Others Do?

Fish populations often cross boundaries between federal and state waters. States should coordinate with the federal government in designing state fishery management programs that are compatible with federal limited entry systems. Regional councils should—at the earliest opportunity—officially inform affected state fishery agencies that they are considering adoption of an IFQ program for fisheries that occur in both federal and state waters. Proposed regulations implementing a federal IFQ program should specify the manner in which relevant state fishery policies and regulations would be made consistent with the federal system. Conversely, if states in a region have developed a coordinated and effective limited entry program in state waters, including IFQs, the regional councils should, where consistent with the national standards, complement these programs in federal fishery management plans. States should cooperate in the collection of social and economic data through regional cooperative fisheries statistics efforts. In particular, states should contribute to the collection of employment data and information about processing activities.

Conclusions

Although the IFQ is no panacea, it deserves a place in the array of techniques that may be needed in any particular fishery management plan. Its value in matching harvesting and processing capacities to the resource, slowing the race for fish, providing consumers with a better product, and reducing wasteful and dangerous fishing has been demonstrated repeatedly.

If the regional councils choose to consider IFQs, they must recognize and respect the interests of all those involved in the fishery—crew members, skippers, their families onshore, prospective fishermen, and all related entities. Fairness *and* efficiency are mandated by the Magnuson-Stevens Act.

In allocating harvest privileges to a national resource, managers must recognize that fisheries are held in trust for the nation and that the nation's stewardship as trustee cannot be abrogated. The allocation of permits to harvest a portion of the TAC is a management tool with high potential for efficiency and stewardship in a given fishery. At the same time, it cannot substitute for the federal government's responsibility to exercise stewardship in the national interest.

Finally, it must be recognized that a system that confers harvest privileges in a fishery can be difficult to reverse once expectations have been created. The committee is by no means suggesting that IFQs be considered compensable rights. Rather, the committee recognizes the political and economic forces that are resistant to regulatory change once investments have been made. Care must be exercised in following the fine line between the certainty needed by recipients of these privileges and the trust responsibility on behalf of the people for whom a fishery is managed.

Agenda Item 9
Position Paper
for
U.S. Delegation
Committee on Fisheries
Twenty-third Session
February 15-19, 1999

DRAFT

Sub-Committee on Fish Trade, Sixth Session

Issue

The Sixth Session of the COFI Sub-Committee on Fish Trade met in June 1998 during which two matters were raised for which subsequent technical meetings were proposed, results of which are to be presented at this COFI meeting. These are ecolabelling and CITES listing criteria.

Background

Ecolabelling: Norway, on behalf of the Nordic countries, requested FAO to investigate the feasibility and practicability of developing non-discriminatory, globally applicable Technical Guidelines for the Ecolabelling of Fish and Fish Products which should take into account *inter alia* the specific characteristics of the fisheries of each State and region. This initiative is in large part in response to the ecolabelling initiative of the Marine Stewardship Council (MSC) which was developed through a cooperative effort of Unilever and WWF. It has been viewed by many as having been developed without adequate input from industry, scientists or governments, and is lacking in transparency in the establishment of criteria and implementation strategies. It has the potential for being trade distorting, costly, and unfair to many.

It was agreed that FAO should organize a technical consultation on establishing technical guidelines which occurred October 21-23, 1998 in Rome. Though no agreement was reached during the technical meeting to make specific recommendations to the COFI on the feasibility and practicability of developing technical guidelines, the report of the meeting is being presented to COFI.

There was consensus that any potential agreement should be consistent with the Code of Conduct and should consider, *inter alia*, the following principles and characteristics: voluntarism, transparency and openness of process at all stages, non-discrimination, accountability, conformance with international standards, auditing and verification processes, recognition of States' sovereignty, practicality and viability, clarity, and truth in labelling. It was also agreed that ecolabelling systems should be market driven, based on the best scientific evidence, and not be trade distorting. There was agreement that FAO should continue examining the feasibility of developing guidelines. Industry is supportive of FAO developing general or framework technical guidelines which would be used by the private sector to develop specific ecolabelling programs for fisheries.

We have just learned that the Nordic Council of Ministers plans to circulate a paper (to be

provided) at the COFI meeting which provides an example of what technical guidelines might look like; this is not meant to be the definitive answer to technical guidelines but is to serve as an example of what could be developed by FAO. We have also learned that there is some concern on the part of USTR that the development of general or framework guidelines could be duplicative of WTO guidelines in the Technical Barriers to Trade (TBT) text. Such guidelines would be counterproductive if they are not consistent with existing guidelines in the WTO text, namely, the TBT. USTR pointed out that the general or framework principles have already been developed by the International Standards Organization (ISO). These are called "Environmental labels and declarations -- General Principles." These have been agreed to by many countries and private sector groups.

U.S. Position

The United States should support the development of technical guidelines for ecolabelling of fisheries products or, as appropriate, support the endorsement of the ISO guiding principles. The U.S. should be sure any guidelines are based on the Code of Conduct and incorporate the principles identified during the technical meeting. The ISO guiding principles incorporate these principles. The United States should also thank the Nordic Council of Ministers for their efforts to draft an example of technical guidelines.

The United States may support FAO's continued involvement in this effort, as appropriate.. FAO should examine the need for the establishment of technical guidelines in light of existing WTO text(s) and the guidelines of the International Standards Organization (ISO). The establishment of FAO technical or framework guidelines or endorsement of ISO guiding principles (if necessary) will be useful in the immediate term while private ecolabelling initiatives are being considered and undertaken in several countries.

FAO should neither develop an actual ecolabelling system, nor should it become a certification body. The development and administration of actual ecolabelling systems and certification should be undertaken by the private sector using the technical framework guidelines developed by FAO and/or other existing internationally agreed texts (WTO, ISO).

OBITUARIES

Harry L. Rietze

Former Juneau resident Harry L. Rietze, died Jan. 24, 1999, at his home in Seattle.

Rietze served for 30 years as director of the Alaska Region of the National Marine Fisheries Service and its predecessor agency, the U.S. Bureau of Commercial Fisheries.

He was born May 20, 1920, in Agatha, Idaho, and moved to Camas, Wash., where his father worked at the paper mill. He married Laura Sullivan Oct. 18, 1941. He joined the U.S. Coast Guard in 1942 and served as an officer on board the cutter Clover. The vessel operated in the Aleutians, the Bering Sea and the Gulf of Alaska. One of his more unusual wartime assignments was to direct the transfer of reindeer from Nunavak to St. Matthew Island as a source of emergency food.

He attended and graduated from the University of Washington School of Fisheries in Seattle and worked for the Oregon Fish Commission as a fisheries research biologist. In 1956 he and his family moved to Juneau.

He joined the volunteer fire department and was active in the Juneau Rotary Club.

After studying Bristol Bay sockeye salmon, he became assistant regional director, and in 1960 was named director of the Bureau of Commercial Fisheries, retiring in 1980.

During his career, he participated in international fishery negotiations with Japan, Canada and the Soviet Union. His background also aided his efforts to restrict foreign fishing in Alaska-area wa-



HARRY L. RIETZE

ters before the United States extended its fishery jurisdiction to 200 miles from its coast. When the 200-mile law was passed in 1976, he worked extensively on its implementation, both within the agency and as the designated Alaskan federal fisheries member on the North Pacific Fisheries Management council.

He was a strong family man and an avid outdoorsman, fisherman and hunter, his friends wrote. He and his family spent many hours in pursuit of salmon, halibut and crab around Auke Bay. He organized an annual deer hunting trip to Admiralty Island and hunted moose in the Chilkat Valley.

After retirement, the Rietzes lived in Haines, Oregon and Washington.

He is survived by his wife Laura and daughter Laura Gail Miller of Seattle; son Hugh Rietz of Haines; grandchildren Jill, Brandy and Kevin Miller of Seattle, and Libby and Harry Rietz of Kodiak.

A celebration of his life will be held at 1 p.m. Friday, Jan. 29, at the Elks Club in Ballard, Wash. In lieu of flowers, the family prefers donations be made to Seattle Medic One, gift and trust fund, Seattle Fire Dept. 301 Second Ave. South, Seattle, WA, 98104.

Cards may be sent to the family at 405B Sunset West, 6535 Seaview Avenue NW, Seattle, WA, 98117.

Missing the Boat

An evaluation of fishery management committee
response to the Sustainable Fisheries Act

A report by the
Marine Fish
Conservation Network
and the
Center for Marine
Conservation

January 1999

EMBARGOED UNTIL
Wednesday, January 13, 1999
9:30 a.m.



Marine Fish
Conservation
Network



CENTER FOR
MARINE
CONSERVATION

Missing the Boat

**An evaluation of fishery management council
response to the Sustainable Fisheries Act**

**Marine Fish Conservation Network
Center for Marine Conservation**

January 1999

Washington, D.C.

MISSING THE BOAT: An evaluation of fishery management council response to the Sustainable Fisheries Act

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The Marine Fish Conservation Network is a coalition of conservation, fishing, environmental and other public interest organizations that united in 1992 to seek reform of America's fishery management laws. After achieving its goal of amending and strengthening the Fishery Conservation and Management Act in 1996, the Network refocused its attention on implementation of the new Sustainable Fisheries Act by the regional fishery management councils and the National Marine Fisheries Service.

The Center for Marine Conservation is a member of the Marine Fish Conservation Network and advocates fish conservation at the eight fishery management councils. CMC is committed to protecting ocean environments and conserving the global abundance and diversity of marine life. Through science-based advocacy, research, and public education, CMC promotes informed citizen participation to reverse the degradation of our oceans.

The cover photo is courtesy of OAR/National Undersea Research Program, and taken from the National Oceanic and Atmospheric Administration On-line Photo Library.

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Marine Fish Conservation Network

Member Groups

Abalone and Marine Resources Council
Alabama Rivers Alliance
Alaska Marine Conservation Council
Alaska Longline Fisherman's Association
American Oceans Campaign
American Sportfishing Association
Atlantic Salmon Federation
Biodiversity Legal Foundation
Cape Arago Audubon Society
Cape Cod Commercial Hook Fishermen's Association
Center for Marine Conservation
Chesapeake Bay Foundation
Coastal Research and Education, Inc.
Coastal Waters Project
Concerned Citizens of Montauk
Conservation Law Foundation
Defenders of Wildlife
Earthjustice Legal Defense Fund
Environment Hawaii
Environmental Defense Fund
Federation of FlyFishers
Fisheries Defense Fund, Inc.
Fish Forever
Fish Unlimited
The Fisherman
Florida League of Anglers
Friends of the Earth
Fulton Safe Drinking Water Action Committee
G.R.E.E.N.
Greenpeace
Gulf Restoration Network
Hawaii Audubon Society
Hawaii Conservation Association
Hawaii International Billfish Association
Interfaith Council for Protection of Animals & Nature
International Game Fish Association
Island Institute
Jersey Coast Anglers Association
King and Sons Fishing Company
Kodiak Community Conservation Network
Maine Lobsterman's Association
Marine Conservation Biology Institute
The Marine Mammal Center
Maryland Saltwater Sportfishermen's Association

Massachusetts Audubon Society
Massachusetts Wildlife Federation
Montauk Boatmen's and Captain's Association
Narragansett Baykeeper
National Aquarium
National Association of Underwater Instructors
National Audubon Society
National Audubon Society, Ten Mile Creek
National Coalition for Marine Conservation
National Fishing Association
National Wildlife Federation
Natural Resource Consultants
Natural Resources Defense Council
Newport County Saltwater Fishing Club
Ocean Policy Associates
Oceanwatch
Ocean Wildlife Campaign
Oregon Wildlife Federation
Oregon Trout
Pacific Coast Federation of Fishermen's Assn.
Pacific Marine Conservation Council
People for Puget Sound
Planning and Conservation League
Project A.W.A.R.E. Foundation
Recreational Fishing Alliance
ReefKeeper International
Reid International
Restore America's Estuaries
Riverkeeper, Inc.
SWIM (Safer Waters in Massachusetts)
Saltwater Sportsman
Save the Bay (Providence, RI)
Save the Harbor/Save the Bay (Boston, MA)
Save the Sound (Long Island Sound)
Sea Turtle Survival League
Sierra Club
The Siwa-ban Foundation
Stripers Unlimited
Surfers Environmental Alliance
Tampa Baywatch, Inc.
Trustees for Alaska
United Anglers of California
Wildlife Conservation Society
World Wildlife Fund

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How they performed

NMFS and councils don't measure up to new mandates to conserve fisheries

Name most of the well-known, popular fish on a consumer's list or restaurant menu, and you'll identify an overfished species: Atlantic cod, summer or yellowtail flounder, Atlantic swordfish, Pacific salmon, red snapper, sea scallops and Pacific rockfish. The United States, once boasting some of the most abundant fisheries in the world, is now home to devastated fish stocks and depressed fishing communities.

This report is a performance review of the National Marine Fisheries Service and the eight management councils responsible for fishery management in the U.S. It assesses how they measured up to the new requirements of the Sustainable Fisheries Act through an examination of selected fishery management plans.

As stewards of the publicly owned fish resources in the U.S. 200-mile Exclusive Economic Zone, the federal officials in charge of fishery management for more than 20 years have presided over the steady, and in some cases steep, decline of some of our most important fisheries.

In October 1998, the National Marine Fisheries Service reported to Congress in its annual "Status of Fisheries of the United States" that 90 species are overfished and another 10 species are approaching an overfished condition—one-third of those whose status is known. We don't know the status of 544 species, more than 60 percent of the fish we target commercially, but we fish for them anyway.

In response to overfishing and other threats to our fisheries, Congress passed the Sustainable Fisheries Act in 1996. This landmark legislation amended the 1976 Fishery Conservation and Management Act with strict new mandates to stop overfishing, rebuild all overfished stocks, minimize bycatch and protect essential fish habitat. (*See The New Requirements, page 3*)

The eight regional fishery management councils, whose job it is to develop plans to conserve the fish of their regions, were given two years to rewrite the 39 existing fishery management plans and prepare

they were to submit new and improved plans, setting a clear course for reversing years of mismanagement, to the secretary of commerce.

Overall the councils and NMFS do not measure up well. In too many instances, they've failed to act as the law requires. Too often, they've settled for making incremental improvements where substantial changes are warranted. Overall, the eight regional councils and the National Marine Fisheries Service responded to the call for significant changes in the way we manage fisheries by doing at best, the minimum they could get away with, and at worst, making little or no effort to meet the new requirements.

The Marine Fish Conservation Network held fishery managers to a high standard in this evaluation, because of the urgency of the problems facing our fisheries and the clear intent of the Sustainable Fisheries Act to turn things around. While we make sure to recognize and applaud the progress made in some areas, we must give the councils

Overall, the councils and the National Marine Fisheries Service do not measure up well. Too often, they've settled for incremental improvements where substantial changes are warranted. They responded by doing at best, the minimum they could get away with, and at worst, making little or no effort to meet the new requirements.

low marks for their overall performance.

On job one—stopping overfishing—the councils had the most explicit mandates within the new law, and the most guidance from the National Marine Fisheries Service. Management plans for all species must contain a new definition of overfishing, set a maximum fishing mortality rate and establish a minimum population threshold.

Some councils, such as the Gulf and Caribbean, failed to meet the deadline. Others, such as the North Pacific, did not establish required overfishing definitions. Still others, the Mid-Atlantic and New England, for example, did not use risk-averse scientific advice.

The law expressly forbids overfishing, yet some councils, such as the Pacific, designed plans that allow overfishing in the short term, especially on depleted species that occur within mixed stock fisheries. In fact, when it came to rebuilding overfished stocks, the councils

under the law. The Marine Fish Conservation Network has yet to be convinced that any of the plans will actually rebuild a stock in less than 10 years, the absolute maximum allowed for most species, because of inadequate conservation measures or the failure to account for all sources of fishing mortality.

Bycatch, the issue that raised more public ire than any other and fueled widespread national support for fisheries reform in 1996, garnered little or no attention from councils across the board.

For the most part, the councils ignored the call for measures to quantify bycatch and, most importantly, take action to avoid it. Several of the regional bodies did not even bother to address the issue, a few rested on past actions as sufficient to meet their obligation, and the rest adopted generic, procedural or framework measures on assessing bycatch or on how they might avoid bycatch if they ever determine action is necessary.

The one relatively bright spot in the otherwise mediocre response to fishery reforms of 1996 was identification of essential fish habitat.

Across the board, the councils engaged in a thorough information gathering process, solicited much public

interaction, and produced documents that should help protect fish habitat.

Every one of the councils, however, failed to carry out one of the most important mandates: reducing harmful effects of fishing on essential habitat.

The National Marine Fisheries Service had its own plans to modify in response to the new law, those for highly migratory species of the Atlantic Ocean. Its performance in amending these fishery management plans has been as disappointing as the councils'.

The agency also was responsible for providing scientific and technical guidance to the eight regional bodies.

The councils, made up of state fishery managers, commercial fishers, academics, recreational fishing representatives, and, in New England, one conservation organization advocate, were critical of NMFS for its delays in getting the guidance out to them. While the Marine Fish Conservation Network does not believe the delay excuses the generally mediocre performance of the councils, in at least two cases, the councils claim the information came too late for them to take action to amend their plans.

Conclusion

The Marine Fish Conservation Network strongly recommends that the secretary of commerce should reject plans and amendments that do not fulfill the intent of the law to:

- ◆ Prevent or stop overfishing immediately and rebuild overfished stocks as rapidly as possible.
- ◆ Protect essential fish habitat by minimizing the effects of fishing on habitat.
- ◆ Minimize bycatch by adopting specific management measures designed to avoid bycatch, and minimize the mortality of bycatch that cannot be avoided.

The secretary must require the councils and NMFS to adopt amendments to fishery management plans that will fully implement the congressional mandate embodied in the Sustainable Fisheries Act.

In the sections that follow, we identify specific deficiencies in the councils' plans. In those cases where council plans fail to meet the requirements of the Sustainable Fisheries Act, the Marine Fish Conservation Network urges the secretary of commerce to step in and do the job necessary to restore and protect America's devastated fisheries and marine ecosystems.

If he does not, we can expect designation of more overfished stocks, more demands for disaster relief in America's fishing communities, and fewer species on the seafood menu.

Conservation advocates from nine of the many groups who attend council meetings in the regions evaluated plans based on the particular circumstances in each region, and on the individual council's performance, not relative to other councils. Following the introductory section are reports on the eight regional councils and on the division of NMFS that prepared plans for highly migratory species. Contact information for each of the primary evaluators is included on the regional report. An explanation of how the evaluation was conducted and a glossary of fishing terms can be found after the end notes. For further information on the publication, contact Lee Crockett, Executive Director, Marine Fish Conservation Network, in Washington, D.C. (202) 544-3526.

The new requirements

End overfishing, rebuild depleted stocks, minimize bycatch, and protect essential fish habitat

In 1976, Congress passed the Fishery Conservation and Management Act (FCMA) to prevent overfishing, which was being done mostly by foreign fleets, and to allow overfished stocks to recover. The act "Americanized" the fishing off our coasts by establishing the Fishery Conservation Zone, and excluding foreign fishing vessels. But it allowed U.S. fishermen to expand effort without adequate restraint, resulting in an ever-increasing number of overfished fisheries.

Fishery managers not only routinely failed to prevent overfishing and the enduring social, economic and ecological losses it caused, but often bowed to short-term economic interests and passed measures that were too little, too late. Many overfished fisheries remain in a depleted condition today.

In October 1996, Congress reauthorized the FCMA, formally titled the Magnuson-Stevens Fishery Conservation and Management Act, by passing the Sustainable Fisheries Act. The SFA contains extensive reforms and conservation measures in response to the problems in U.S. fisheries.

Three of the most critical problems are widespread overfishing, the waste and threats to fisheries from high levels of bycatch, and degradation of the marine and coastal habitats necessary to support fish and fishing.

The SFA brought new mandates for fishery management plans. Before, fishery managers were not required by law to prevent overfishing and did not have to address either bycatch or habitat needs.

Now, each plan must include a definition of overfishing for that fishery; a rebuilding plan for overfished stocks, accompanied by a timetable for reaching recovery; conservation and management measures to avoid bycatch; and a description of essential habitat for the species involved, along with conservation and management measures to protect them.

Overfishing/Rebuilding

The SFA mandates that the secretary of commerce identify overfished species and requires fishery managers to prepare plans to restore them to a population capable of producing their maximum sustainable yield (MSY) in as short a time as possible, but not more than 10 years.

In September 1997, NMFS designated 86 species as "overfished," more than a third of those species whose

report, finding that 90 species are overfished, and 10 more are approaching an overfished condition.

According to the SFA, management plans for all species must:

- ◆ Contain a new definition of overfishing.
- ◆ Set a maximum fishing mortality rate.
- ◆ Set a minimum population size threshold.

For species determined to be overfished, plans must:

- ◆ Propose conservation measures, including total allowable catch limits and other restrictions, designed to rebuild fish populations.

All the revised plans were to be submitted to the secretary for review. If a plan is not submitted, or does not satisfy the rebuilding provisions of the law, the secretary must prepare and implement within nine months whatever regulations are necessary to stop overfishing and rebuild the affected stocks.

Bycatch

Bycatch is the indiscriminate catching of fish and marine life other than those targeted by a fishing vessel. Fish of the wrong species, wrong sex, wrong size, or wrong quality, as well as a multitude of other fish and marine life that have no market value (but are ecologically important) are thrown back into the sea, dead or dying. Bycatch results from fishing practices and gear that are not selective, from lost or abandoned gear, and through mortality caused when fish and other sea life pass through or escape fishing gear.

The effects of bycatch on marine ecosystems, while poorly understood, provide ample cause for concern.

The National Academy of Sciences concluded that bycatch and associated wastes can cause significant changes in the behavior, distribution and abundance of scavenging species, which in turn affects the way ecological communities function. These changes then affect the behavior, distribution and abundance of fish.

Before Congress passed the SFA, America's fishing law didn't even mention bycatch. Now the law mandates that the councils include bycatch measures in plans. The councils were to revise plans, by October 1998, to:

- ◆ Establish a standardized reporting method to assess the amount and type of bycatch in managed fisheries.
- ◆ Adopt conservation measures that minimize

◆ Minimize the mortality of bycatch that cannot be avoided.

Habitat

Habitat loss and degradation are major contributors to fish declines, but until recently, have been beyond the control of fishery managers. Of all commercial fish in the U.S., 75 percent depend on estuaries and associated wetlands for some portion of their life cycle.

Habitat destruction is especially detrimental to fish that depend on rivers and tributaries for spawning grounds and pathways.

Fishing activity can also lead to habitat degradation. Although most gear types have not been studied, growing evidence indicates that some gears and fishing practices can degrade the habitats they fish.

For the first time, America's fishing law contains the tools to protect essential fish habitat -- those waters and bottoms necessary to fish for spawning, breeding,

feeding, or growth to maturity.

The SFA declared as one of its purposes "to promote the protection of essential fish habitat," and requires fishery managers to take fish habitat into serious consideration.

Each regional fishery management council must amend fishery management plans to:

◆ Identify and describe essential fish habitat for each managed species.

◆ Identify and assess the adverse impacts and potential adverse impacts of fishing and other activities on essential fish habitat.

◆ Contain management measures, including gear restrictions and time/area closures, that effectively minimize the adverse effects caused by fishing.

◆ Identify the adverse impacts of fishing and non-fishing activities on habitat for proposed activities requiring federal or state approval or permits.

◆ Assist NMFS in recommending measures to conserve, enhance and restore essential fish habitat.

Who's in Charge Here?

The secretary of commerce has authority over the nation's fisheries. He has delegated it to the National Marine Fisheries Service (NMFS), which is responsible for the conservation and management of the nation's living marine resources.

Although NMFS has final authority over fisheries in federal waters,⁽¹⁾ the original passage of the FCMA was influenced by a desire to involve people who actually participated in America's fisheries. The FCMA established eight regional fishery management councils (See map).

Each regional fishery management council is made up of a dozen or more voting members: the state official responsible for marine fishery management in each state, the regional NMFS administrator in the council's area and members appointed for 3-year terms by the secretary from a list of qualified individuals submitted by the governors of the states in the council's region.

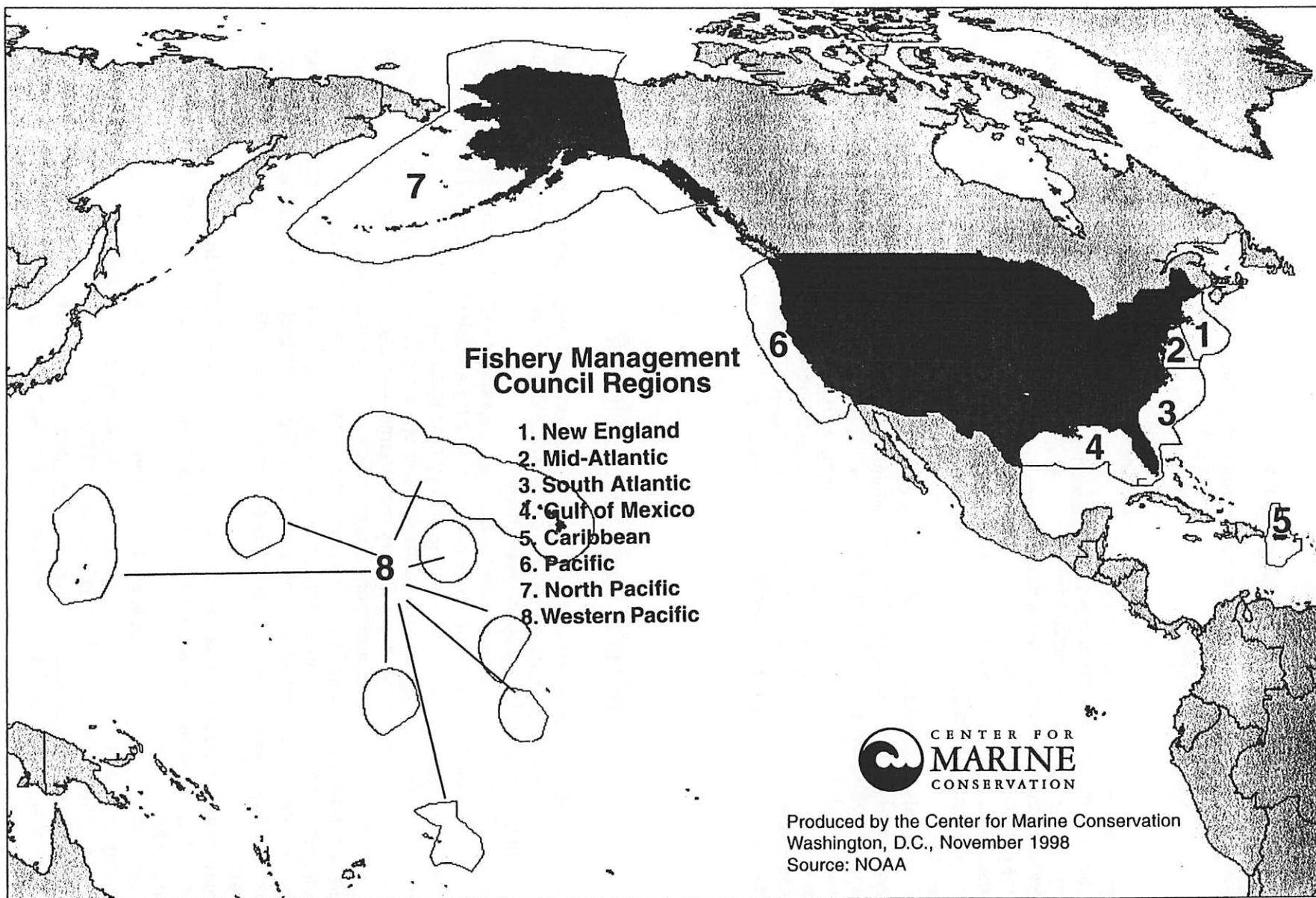
Non-voting members who sit on each council are the regional or area director of the U.S. Fish and Wildlife Service, the commander of the local Coast Guard district, a representative from the appropriate interstate marine fisheries commission, and a representative from the U.S. Department of State.⁽²⁾

The councils are charged with carrying out the objectives of the FCMA by developing fishery management plans. The national standards provide a solid framework to promote conservation and sustainability.

Every year, the secretary must publish a list of fisheries that are designated to be overfished or approaching an overfished condition. The first such report was presented to Congress in September 1997. Another report was released in October 1998.⁽³⁾

The secretary also is authorized to prepare management plans for Atlantic "highly migratory species" -- fish that inhabit such a vast portion of the ocean that no one council or nation can regulate fishing activities.

A proposed plan or amendment, after it has been released for public comment and revised accordingly, is submitted to the secretary of commerce, who has the final authority to approve, partially approve, or reject the plan or amendment. If approved, it is implemented by NMFS.



New England: Maine, New Hampshire, Rhode Island, Massachusetts. **Mid-Atlantic:** New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia and North Carolina. **South Atlantic:** North Carolina, South Carolina, Georgia, Atlantic coast of Florida. **Gulf:** west coast of Florida, Florida Keys, Alabama, Mississippi, Louisiana, Texas. **Caribbean:** Puerto Rico and the Virgin Islands. **Pacific:** California, Oregon, Washington and Idaho. **North Pacific:** Alaska. **Western Pacific:** Hawaii, American Samoa, Guam, and the Northern Marianas Islands.

New England Council

Exec takes SFA mandate seriously but council needs political will to meet conservation challenge

Contact: Sonja Fordham, Center for Marine Conservation (202) 429-5609

Thanks in large part to its new, assertive executive director, the New England Council has come a long way from its notorious past in tackling fish conservation needs in the region. This council still faces serious challenges and will need consistent political willpower to adhere to scientific advice and rebuild some of the nation's most depleted fish populations.

Overfishing/Rebuilding

The New England Council has submitted plans to rebuild all of the species within its purview (this excludes lobster and salmon) that were listed as overfished by NMFS, and has established an annual review process for all of its plans.

This council gets high marks for establishing a landmark scientific overfishing definition review panel, meeting its deadlines and for adopting plans aimed at rebuilding overfished populations within the legal limit of 10 years. Many of these plans, however, allow overfishing to continue in the short term.

For example, the council's plans to rebuild depleted sea scallops, monkfish and dogfish prescribe a year or more to stop overfishing and stretch rebuilding periods out to nearly a decade. This strategy increases the risk of population collapse and delays the ecological and economic benefits of recovery.

For scallops, scientific advice from the region's scientific and statistical committee to end overfishing immediately was not even included in the options sent out for public comment.

Commercially extinct Atlantic halibut will at last receive management, but the council opted to allow possession of one fish of a minimum size rather than prohibit take altogether. Since catching halibut is reportedly a rare event, limiting fishermen to one fish hardly constitutes a rebuilding plan.

Other groundfish that are already under a rebuilding plan are still at risk. For example, the council has yet to act in response to this past summer's scientific warning that the Gulf of Maine cod stock is in a state of collapse.

Most New England groundfish remain at seriously depressed levels, yet some severely depleted species, such as haddock and yellowtail flounder, were not listed

as overfished because they have recently begun the long road to recovery.

Essential Fish Habitat

The New England Council has done an impressive job of identifying and describing essential fish habitats. The council did not, however, include all practicable measures to protect habitat from the impacts of all fishing gear. Popular New England fishing techniques such as bottom trawling and scallop dredging can damage rocky and cobbled ocean bottom habitats that provide shelter and prey for young fish. The council designated and provided enhanced protection for a habitat area of particular concern for juvenile cod within an existing closed area. The council needs to identify and protect more of these sensitive regions.

Bycatch

The New England Council has failed to conduct a comprehensive evaluation of the region's bycatch and set forth options to minimize it. The council has, however, called for more regional observer coverage and other scientific information that will help them address problems in the future.

The region already mandates the use of a bycatch reduction device in the northern shrimp fishery and has measures to keep groundfish bycatch in other fisheries under five percent. In addition, the NMFS regional administrator can restrict or close fisheries that take juvenile groundfish as bycatch.

Preliminary reports from fishery observers suggest that the region's purse seine and mid-water trawl herring fisheries may discard significant numbers of herring as well as overfished spiny dogfish. The council needs to assess the level of discards (particularly how many discarded fish die as a result of capture) and address the situation accordingly.

Recently, scientists reported that bycatch in Northwest Atlantic groundfish nets has put the barndoor skate at risk of extinction. This is the kind of problem the council should investigate and address in a comprehensive regional bycatch review.

Mid-Atlantic Council

Plan amendments tackle EFH, fall short on overfishing, miss the boat on bycatch

Contact: Sarah Chasis, Natural Resources Defense Council (212) 727-4424

The council worked hard to meet the October deadline and basically did so, with the exception of tilefish. The council adopted new measures to curb overfishing for bluefish, but otherwise relied largely on existing measures and rebuilding schedules (all 10 years or less) for the other overfished species, including summer flounder, scup and black sea bass. The council did a poor job on bycatch, leaving the problems of scup bycatch and summer flounder discard mortality inadequately addressed.

Overfishing/Rebuilding

Six out of the 11 species managed by the Mid-Atlantic Council are classified as overfished: summer flounder (fluke), scup (porgy), black sea bass, bluefish, spiny dogfish and tilefish.

The council has submitted plan amendments to NMFS for the first four of these. It has issued a public hearing draft plan for spiny dogfish (ahead of schedule since this fish was not listed as overfished until April 1998). The council has yet to adopt a fishery management plan for tilefish (although it says it has plans to do so in 1999).

The overfishing definitions for scup and black sea bass are not as protective of the stocks as they should be, in light of both fishes' low stock biomass and uncertain stock assessments.

The thresholds set for what constitutes overfishing of these species are substantially higher than those recommended by the scientists and NMFS' technical guidance document.

Even using the council's definitions, overfishing of scup, black sea bass, bluefish and spiny dogfish is allowed to continue, in some cases for several more years. This strategy risks the stocks' ability to rebuild within the legal time limit of 10 years or less.

The fishing mortality reduction schedule for scup has only a minimal probability of rebuilding the stock within 10 years, and the bluefish stock will take 9 years to re-

The rebuilding schedule for summer flounder is threatened by the repeated overages that occur in the recreational fishery, discard mortality, and a proposed 1999 landings limit that is in excess of what the scientists say is needed to rebuild. Despite these problems, no specific additional conservation and management measures are included in the summer flounder plan amendment.

Essential Fish Habitat

The council has done a very good job of identifying and describing essential fish habitat (EFH). The council typically has identified 90 percent of the offshore areas where fish are found as EFH for overfished stocks, plus all major estuaries where the species are common. For summer flounder, submerged aquatic vegetation is identified as a habitat area of particular concern.

Unfortunately, some areas are excluded from the EFH

designations, either because of gaps in survey data, or failure to use available state data on valuable habitat in nearshore coastal waters, small estuaries and tidal creeks. The resulting designations are less ecologically coherent and comprehensive than they should be.

The council comprehensively identified and assessed the threats to EFH from a wide range of activities and recommended numerous measures for the conservation and enhancement of EFH in the face of non-fishing threats.

It found potential adverse effects on EFH from certain types of fishing activities, but included no management measures to protect EFH from such impacts.

The council said there was insufficient information on which to act, but included no procedures for gathering additional information nor a schedule for adopting management measures.

Major threats to EFH in the Mid-Atlantic arise from activities onshore and in nearshore waters. The council

Six of the 11 species managed by the Mid-Atlantic Council are classified as overfished. ...

The council found potential harm to habitat from some fishing activities but included no measures to address it. ...

The council has failed to adequately address significant bycatch issues in the region.

strong recommendations to the Army Corps of Engineers on a number of dredging, beach replenishment and marina development projects that threaten fish habitat.

Bycatch

The council has failed to adequately address significant bycatch issues in the region, which include discards of juvenile scup in trawl fisheries, and discard mortality in the summer flounder fishery.

The council has proposed no new measures in either the scup or squid plans to reduce bycatch of juvenile scup. The council previously adopted a measure that would lower the commercial catch at which the minimum mesh size is triggered in the scup fishery, but it is not clear how effective the measure will be, and there is no plan to monitor its effectiveness.

To address summer flounder discards, the council sets aside some quota to account for summer flounder bycatch, and now applies the minimum mesh size requirements to the entire net rather than only part of it, but still has a problem with discard mortality. However,

the council did not adopt additional measures such as time and area closures for the commercial fishery, a requirement for use of circle hooks in the recreational fishery, or abolition of the small mesh exemption program that would have helped address the discard mortality problem.

To improve its performance, the council needs to:

- ◆ Reduce both scup bycatch and summer flounder discard mortality.

- ◆ Adopt more precautionary overfishing definitions for scup and black sea bass, and immediately eliminate overfishing in the summer flounder, scup, bluefish, black sea bass and spiny dogfish fisheries.

- ◆ Implement more effective measures to assure success in meeting the target fishing mortalities in the summer flounder rebuilding plan, adopt a shorter rebuilding period for bluefish, and ensure that scup is rebuilt within the statutory time frame.

- ◆ Complete its identification of essential fish habitat based on state and other data, and take steps to protect these essential habitats from the potential adverse effects of fishing gear.

South Atlantic Council

Council relies on past actions to meet mandate

Contact: Doug Rader, Ph.D., Environmental Defense Fund (919) 881-2601

The South Atlantic Council worked hard to meet the October deadlines. It adopted few new measures to address overfishing, relying heavily on previous actions (not yet implemented because of delays at NMFS) to achieve existing rebuilding schedules based on the life history characteristics of the fish involved.

Fed up, the council voted to request emergency implementation of those measures. The council, long a leader on habitat concerns, delivered an outstanding, integrated habitat plan, but fell somewhat short on fishing-related impacts.

A new and impressive marine reserve process represents an important opportunity, but a strong commitment to that process will be necessary to overcome localized political objections.

Overfishing/Rebuilding

The South Atlantic Council faces a challenge in managing the wide array of mostly reef-associated fish under its jurisdiction, given the sparse scientific information available about many of them. The status of fully 56 species remains "unknown" in the 1998 *NMFS Report to Congress, Status of the Fisheries of the United States*.

Many of these fish display unusual life history patterns, including sequential hermaphroditism (where all members of the species begin their lives as females and only the largest, oldest fish become male) and aggregation spawning.

Seventeen species under South Atlantic Council management, mostly in the snapper/grouper complex, were listed as overfished in the 1998 *Report to Congress*.

The council elected to adopt "proxies" for the various overfishing levels, consistent with NMFS' technical guidance, and as good as current science allows. The council also clearly stated its intent to manage directly for more conservative optimal yield levels, set quite high for most species.

For a few species, such as gag grouper, the proxy levels should have been somewhat higher. The plans also contain threshold levels, where all fishing would be banned. Prohibitions on the take or possession of the three most depleted species -- red drum, jewfish and Nassau

grouper -- are already in place.

The council did not revise its existing rebuilding time frames (typically 10 to 15 years, depending on the longevity and reproductive patterns of the fish). Members assert that current schedules require compliance as fast as newly adopted ones would and the data needed to revise them remain inadequate.

The council should follow through with its intent to manage directly for optimum yield, including more restrictive fishery management measures.

The council requested the necessary information from NMFS, to be used in future stock assessments, and to revise the rebuilding schedules when adequate information is available.

No new measures were adopted to ad-

dress overfishing, on the theory that adequate measures are in place once they are given the opportunity to work (including spawning season closures, which will help protect spawning aggregations).

Concerned about delays in getting the already adopted measures implemented, the council voted to force NMFS to implement them as an emergency rule for 1999. For some species, those measures may well fall short, and additional efforts will be necessary.

The council completed a new plan for calico scallops, and is working on another for dolphin fish and wahoo. In addition, the council recently approved a plan for managing floating sargassum, continuing its pattern of thinking holistically about fish habitat. (A similar fishery management plan for corals was first adopted in 1982.)

The council should follow through with its intent to manage directly for optimum yield, including more restrictive fishery management measures. Implementation of well-designed marine reserves, which incorporate adequate area to support all life history states, particularly spawning aggregations, will be critical to achieve these levels.

Further measures to reduce mortality of prohibited species in the mixed fishery, such as education, and joint

efforts (such as closures) to reduce mortality in state waters, also will be important

Essential Fish Habitat

The South Atlantic Council adopted an excellent and extensive (800+ pages) Habitat Plan, which addresses threats to fish habitats all over the region for managed and non-managed species alike. The plan provided the basis for the council's comprehensive essential fish habitat amendment, and did an especially good job of identifying habitat threats.

Notably, the council included in its amendment a proposed process for reviewing and commenting on projects affecting EFH. It has already taken a leadership role in exercising its authority, sending a letter requesting involvement in an alteration project for the lower Savannah River.

The comprehensive EFH amendment includes good descriptions of habitat for all managed species, including appropriate identification of habitat areas of particular concern for most species (stopping somewhat short on such areas in the new calico scallop plan).

The amendment, however, adopted few new measures to address fishing-related impacts, beyond a modest expansion of the Oculina Banks Habitat Area of Particular Concern, in which the use of most bottom-disturbing gears is prohibited in order to protect deep-water Oculina corals.

Existing gear restrictions have reduced habitat-related fishing impacts in many fisheries, but more could be done to limit the effects of the rock shrimp and calico scallop fisheries, and to protect specific spawning sites.

All three of these needs are the subject of follow-up processes already under way. The newly initiated marine reserves process has great potential. The council also initiated programs to implement vessel monitoring systems for the rock shrimp and calico scallop fleets.

The council should work to reduce fishing impacts on habitat, including further gear restrictions, better vessel monitoring and enforcement systems, and better use

of marine reserves to protect spawning aggregations and other life history stages. Immediate opportunities exist to use the habitat plan to reduce non-fishing impacts, such as responding to the Chevron proposal for oil and gas development off North Carolina.

Bycatch

The South Atlantic Council already had adopted significant measures to reduce bycatch in many fisheries, notably the shrimp fishery, requiring bycatch reduction devices since 1996. The SFA amendment approved by the council catalogues these and other existing bycatch reduction measures. The council made a finding that no new measures are needed because bycatch has been minimized, with the possible exception of the rock shrimp fishery and certain aspects of the mixed species snapper-grouper fishery. More can be done in these two areas.

For the rock shrimp fishery, the council has requested that NMFS collect additional data, and stated its intention to extend the bycatch reduction device requirement which currently applies to the rest of the shrimp fishery to the rock shrimp fishery if the bycatch is found to be more than minimal.

The council acknowledged a bycatch problem in the snapper-grouper fishery -- the mortality of undersized fish and individuals of prohibited species -- but adopted no new measures to address it. The establishment of time-area closures and marine reserves would go a long way toward eliminating bycatch of prohibited species, since most have known geographic and temporal concentrations. The new marine reserve process should result in progress on this front.

The council did not adopt any new bycatch reporting requirements in its plans, but voted to include enhanced reporting consistent with the Atlantic Coast Cooperative Statistics Program, at the appropriate time. While effective implementation of that program is badly needed, what is meant by "appropriate time" is yet unclear. In the meantime, better reporting on mortality in the mixed snapper-grouper fishery is necessary.

Gulf of Mexico Council

Gulf council fails to meet SFA October amendment deadline

Contact: Kim Davis, Center for Marine Conservation (727) 895-2188

With the exception of limited provisions of its essential fish habitat amendment, the Gulf of Mexico Fishery Management Council failed to amend its seven fishery management plans to comply with the most important provisions of the Sustainable Fisheries Act by the October 11 deadline. The tardiness of the National Marine Fisheries Service in issuing guidelines to assist the councils in their implementation of new requirements contributed to the council's failure to meet the deadline. The council is expected to complete its work on the required amendments in early 1999, but whether or not those amendments will include necessary improvements is yet unclear.

Overfishing/Rebuilding

The Gulf Council failed to submit amendments required by the overfishing provisions of the SFA by the October 11 deadline. The council is expected to submit to NMFS in early 1999 its generic Sustainable Fisheries Act amendment, which will amend each of its seven plans with respect to the overfishing and other provisions.

The council also failed to submit required rebuilding plans for four Gulf stocks already determined to be overfished (red snapper, Nassau grouper, jewfish, red drum), the one Gulf stock determined to be approaching an overfished condition (vermillion snapper), and the one stock jointly managed by the Gulf and South Atlantic councils (Gulf group king mackerel) determined to be overfished. The council plans to include these rebuilding plans in the SFA amendment it is developing.

Since the council's amendment is still in draft form, evaluating it with respect to SFA requirements is somewhat premature.

The Gulf Council, like the South Atlantic and Caribbean Councils, faces a particular challenge in managing a wide array of reef-associated fish species. Many of these species have unusual life history characteristics that make them particularly vulnerable to overfishing, including

sequential hermaphroditism (where all members of the species begin their lives as females and only the largest, oldest fish become male) and aggregation spawning. All four of the Gulf species listed as overfished in the 1998 *NMFS Report to Congress* are reef fish species. The status of 37 other reef fish species in the region remains unknown, as there is sparse scientific information about them. The life history characteristics of many of the unknown species, and the depleted state of reef species with similar life histories, characteristics, and exploitation patterns suggest that many of these species of unknown status are also depleted and in need of increased protection. The marine reserves initiative recently undertaken by the council holds exciting potential for protecting these reef fish species.

Essential Fish Habitat

The Gulf Council, with the help of the Gulf States Marine Fisheries Commission, prepared a substantial essential fish habitat amendment. This document identifies EFH for each fishery management plan based upon the habitat used by all life stages of selected representative species from each management unit (accounting for approximately one-third of the species under management by the Gulf Council). The result is that all habitats within the federal and state waters of the Gulf are designated EFH. The amendment also identifies and describes in detail the adverse impacts of non-fishing activities and includes a list of recommendations to minimize those impacts.

While the amendment includes a great deal of important information and management recommendations, it fails to adequately address the impacts of fishing activities on habitat. The amendment's discussion of the adverse impacts to habitat from fishing activities is much more limited than that of the impacts of non-fishing activities. Further, the amendment fails to adopt any new measures to minimize the effects of fishing gear on essential habitat. The council has stated that it does not

The Gulf Council failed to submit its overfishing and bycatch amendments by the October 11 deadline, or adopt any new measures to minimize the effects of fishing gear on habitat.

have adequate information to propose any new measures at this time. Therefore, it is imperative that the council establish closed research areas in order to evaluate impacts of fishing gear and utilize a precautionary approach in its current management of the effects of fishing gear.

The amendment does not adequately fulfill the requirements of the law to protect essential fish habitat. It fails to outline an aggressive procedure for addressing non-fishing activities that affect EFH. This step is particularly important in the Gulf of Mexico, where important fish habitats are being lost at an alarming rate.

Specifically, the council should develop a strategy for maximizing its limited resources to most efficiently address actions affecting Gulf habitat. In addition, the council must establish an abbreviated consultation procedure so that it may address those activities which do not coincide with council meetings.

Bycatch

The Gulf Council failed to submit amendments required by the bycatch provisions of the SFA by the deadline. The council's overall amendment in response to the SFA, expected to be complete in January of 1999, will amend each of the seven plans with respect to bycatch.

Since the document is still in draft form, evaluating

it with respect to bycatch requirements is somewhat premature.

The council adopted a long overdue shrimp trawl bycatch reduction requirement for most of the Gulf last year. This requirement is designed to reduce the mortality of juvenile red snapper by 50 percent, but how well required bycatch reduction devices (BRDs) are achieving that goal is yet unclear. Shrimp trawl bycatch remains a problem where the excluders are not required. In order to comply with the SFA requirement that bycatch be minimized, the council should require shrimp trawl bycatch reduction in the eastern Gulf as well as the western Gulf, and act to minimize the bycatch of all non-target species, not just red snapper.

Bycatch data are lacking on some Gulf fisheries. For instance, there is only limited information available on bycatch mortality in several hook-and-line fisheries, particularly regarding the release mortality for many species taken as bycatch in these fisheries. There is also limited information available regarding bycatch in wire mesh fish traps. The use of wire mesh fish traps in the reef fishery is undergoing a 10-year phase-out (two years in some areas), at least partly due to bycatch concerns.

The council and the National Marine Fisheries Service should act aggressively to ensure that such information is collected, since the bycatch in those fisheries can better be reduced after more data are available.

Caribbean Council

Big unknowns contribute to council's lack of response to SFA mandates

Contact: Alexander Stone, ReefKeeper International (305) 358-4600

With the exception of its Essential Fish Habitat (EFH) amendment, the Caribbean Council was able to do little to improve fisheries management in accordance with the Sustainable Fisheries Act.

Since the council is working with very limited staff resources and technical data, priority should be given to managing stocks, rebuilding depleted stocks, and ensuring stocks are not overfished. More frequent and longer council meetings would speed the work needed to achieve this objective.

Overfishing/Rebuilding

The Caribbean Council failed to release any documentation regarding the new requirements for overfishing measures in its fishery management plans by the October deadline. Three species currently under management (Nassau grouper, jewfish and queen conch) are designated as overfished.

Spiny lobsters are the only known stock designated as not overfished. The council needs to press for more stock assessments, since the status of 175 of its 179 managed species is unknown. Anecdotal consensus from researchers and fishers indicates that many species are severely overfished.

Although the council would have met the October deadline with a comprehensive amendment that was scheduled for approval at its September meeting, action was stopped to allow for public hearings.

It should be acknowledged that the National Marine Fisheries Service failed to issue the guidelines to assist the councils in interpreting SFA requirements in a timely manner.

Council staff is currently revising the draft comprehensive amendment based upon public hearings held in November. The preferred options in the draft document are conservative for the easily exploited grouper stocks, but less so for the other reef fish species.

The draft contains no explicit commitment to new stock assessments.

Essential Fish Habitat

The council prepared a substantial EFH amendment which has been submitted for approval to the secretary. EFH was identified for each FMP based upon the habitat utilized by all life stages of a species, resulting in virtually all habitats within the council's jurisdiction being considered EFH. Adverse impacts of non-fishing activities were identified in great detail, along with an extensive list of recommendations to minimize these impacts.

Discussions of adverse impacts of fishing were more limited, but did include a number of non-binding recommendations for action to minimize these impacts.

The council still needs to develop a project-specific procedure to comment on adverse impacts from non-fishing projects, as well as convert its recommendations for minimization or elimination of adverse impacts of fishing into mandatory regulations.

Bycatch

The council failed to submit new documentation to address bycatch requirements by the October deadline. The same timing delay occurred to accommodate public hearings. It should be acknowledged that NMFS did not issue guidelines to assist the councils in interpreting SFA requirements in a timely manner.

Bycatch remains a very serious problem, especially in the reef fish fishery where fishers use wire mesh fish traps. Although the council has taken some preventive actions, such as increasing the mesh size of these fish traps, this has not had a significant impact on bycatch of juvenile, undersized, or non-target fish.

No system exists to gather bycatch information, so the council must call for additional research to quantify bycatch and study ways to minimize or eliminate bycatch from its fisheries.

The draft document lacks substantive options and proposes no actions for bycatch identification, minimization, or elimination.

Pacific Council

Absence of salmon plan amendment drags down overall performance

Contact: Karen Reyna, Pacific Ocean Conservation Network (415) 391-6204

The Pacific Fishery Management Council was evaluated on its performance developing or amending plans for groundfish, salmon and coastal pelagics. The council made a serious effort for groundfish. However, it adopted no specific measures to minimize bycatch or protect habitat from fishing effects.

The council's amended FMP for coastal pelagics moved toward a more sustainable approach with new features such as limited entry for some of the fishery.

The council failed to prepare any management plans for salmon, making it difficult to do an evaluation. Therefore, we can only assess progress to date.

Overfishing/Rebuilding

The council did a good job amending the Pacific groundfish FMP to include an innovative framework that could help reduce or avoid overfishing. Already prone to overfishing because of their life history, Pacific groundfish are under additional pressure because of catch reductions in other fisheries (particularly salmon) that have increased the demand for and effort on them.

The council's amendment includes a default plan that aims to correct for overestimates of fishing rates on groundfish by tying fishing rates to population size. As abundance falls to lower levels, the fishing rate is progressively reduced. By linking the fishing rate to measurable criteria, this plan can reduce the risk that a population will become severely overfished. The council made definite progress in adopting such a plan, and showed national leadership.

However, while the default plan reduces fishing pressure on stocks that fall below certain levels, it does too little, too late, to maintain productive fisheries.

There is also concern about whether the council will stick to its plan. Several plans for Pacific groundfish would allow incidental catch without any way to reduce this source of fishing mortality. Several of the plans under consideration would also allow directed catch of vulnerable species such as lingcod and bocaccio.

Nevertheless, in recognition of progress over previous policies and relative to other regional plans, the council earns praise for preventing overfishing of groundfish.

While many factors contribute to salmon overfish-

ing (habitat destruction and a weak Pacific Salmon Treaty), the council has a mandate to conserve and manage regional salmon stocks. By failing to adopt a salmon plan amendment, the council has jeopardized the viability of healthy salmon runs on the Pacific Coast.

As for progress to date on salmon, the council appears mired in allocation issues. Significant improvement is needed to meet natural spawning escapement goals. Nine salmon stocks are designated as overfished (stocks not meeting spawning escapement goals for three consecutive years).

A number of stocks have been removed from the list for achieving their spawning escapement goal for just one year. A determination to end the overfished designation should be tied to specific evaluation criteria identified in recovery plans.

Many salmon stocks (Klamath Spring chinook, Central California coho, Willapa Natural coho, Lower Columbia coho) do not have specific FMP escapement goals; the total impact of fishing on these populations is unknown. The direction the council is moving could allow an increase in overfishing of these runs.

The council has done an admirable job with establishing controls in its plan for coastal pelagics. There are several positive elements of the amendment. The innovative forage factor incorporates ecosystem considerations into the allocation process and provides greater stability in the face of environmental variations in this fishery.

The limited entry program is an important step forward. The decision to reconsider annually whether to actively manage species that are now only monitored is appropriate. The coastal pelagics amendment would have been near perfect if the council had adopted a limited entry program with fewer participants.

Essential Fish Habitat

The council did a good job of identifying and describing Essential Fish Habitat (EFH) for groundfish and appropriately defined groundfish EFH as the waters of the entire Pacific Coast. The assembly of available data on the habitats of 83 groundfish species, and division of EFH into composite, ecosystem-based units may facili-

tate different protective measures for different types of habitat. However, the amendment fails to identify habitat areas of particular concern.

The amendment does a good job of describing the kinds of measures needed to protect habitat from damage due to fishing and non-fishing practices, and of recommending steps to protect habitat from non-fishing impacts.

It falls far short in the area where the council has the greatest authority and responsibility: it completely lacks actions to minimize habitat damage from fishing.

Based on data from other regions, certain gear types are likely to be harming Pacific groundfish habitat. The groundfish amendment merely authorizes regulations to minimize fishing impacts.

It includes no regulations, no specific management measures for the practices that may be harming habitat, no process or schedule for adopting such measures, and no actions to provide better data on fishing impacts.

For coastal pelagics, the council identified EFH and potential measures to address habitat impacts. It identified no habitat areas of special concern, an action that seems justified for the species that are now actively managed under the plan (sardines and Pacific mackerel). In the case of squid, which are not now actively managed, some spawning areas may warrant such designation.

The council did not produce a fishery management plan for salmon essential fish habitat. Because of this failure, we can only assess progress to date. The council is in the process of describing and identifying EFH and the potential adverse impacts to it.

The council has followed the recommendations from its Habitat Steering Committee by including conservation and enhancement measures in the final draft salmon EFH document despite pressure from major industry groups to eliminate such measures.

Stronger language and more prescriptive actions would make the document more effective in truly protecting habitat critical to the recovery of the many depressed stocks.

The council could have done a better job for EFH on groundfish, to give one example, if it had:

- ◆ Identified habitat areas of special concern, giving those areas priority for protection.
- ◆ Adopted conservation and management measures to protect habitat from the impacts of potentially harmful fishing practices, such as prohibiting, in certain areas or seasons, the use of gears that scrape the ocean floor, and establishing no-take reserves to preserve habitat of depleted species or provide base-line information.
- ◆ Initiated an assessment of the impact of gears known to be harmful in other regions.

Bycatch

The council has recommended the establishment of a standardized reporting methodology, and procedures for implementing bycatch reduction measures in the groundfish plan. Although these procedures have merit, the council action to adopt them falls short of the clear mandate in the SFA to amend the plan to include specific and identifiable management measures designed to first minimize bycatch, and second minimize the mortality of bycatch that cannot be avoided.

The council has taken two procedural actions to address bycatch in the mixed stock groundfish fishery. First, it developed the Total Catch Determination Committee, which is considering a mandatory observer program to analyze total catch in the groundfish fleet.

Second, the council is planning to convene a Legal Gear Committee, whose current charge is to discuss changes to gear specifications that will reduce discards. They will initially focus on trawl gear, then on other commercial gear types and recreational gear.

The council did not put these actions in its FMP and deferred them past the October deadline. Several council members have expressed strong support for an observer program, but this did not show up as any specific measure in the management plan.

The council authorized and identified bycatch reduction measures for the coastal pelagics fishery and identified times when their use should be considered. They did not adopt specific measures.

The council did not produce a fishery management plan provision for salmon bycatch reduction. Without a specific measure, we can only assess progress to date.

The council failed to act on recommendations from its three salmon advisory committees for a comprehensive review of hooking mortality and encounter rates, a means to improve prediction of effects on wild stocks.

The council could have done better on bycatch reduction efforts by addressing bycatch mortality in the groundfish fishery and adopting an array of bycatch assessment and reduction measures, such as:

- ◆ Adopting a mandatory West Coast observer program.
- ◆ Developing an alternative to the year-round fishery for some groundfish species and to the use of trip limits.
- ◆ Establishing bycatch caps based on the harvest guidelines.
- ◆ Allowing stackable permits.
- ◆ Creating incentives for clean fishing by developing harvest priorities with options such as extra allocations for fishers with lower bycatch rates.

North Pacific Council

Fishery conservation reforms off Alaska coast a work in progress

Contact: Steve Ganey, Alaska Marine Conservation Council (907) 277-5357

The North Pacific Council adopted improved overfishing amendments and initial habitat amendments for all five plans off the coast of Alaska, as well as one bycatch amendment for one fishery management plan. Initial efforts on these reforms clearly indicated that more work is needed in each area.

On overfishing, the council did not use one of the two necessary criteria for determining whether groundfish stocks are overfished. The essential fish habitat amendments for all five plans stopped short of adequately analyzing threats to EFH and identifying ways to protect habitat, especially habitat areas of particular concern.

In response to public pressure for progress on minimizing bycatch, the council solicited views on how to achieve this goal and then adopted one public proposal it received as a first step in avoiding bycatch under the new Sustainable Fisheries Act.

To its credit, the council does have more work on habitat and bycatch issues tentatively slated for attention over the next year.

Overfishing/Rebuilding

The North Pacific Council approved amendments to its groundfish plans that accomplished only half of the overfishing objectives of the SFA. While the amendments improved the plans' overfishing definitions by insuring that MSY was treated as a limit, not a target, they failed to include minimum stock size thresholds as criteria for determining the status of the groundfish stocks of the Bering Sea and Gulf of Alaska.

On the advice of its scientific and statistical committee, the council declined to add minimum stock size thresholds as one of the two required status determination criteria to its groundfish FMPs.

The committee felt the current North Pacific overfishing definitions were superior to any based upon stock thresholds. As a result, the council treated the requirement for minimum stock size thresholds as simply a discretionary option of the National Standard Guidelines, not a requirement.

If the council had established minimum thresholds, the Bogoslof pollock stock would be considered overfished at its currently estimated stock size of 14 percent

of that needed to maintain MSY. Directed pollock fishing in this area has been closed since 1992.

For the scallop, salmon, and crab fisheries, the council approved amendments in June 1998 to establish more conservative overfishing definitions. The new definitions specify objective and measurable criteria for both fishing mortality rates and minimum stock size thresholds to be used in determining when each stock is overfished.

For salmon, escapement goal policies were established in place of minimum stock size thresholds. These policies serve the same function in that they are intended to ensure that annual spawning escapement requirements are met.

When the overfishing amendments are enacted, Tanner crab in the Bering Sea will be overfished. At its October 1998 meeting, the council approved an outline for an analysis to establish a rebuilding program for Tanner crab. A rebuilding program for this stock should be in place for the year 2000 fisheries. There will be no directed fishery in 1999.

The unfinished business for the council on overfishing includes establishing the SFA-required minimum stock size thresholds for its two groundfish plans and improving methods for consideration of ecosystem interactions within its overfishing definitions.

Essential Fish Habitat

The council approved essential fish habitat amendments for all five plans in June 1998. EFH was deemed to be all habitat within a general distribution for a species' life stage which was determined to be a subset of a species' range.

The council also identified several habitat types as habitat areas of particular concern although it did not fully identify locations where these habitat types exist.

While the habitat amendments included a good discussion of the adverse effects of fishing and non-fishing threats to EFH as well as a review of existing habitat protection measures, it did not include any substantive analysis of whether existing habitat protection measures were sufficient.

As a separate action, the council approved an amendment prohibiting boat anchoring and fishing for ground-

fish, halibut and scallops in a four square-mile pinnacle area off Sitka to protect important habitat for rockfish and lingcod.

The council will need continued work on habitat to develop a more complete assessment of habitat protection needs and actual fishing and non-fishing threats to specific habitats.

It should be noted that the council has announced its intention to complete this remaining work.

In October the council agreed to analyze four out of six public proposals it solicited to identify HAPCs and assess habitat protection needs and possible measures to minimize the adverse effects of fishing on habitat.

Bycatch

Eight months after the SFA's bycatch mandate increased public pressure to minimize bycatch and improve monitoring and reporting, the North Pacific Council issued a call for public proposals. Until that point, the council viewed its prior bycatch actions as sufficient to meet the new requirements.

Since then, the council has approved one amendment to minimize bycatch in one plan: prohibiting the use of bottom trawl gear in the Bering Sea pollock fishery. This plan clearly places a priority on avoiding bycatch.

Under the SFA, no action has been taken to minimize bycatch in the Gulf of Alaska groundfish fisheries, though the council is considering a full retention program for demersal shelf rockfish in fixed gear fisheries. This plan does not give priority to avoiding bycatch and it is debatable whether it will lead to avoidance.

No new action has been taken to minimize bycatch or bycatch mortality in the scallop, crab, or salmon FMPs as a result of the SFA.

The council did not use one of the two necessary criteria for determining whether groundfish stocks are overfished, and stopped short of adequately analyzing threats to and identifying ways to protect habitat.

The council does have several bycatch measures pending consideration, including a plan to minimize bycatch mortality for halibut in trawl fisheries, but it is incomplete. The council also is considering development of several individual accountability incentive-based programs to minimize bycatch.

While these longer-term programs are developed, the council is looking at a variety of traditional bycatch reduction measures. These include proposals to minimize chinook salmon bycatch in the Bering Sea/Aleutian Islands groundfish plan, to require full retention of shortraker/rougheye rockfish bycatch in individual quota fisheries, and to reduce the amount of shortraker/rougheye and thornyhead rockfish bycatch in the Gulf of Alaska.

For improvements in bycatch monitoring and reporting, the council has taken no new steps. It has an elaborate catch and bycatch estimation system, including an observer program. It analyzed these systems to assess

whether or not they satisfied new total catch estimation and reporting requirements.

The assessment indicated that this complicated system may be providing a better estimate of total catch than can be found in any other region of the country.

However, it also pointed to a variety of improvements that could be adopted. Remaining improvements the council can make in bycatch management include moving forward with improvements to the bycatch monitoring and reporting system.

The council needs to continue its consideration of traditional bycatch minimization measures while also working toward more comprehensive proposals that will lead to significant, meaningful reductions in the total amount of marine life killed and wasted as bycatch.

Western Pacific Council

Regional management efforts need cooperation, closer look at bycatch

Contact: Linda Paul, Hawaii Audubon Society (808) 262-2659

Three species under the Western Pacific Council's jurisdiction are listed by NMFS as overfished. The foreign armorhead pulse fishery (northwest of Midway Island) was shut down years ago. Two deep-water snapper species are locally overfished in areas primarily under state jurisdiction.

Fishery management plans appear to be working to protect the rest of the stocks from overfishing. The council responded to the SFA mandates in an adequate and timely manner.

A comprehensive effort to identify EFH is complete, and the council has adopted a precautionary approach in identifying habitat areas of particular concern. The council gets good marks for its regional management efforts, but still needs to work more cooperatively with NMFS and the state of Hawaii in all aspects of fisheries management.

Overfishing/Rebuilding

There are 64 stocks under the Western Pacific Council's authority. Of those, NMFS lists three as overfished (armorhead, ehu and onaga), one (a grouper) as approaching an overfished condition, 47 as not overfished, and 13 as unknown.

Ehu and onaga, deep-water snappers, are overfished around the main Hawaiian Islands in areas that are almost entirely within state jurisdiction.

The council gave the state a deadline to devise a rebuilding plan, or the council would do it. The state implemented a recovery plan last spring but the council may still close the federal waters in which the depleted stocks occur because it does not have complete confidence in the state plan.

The council has adopted plans for pelagics, crustaceans, bottom fish, seamount groundfish and precious corals. The council is currently working on an FMP for coral reef ecosystems, with framework regulations aimed at gear, habitat protection and conservation of fish.

The overfished armorhead stocks are located on Emperor Seamounts at the extreme northwest end of the Hawaiian Island chain. The fishery in U.S. waters has been shut down, but since all but three percent of the stocks extend beyond the U.S. Exclusive Economic Zone

(200-mile limit) and are fished by Japan and Russia, a workshop has been proposed to develop an international management plan.

Armorhead are covered under the bottomfish and seamount groundfish plan.

Even though this species is not sought by U.S. fishermen, the council extended the fishing ban another six years. International agreement is required because Japanese and Russian fleets fish the stock heavily whenever it rebounds.

Bottomfish stocks are currently depleted around the main Hawaiian Islands, and management efforts must be coordinated with the state of Hawaii, which has jurisdiction inside three miles.

The state, under pressure from the council, recently established new bottomfish rules that prohibit the use of nets, traps, trawls, or bottomfish longline to take onaga, ehu, grouper, and four other species, establish a total recreational bag limit of 10 ehu and onaga combined, and set aside 20 percent of the bottomfish fishing area as no-fishing zones to conserve spawning populations of onaga and ehu.

A panel composed of fishermen, scientists and fishery managers developed the regulatory measures. State biologists doubt that stocks of onaga and ehu can recover in 10 years under this scenario.

For now, the council has accepted the state's measures as sufficient, but is still considering shutting down the only bottomfish fishing grounds outside state waters and within federal jurisdiction (20 percent of the bottomfish habitat in the main Hawaiian Islands).

The council is implementing a limited access program for the Mau Zone bottomfish fishery, one of the two bottomfish fisheries in the Northwest Hawaiian Islands (the other is the Ho'omalulu Zone). The council is also initiating a study to determine if the stocks of onaga and ehu in the Northwest Hawaiian Islands are part of the main Hawaiian Islands stocks.

The council gets good marks for getting the SFA amendments done ahead of time, and for having adopted plans years ago that were sufficient to prevent the managed stocks from becoming overfished.

For its precautionary approach in setting target bottomfish threshold levels higher than required, for fund-

ing pelagics research that has mapped the Pacific-wide distribution of pelagic stocks (with juveniles concentrated in the Central and Western Pacific), and for actively participating in Pacific-wide multilateral pelagics management efforts, the council gets an above average grade.

Cooperation with the state of Hawaii and with NMFS needs improvement, however.

Essential Fish Habitat

The West Pacific Council earns good marks for comprehensively identifying Essential Fish Habitat.

It adopted a precautionary approach in identifying habitat areas of particular concern, given the large gaps in knowledge about the life histories and habitat requirements of many FMP species.

In addition, it has begun work on developing a coral reef ecosystem FMP in an effort to address the EFH requirements in a comprehensive way.

The council, however, manages a conglomeration of jurisdictions in the Pacific, some of which extend to the shoreline and some of which begin three miles offshore.

A concerted effort to include Hawaii, Guam, and other Pacific islands is needed in the preparation of this new FMP so that coral reef ecosystems are managed as a seamless whole from the shoreline to the edge of the EEZ.

Bycatch

Most of the recognized bycatch problems the Western Pacific Council has faced centered on prohibited spe-

cies such as marine mammals, seabirds and turtles, rather than incidentally caught, non-target fish.

While the council is to be commended for its years of work in trying to shape fisheries to avoid these interactions, this type of bycatch, with the exception of turtles, is not governed by the new SFA requirements.

Based on agency data that bycatch represents about 19 percent of total catch in the region, the council did not adopt specific bycatch measures. Bycatch data is collected from logbooks, creel surveys, observer data and agency research.

The largest discard issue in the Western Pacific is shark finning.

Although shark longliners release 40 percent of the sharks they catch, of those they retain, 99 percent are finned and discarded.

Although shark longliners release 40 percent of the sharks they catch, of those they retain, 99 percent are finned and discarded.

Only one percent of the animals are retained and marketed for their flesh. Managers estimate that more than 60,000 blue sharks are finned yearly, of the estimated 100,000 blue sharks caught.

The Hawaii longline shark fishery is one of the few left where finning is allowed. The practice is banned entirely in U.S. Atlantic waters and in coastal California waters.

While the council is considering ways to reduce waste by promoting more use of shark flesh, it has not yet approved a ban on finning.

The council requires documentation of shark bycatch, and has approved a project to assess the impact of banning shark finning in its jurisdiction.

NMFS highly migratory species

Plans offer hope for rebuilding but fall short on bycatch reduction

Contact: David Wilmot, Ocean Wildlife Campaign (202) 861-2242

The National Marine Fisheries Service's Highly Migratory Species Division, rather than regional fishery management councils, is responsible for implementation of Magnuson-Stevens provisions for Atlantic pelagic fish. On September 30, 1997, NMFS classified 26 Atlantic species --bluefin tuna, swordfish, white marlin, blue marlin and 22 species of sharks --as overfished.

The agency's strategy for complying with the requirements was to develop a fishery management plan for tunas, sharks and swordfish and an amendment to the existing Atlantic Billfish FMP. Both documents have been completed and made available to the public.

The draft plan contains a number of cautionary elements that, if adopted nationally and internationally, will go far toward halting overfishing and restoring depleted Atlantic highly migratory fish populations.

Offsetting encouraging steps to halt overfishing and account for primary sources of mortality were the agency's failures to propose a rebuilding plan for bluefin tuna or develop a bona fide comprehensive plan to minimize bycatch and its associated mortality. If NMFS were to remove the proposed discard provisions, the plan would be significantly weakened.

Finally, NMFS did not adequately explain how the U.S. government will use the FMPs to diligently pursue comparable international measures for Atlantic highly migratory species at the International Commission for the Conservation of Atlantic Tunas (ICCAT).

Though NMFS deserves credit for its initial work on EFH measures, these actions were deemed less critical to HMS management than the proposed overfishing/rebuilding and bycatch actions.

Overfishing/Rebuilding

NMFS adopted cautionary thresholds for maximum fishing mortality and minimum stock size. Establishing the stock size threshold at a level dictated by the biology of the species was an excellent decision.

While additional precautionary measures, such as establishing the fishing mortality limit at some level below maximum sustainable yield, would have been welcome, the proposed measure is sufficient.

The rebuilding plans for the 26 overfished species are both encouraging and discouraging. If the proposed actions for sharks, swordfish and marlins are adopted, they will go a long way toward restoring these populations to healthy levels; however, NMFS abdicated its responsibility to prepare a rebuilding plan for bluefin tuna by deferring management decisions until officials consult with ICCAT.

The preferred rebuilding period for north Atlantic swordfish, blue marlin and white marlin is 10 years. Under "no-fishing mortality" alternatives, these populations would rebuild to levels that would support MSY in approximately 3, 5-8, and 4-6 years respectively. Given the bycatch mortality problems associated with these fish, a shorter time frame could have been justified.

However, NMFS' proposal to count swordfish discard mortality against the total allowable catch will help ensure that the rebuilding pace can be maintained.

While a new assessment was not performed for marlin, there is concern that the model used to generate the marlin recovery projections is overly optimistic.

Large coastal sharks and bluefin tuna cannot be rebuilt to target levels within 10 years, even with no fishing mortality. NMFS should be applauded for moving quickly to perform an unscheduled assessment of large coastal sharks in 1998. In addition, the agency acted upon several of the key recommendations from the shark evaluation workshop.

The preferred rebuilding periods for large coastal sharks are quite long: approximately 40 and 30 years for ridgeback and non-ridge sharks, respectively.

Important elements included in the shark rebuilding plan that may improve the odds of recovery include:

- ◆ A commercial quota reduction.
- ◆ Protected status for additional shark species, including dusky sharks, which have declined by 80-90 percent over the past two decades.

- ◆ A proposal to count dead discards and sharks caught by commercial fishers in state waters after federal closures against federal commercial quotas.

One major weakness in the plan is the lack of adequate monitoring to effectively evaluate progress.

NMFS failed to propose a preferred rebuilding plan

for severely depleted western Atlantic bluefin tuna. In pre-draft documents, NMFS preferred a 35-year plan.

The agency properly rejected deferring to ICCAT, which has no rebuilding plan for tunas. NMFS also properly rejected the status quo because rebuilding would take far too long.

Even a 35-year recovery plan is too risky for bluefin tuna, as stock levels for the western Atlantic bluefin tuna are less than 20 percent of that needed to support MSY.

There is concern that the assessment model used to project bluefin rebuilding is overly optimistic. Allowing the most severely overfished populations, which are at the greatest risk, to be exempted from the most stringent rebuilding regimes is illogical. To again delay action after so many years of neglect is unconscionable.

Essential Fish Habitat

With the exception of some shark species, EFH issues for highly migratory species are difficult to assess, given their predominantly oceanic distribution and lack of correlation with areas that are traditionally thought of as fish habitat.

For some species, entire ocean basins can be considered habitat, and with the exception of a few gear types such as bottom longlines or gillnets, identifying an adverse impact of fishing gear on habitat is problematic at best.

NMFS has done an adequate initial job of meeting the requirements to define EFH for these fish, and in identifying other actions to encourage conservation of EFH.

The billfish draft FMP and draft HMS plan lack any in-depth discussion of mitigating fishery impacts on EFH.

However, few gear types targeting pelagics are known to significantly affect habitat.

Both plans included more thorough discussions of non-fishing threats to habitat and contained descriptions of potential adverse impacts and mitigation recommendations.

A particularly glaring omission is the lack of a procedural framework that describes the process for review and mitigation of fishing and non-fishing threats to highly

migratory species habitat.

Overall, the habitat components of the draft billfish plan amendment and the pre-draft management plan are adequate at this time. However, given the severe overfishing and excessive mortality levels facing billfish and highly migratory species, addressing habitat concerns for these fish is a secondary matter.

Bycatch

By beginning to account for all sources of mortality, NMFS has taken only the first step toward addressing the pervasive problem of bycatch in pelagic fisheries.

The draft highly migratory species plan does not include a comprehensive bycatch reduction program, includes too few provisions to directly avoid or minimize bycatch, and lacks specific criteria for measuring the effectiveness of proposed provisions in achieving bycatch reduction goals.

The available data show clearly that specific fisheries, in particular the drift longline fishery, are plagued with bycatch problems, resulting in substantial dead discards and, most importantly, excessive mortality levels that undermine conservation and management objectives.

A key missing element in the plan is protection of juvenile swordfish by closing nursery areas. The only proposed protection is the closure of the Florida Straits during July, August, and September.

The agency failed to propose time and area closures, such as wintering habitat off Cape Hatteras, N.C., to protect juvenile and sub-adult sharks, bluefin tuna, or marlins.

NMFS' proposals to close the swordfish driftnet fishery and count dead swordfish and shark discards against commercial quotas prevented a failing grade, but it cannot replace needed measures to reduce bycatch discards.

To create more comprehensive plans for highly migratory species and billfish, NMFS must develop a framework with a defined target and time frame for bycatch reduction, including milestones, and triggers leading to concrete actions if reduction milestones are not met.

Allowing the most severely overfished populations, which are at greatest risk, to be exempted from the most stringent rebuilding regimes is illogical. To delay action after so many years of neglect is unconscionable.

How we evaluated

Analyzing the effectiveness of fishery management plans

Activists who attend fishery management council meetings in eight regions around the U.S. and at the National Marine Fisheries Service have not only been advocating conservation, but also watching to see how managers measure up to the new standards set forth in the Sustainable Fisheries Act.

In September 1998, the Marine Fish Conservation Network, a coalition of more than 80 groups working on fisheries issues, laid out a set of criteria for how activists might assess council performance.

The framework for this evaluation is based on an examination of three or four representative fishery management plans in each region, to see how they comport with three of the most critical management areas in the SFA: stopping and preventing overfishing and rebuilding overfished stocks, minimizing bycatch, and protecting fish habitat.

For each of several plans in the eight management councils, reviewers asked these questions:

1. Does the plan specify objective and measurable criteria for determining when a fishery is overfished?
2. For stocks that have been determined to be overfished, does the plan include conservation and management measures to end overfishing and rebuild the fishery to its maximum sustainable yield?
3. Does it specify a time period for rebuilding the fishery as rapidly as possible, but no longer than 10 years, taking into account the status and biology of the stock, the needs of fishing communities and international agreements?
4. In the case of fisheries that cannot be rebuilt in 10 years, even in the absence of fishing mortality, does the plan specify a time period that is as short as possible, taking into account the regenerative capacity of the species?

The framework for this evaluation is based on an examination of three or four representative fishery management plans in each region. Evaluators judged how the plans stack up against three of the most critical management areas in the SFA: ending overfishing and rebuilding overfished stocks, minimizing bycatch, and protecting fish habitat.

5. Does the plan describe the amount and type of bycatch and assess the level of bycatch mortality occurring in the fishery?

6. Does the plan contain management measures to minimize bycatch and do these measures give priority to avoiding bycatch where practicable?

7. If bycatch cannot be avoided, does the plan contain measures to minimize mortality?

8. Does the plan provide incentives for participants in the fishery to employ fishing practices that avoid bycatch and/or minimize mortality of unavoidable bycatch?

9. Does the plan identify and describe essential fish habitat for

all managed species, including the biological requirements for each life history stage of the species, and assess the quantity and quality of habitat necessary to maintain a sustainable fishery (or restore a species listed as overfished in order to obtain increased yields) and the managed species' contribution to a healthy ecosystem?

10. Is the best scientific information available used to identify and describe essential fish habitat and is it interpreted in a risk-averse fashion, to ensure adequate areas are protected?

11. Does the plan identify and assess the adverse impacts, and potential adverse impacts, of fishing and other activities in areas described as essential fish habitat?

12. Does the plan where necessary contain management measures, including gear restrictions and time/area closures, that effectively minimize the adverse effects caused by fishing?

13. Does the plan consider actions that reduce the availability of prey species to managed species as an adverse effect on essential fish habitat?

End Notes

(1) The U.S. Exclusive Economic Zone is that area of the ocean that falls between a line drawn along the U.S. Coast three miles seaward from the shoreline and another such line drawn 200 miles seaward. The coastal waters of a state, in which the states maintain fishery jurisdiction, generally extend three nautical miles from shore. Texas, the Florida Gulf Coast, and Puerto Rico have fishery jurisdictions extending nine nautical miles offshore. The U.S. Department of Commerce is charged with managing activities in the EEZ, while individual states govern their waters.

(2) Interstate marine fisheries commissions are created by federal law and coordinate state regulations within their regions. There is one for the Atlantic states, one for the Pacific states, and a third for the Gulf of Mexico states. These are not to be confused with state fishery management bodies, such as the Florida Marine Fisheries Commission, which regulate within state waters.

(3) The list of overfished stocks presented to Congress was, by law, required to be based on the definitions in fishery management plans before they were changed to comport with the new SFA mandates. NMFS stated in that review that "the list will likely be expanded in the next year or two as the provisions of the SFA are fully implemented." For the full technical explanation of how the list of overfished stocks was determined, see pages 2-5 of the 1997 NMFS report and pages 2-4 of the 1998 report.

References

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Glossary

Bag limit: Set number of fish that each boat or fisher can land. Bag limits usually apply to recreational fisheries.

Billfish: Pelagic (see below) fish with long, spear-like protrusions at their snouts, such as swordfish and marlin.

Biomass: A term used to describe the total weight of a population of fish, the spawning adult portion of that population (see spawning stock biomass), or the weight of several populations combined.

Bycatch: Fish and other marine life that are incidentally caught with the targeted species. Bycatch also can include unobserved mortality of fish that fall out of nets or are caught by lost or discarded nets.

Bycatch reduction device (BRD): A device used with the nets to reduce bycatch while fishing. These gear modifications are most commonly used with shrimp trawls. BRDs are also called "Finfish Excluder Devices," or in New England, the "Nordmore Grate." When specifically designed to exclude sea turtles, they are called "Turtle Excluder Devices" (TEDs).

Closed areas and seasons: Closing certain fishing areas or limiting fishing to certain seasons. Managers may implement closed seasons or areas to protect a specific spawning area, spawning season, or critical life stage of fish.

Coastal pelagic: Fish that live in the open ocean at or near the water's surface but remain closer to the coast than true pelagics. Mackerel, anchovies, and sardines are examples of coastal pelagic fish.

Dredge: Bag dragged behind a vessel that scrapes the ocean bottom, usually used to catch shellfish. Dredges are often equipped with metal spikes in order to dig up the catch.

Drift nets: Gill nets that drift freely in the water. Drift nets longer than 2.5 kilometers are prohibited in U.S. waters. Depth typically ranges from 30 to 40 feet, though it can reach 130 feet. On the high seas, by United Nations Resolution, driftnets must be no longer than 2.5 kilometers.

Effort: A term used to indicate the level of fishing

days or hours spent fishing, the number of vessels in a fishery, the effectiveness of gear used, or a combination of any such quantifications of fishing activity.

Emergency action: A short-term conservation measure that may be implemented by a regional fishery management council or the secretary of commerce when a problem arises in a fishery that requires regulations sooner than a fishery management plan or amendment can be proposed and implemented.

Estuary: A bay or inlet often at the mouth of a river, in which large quantities of freshwater and seawater mix together. These unique habitats are necessary nursery grounds for many marine fishes and shellfishes.

Exclusive economic zone (EEZ): That area of federal waters adjacent to state waters, and extending from 3 to 200 nautical miles from shore. The state waters of Texas, Puerto Rico, and the west coast of Florida extend nine miles from shore.

Fishery: The combination of fish and fishers in a region, fishing for similar or the same species with similar or the same gear types. The Magnuson-Stevens Fishery Conservation and Management Act defines "fishery" as the stock(s) fished or the act of fishing for such stock.

Fishery management council: An advisory and planning body that recommends conservation measures for area fisheries. Regional fishery management councils around the United States are responsible for developing fishery management plans.

Fishery management plan (FMP): A management program developed by a regional fishery management council, or, in some cases, by the secretary of commerce, to regulate a fishery in the U.S. Exclusive Economic Zone. Every FMP, amendment to an FMP, and the regulations that implement them must comply with the national standards of the Magnuson-Stevens Fishery Conservation and Management Act.

Fishing mortality: The rate or level at which fish in a given fishery are killed by human fishing activity.

on gear used in a fishery. Gear requirements can entail such modifications as less technologically advanced gear, amendments such as bycatch excluder devices, or restrictions on the size or type of vessel or gear allowed in a fishery.

Gear selectivity: The degree to which a type of fishing gear catches targeted species relative to the amount of bycatch. Selective gear catches little bycatch, while non-selective gear fishes indiscriminately.

Gill nets: Curtains of netting that can either drift freely or be attached to the sea floor that catch fish by entangling them by the gills. (See also drift nets)

Groundfish: A general term referring to fish that live on or near the sea floor, including cod, cusk, haddock, pollock, halibut, and ocean perch. Groundfish also are called bottom fish or demersal fish.

Landings: The amount of fish brought back to the docks and marketed. Landings can describe the kept catch of one vessel, of an entire fishery, or of several fisheries combined.

Limited entry: A general term for management schemes that close a fishery to access by new participants. Some limited entry programs also provide for reducing the number of participants over time.

Longlines: A system of hooks and lines. The main line is equipped with many branch lines, each with a baited hook. Longlines fish at any depth in the water column.

Marine fishery reserves: Areas in the ocean where fishing is permanently prohibited in order to protect whole ecosystems and habitats along with the fish. Marine fishery reserves also may be called harvest refugia or replenishment zones.

Maximum sustainable yield (MSY): The largest annual catch that fishers can take continuously from a stock without overfishing it under the existing environmental conditions.

National standards: A set of 10 objectives in the law with which fishery management councils and the National Marine Fisheries Service must comply.

Optimum yield (OY): A term that refers to the catch from a particular fishery that will provide the greatest overall benefit in terms of food production and fishing opportunities. It is determined on the basis

of Maximum Sustainable Yield as reduced by any relevant ecological, economic or social factor.

Pelagic: Fish that live in the open ocean at or near the water's surface. Pelagic fish often migrate long distances.

Pot: A type of gear usually set on the ocean bottom to attract fish or shellfish. The entrance of the pot is designed so that once the animal enters, it cannot escape.

Purse seine (pronounced "sane"): A type of net that encircles fish. Once the purse seiners locate a school of fish, they set the net around the school and then pull a drawstring on the bottom of the net, creating a pocket that traps the fish. The entire net is then hauled on board and emptied.

Reef fish: Fish that live mostly on or around reefs. Reef fish include snappers, groupers, grunts, porgies.

Scientific and statistical committee (SSC): A committee of experts that advises a regional fishery management council, assisting in interpreting biological, sociological, and economic data. Members of the SSC are not council members and do not vote.

Single species fishery: A type of fishery in which fishers target only one species of fish, although it is usually impossible not to catch other species incidentally.

Size limit: The minimum size of a fish that a fisher can catch and keep legally.

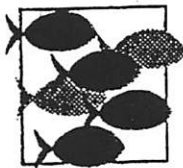
Spawning stock biomass: The total weight of all sexually mature fish in a population.

Total allowable catch (TAC): A management measure that sets an amount of fish that can be caught annually by all participants in a fishery.

Trap: A fishing gear made of stationary nets, pots or cages (can be wire, wood or plastic) staked or anchored into the sea bed. Built in a variety of configurations, traps guide fish into entrapment compartments. They are usually set near shore.

Trawls: Nets with a wide mouth tapering to a small, pointed end, called the "cod end." Trawls are towed behind a vessel at any depth in the water column.

Trip limit: A quota that each fisher or vessel is allowed to catch per trip out to sea. Trip limits are the commercial equivalent of a recreational bag limit.



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U.S. COAST GUARD

WINTER FISHERIES SEARCH AND RESCUE REPORT

01/01/99 – 01/31/99

This report has been prepared to provide information regarding the large number of search and rescue (SAR) cases prosecuted in the Bering during the month of January. Enclosure 1 includes related press releases.

SUMMARY OF BERING SEA CASES:

18 Jan 99

* **F/V DR. K:** F/V DR. K, a 100ft crab vessel located 40nm E of St. Paul, was assisted by CGC MORGENTHAU after it became disabled and adrift due to contaminated fuel. MORGENTHAU towed F/V Dr. K to St. Paul Harbor since a commercial tow was not available and the weather was forecast to deteriorate over the next 24 hours.

19 Jan 99

F/V LADY BLACKIE: F/V LADY BLACKIE, a 90ft trawler located off of St. Paul, requested medical advice concerning a 40 year old male crewmember who was possibly having a heart attack. The Duty Flight Surgeon recommended a MEDEVAC and an AirSta Kodiak HH-60, pre-staged in St. Paul for the Opilio season, hoisted and transported the crewman in stable condition to St. Paul clinic for further evaluation.

20 Jan 99

* **F/V BELLA K:** F/V BELLA K, a 130ft crab vessel located 110nm NNW of Dutch Harbor, requested medical advice for a 25 year old male crewman who was hit in the back, 5in above the waist, by a 45 lb bait box and was in severe pain when he moved his legs and feet. The Duty Flight Surgeon was consulted and provided medical advice while the F/V proceeded to Dutch Harbor. Recommended crewmember be brought ashore in Dutch Harbor.

* **F/V MYSTERY BAY:** F/V MYSTERY BAY, a 170ft crab vessel located 70 NM SE of St. Paul, requested a MEDEVAC for a 28 year old male crewmember who had amputated a piece of his right thumb in a hydraulic bait cutter. The Duty Flight Surgeon recommended a MEDEVAC and an AirSta Kodiak HH-60, pre-staged in St. Paul for the Opilio season, hoisted and transported the crewman to St. Paul where a waiting Penn Air flight transported the patient to Anchorage.

* - Indicates vessel was engaged in State fishery.

22 Jan 99

* **F/V NOWITNA:** F/V NOWITNA, a 135ft crab vessel with 6 people on board, initiated a distress call indicating they were taking on water, donning survival suits, and were preparing to abandon ship 70nm W of Cold Bay. An HH-60 helicopter, pre-staged in St. Paul for the Opilio season, launched and proceeded to the scene. CGC MELLON, 100 NM away, diverted but was unable to launch its HH-65 helicopter due to heavy weather and sea state. A C-130 was launched from Kodiak to provide dewatering pumps and back up communications. F/V DONA MARTITA tried to assist but the 20ft seas and 45 kts winds prevented any attempts at rescue. The HH-60 arrived on scene 3 hours after launching and after finding the vessel's deck awash, elected to hoist the crew immediately rather than deploy pumps and attempt to de-water the vessel. All six crewmen were safely hoisted off the vessel and transported to Cold Bay in good condition.

F/V ENDURANCE: F/V ENDURANCE, a 280ft trawler located 70nm NW of Cold Bay, notified the Coast Guard of an ill 46 year old male crewmember. Crewman was suffering from acute appendicitis and the Flight Surgeon recommended an immediate MEDEVAC. CGC MELLON departed scene of F/V NOWITNA SAR and despite heavy seas near launch limits, launched its HH-65 helicopter to assist F/V ENDURANCE. The patient was flown to Cold Bay and was transferred to Lifeflight for further transport to Anchorage.

F/V KODIAK ENTERPRISE: F/V KODIAK ENTERPRISE, a 275ft factory trawler located 75nm W of Cold Bay, contacted the Coast Guard for MEDEVAC of an injured 30 year old male crewmember. Crewman was injured when swell wave washed patient under cod end during haul back operation. As cod end continued to be brought on deck the injured crewman was located in the hold of the vessel. He was knocked unconscious, wasn't breathing and had no pulse. The EMT onboard administered CPR for six minutes and revived the patient. The HH-65 helicopter departed Cold Bay after dropping off the patient from F/V ENDURANCE and hoisted the patient and transported him to Cold Bay. An awaiting Lifeflight Learjet transported the patient from Cold Bay to Anchorage.

23 Jan 99

* **F/V NORSEMAN:** F/V NORSEMAN, a 120ft crab vessel located 64nm SE of St Paul, requested medical advice concerning an injured crewmember. A wave broke over vessel's deck and knocked a 29 year old male crewman into a crab pot. The crab pot's bars hit the crewman across the lower part of his chest and he was experiencing severe chest and left arm pains. Duty Flight Surgeon decided not to MEDEVAC. Vessel continued to Dutch Harbor, and the patient was seen in clinic and released in satisfactory condition.

24 Jan 99

* **F/V WEST POINT:** F/V WEST POINT, a 115ft crab vessel located 30nm SE of St George, reported to CGC MORGENTHAU that a 41 year old male crewmember had fallen overboard while working on deck in heavy weather. F/V WEST POINT commenced a search; MORGENTHAU was on patrol approximately 60nm away and immediately diverted to the scene. The HH-60 helicopter stationed in St. Paul for the Opilio season was unable to launch due to estimated 75 kt winds. Five hours later when the weather abated the HH-60 in St. Paul launched. Successive searches by MORGENTHAU and the HH-60 found no sign of the person in the water. Cold water exposure models indicated immersion would result in incapacitation/unconsciousness within one hour.+

* **F/V KATRINA EM:** F/V KATRINA EM, a 80ft crab vessel located 2nm N of St Paul, reported that a 27 year old male crewmember had broken his left leg and was losing sensation in his lower leg. After consultation with the Flight Surgeon the HH-60 in St. Paul hoisted the patient and transported him to St. Paul for further transfer via air ambulance to Anchorage.

F/V AMERICA NO. 1: F/V AMERICA NO.1, a 160ft trawler located 55nm E of Cold Bay contacted CGC MELLON about a 39 year old male crewmember suffering from severe abdominal pain. F/V AMERICA NO.1 transited to the vicinity of Cold Bay where an AirSta Kodiak HH-60 hoisted the patient and delivered him to an awaiting Lifeflight which transported him to Anchorage.

25 Jan 99

* **F/V LIBERATOR:** F/V LIBERATOR, a 161ft crab vessel located 125nm NW of Cold Bay requested a MEDEVAC for a 37 year old male who had not had his diabetes medication in over a week and was deteriorating quickly into an incoherent state of shock. An AirSta Kodiak HH-60 helicopter launched, hoisted and delivered the patient to an awaiting Lifeflight in Cold Bay which transported him to Anchorage.

* **F/V SEA BROOKE:** F/V SEA BROOKE, a 109ft crab vessel located 112nm NW of Cold Bay requested a MEDEVAC for 27 year old male crewmember who had a crab pot drag across the top of his foot causing a compound fracture and severe laceration. An AirSta Kodiak HH-60 helicopter launched, hoisted the patient and delivered him to an awaiting Lifeflight in Cold Bay which delivered him to Anchorage.

26 Jan 99

* **F/V BARANOF:** F/V BARANOF, a 180ft crab vessel located 140 nm NW of St. Paul, requested a MEDEVAC for a 31 year old male crewman who suffered severe abdominal pain for several days and had possible appendicitis. CGC MORGENTHAU's HH-65 helicopter, with a C-130 for cover, hoisted the patient and transported him to the St. Paul clinic. Clinic examined patient and reported possible kidney stones. Patient was flown by a Penn Air flight to Anchorage for further treatment.

28 Jan 99

* **F/V LISA MARIE:** F/V LISA MARIE, a 78ft crab vessel located 60 nm se of St. Paul, requested a MEDEVAC for a 29 year old male crewman who was suffering from severe chest pains as a result of being struck by a falling tackle block. CGC MELLON's HH-65 helicopter, hoisted the patient and transported him to the St. Paul clinic. Clinic examined patient and reported the crewman had sustained severe contusions and several broken ribs.

SUMMARY OF GULF OF ALASKA CASES:

28 Jan 99

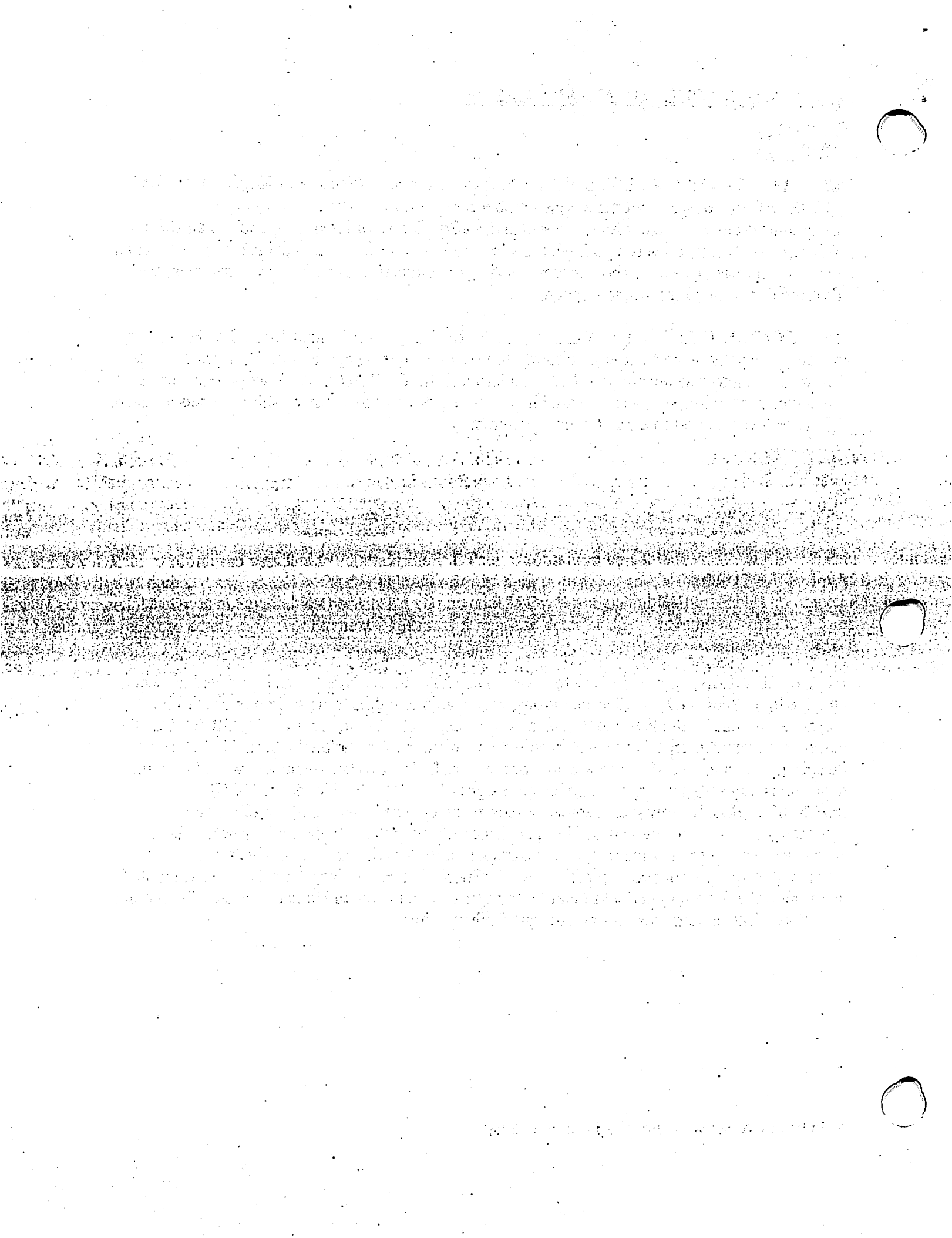
F/V MISS LINDA: F/V MISS LINDA, a 58ft trawler located 70nm W of Kodiak, requested MEDEVAC of a 65 year old male crewmember complaining of severe chest pains. Communications were lost with the vessel and AirSta Kodiak ordered the launch of an HH-60. When communications were regained, the vessel reported the crewman unconscious. The patient went into cardiac arrest and another crewman began conducting CPR. The crewman was later declared deceased by the flight surgeon.

F/V PROVIDENCE: F/V PROVIDENCE, a 58ft fishing vessel located 13nm S of Petersburg, radioed a Mayday when their engine room flooded after running aground in Wrangell Narrows. The three person crew abandoned the vessel into a skiff. CGC ANACAPA sent a rescue and assistance party with pumps to assist with dewatering efforts. Five other fishing vessels assisted. The vessel was floated free and towed to Petersburg.

30 Jan 99

F/V ATLANTOS: F/V ATLANTOS, a 37ft longline vessel located 41nm S of Seward, radioed for help just before the vessel sank south of Pilot Rock in Blying Sound. An AirSta Kodiak HH-60 was launched to assist. The three person crew abandoned their vessel into the F/V DOLPHIN and F/V ICEBERG.

F/V KAVKAZ: F/V KAVKAZ, a 37ft longline vessel capsized with two crewmembers aboard off Dangerous Cape north of Port Graham. The F/V ARIZONA reported that neither of the crew had surfaced after the vessel capsized. An AirSta Kodiak HH-60 was launched and the CGC ROANOKE ISLAND got underway to assist. The CGC ROANOKE ISLAND arrived on scene but, due to darkness and weather conditions, was unable to put a rescue swimmer aboard the vessel. At first light, the F/V KAVKAZ was relocated and taken in tow by F/V ARIZONA. The vessel was grounded on a sand beach where divers from the Air National Guard 210th Rescue Squadron were able to swim into the bow of the vessel. The two crewmembers were found in their immersion suits but appeared to have no signs of life. As the tide receded, CGC ROANOKE ISLAND crewmembers went aboard and detected signs of life in one of the crewmembers. A chainsaw was used to gain access through the hull and both crewmembers were extracted. Both crewmembers were transported to Port Graham clinic where one crewmember was pronounced deceased. An AirSta Kodiak HH-60 was launched and attempted to transport the surviving patient to Homer but was unable to land in Homer because of white out conditions. The patient was returned to Port Graham clinic.





January 24, 1999
By Petty Officer Tyler Johnson
Release # 017-99

Coast Guard suspends search for missing fisherman

KODIAK, Alaska - The Coast Guard suspended the search at 4:40 p.m. for the 41-year-old man who fell overboard from the fishing vessel Westpoint at 1:18 a.m. today, 30 miles southeast of St. George Island.

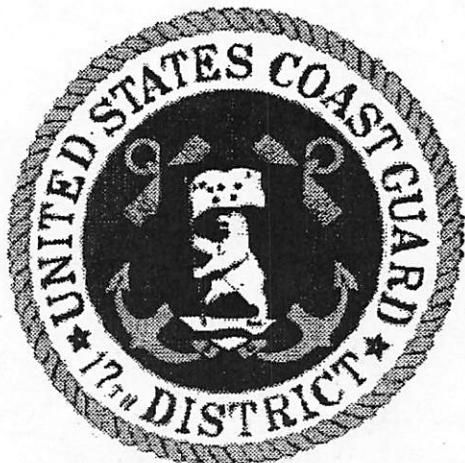
The Coast Guard responded to the distress call with the Coast Guard cutter Morgenthau and a Jayhawk helicopter crew, pre-staged in St. Paul for Operation Northern Safeguard. The Morgenthau searched throughout the night and found nothing. This morning, the Morgenthau and the helicopter searched the area again with no results.

A watch stander at Coast Guard Communications Station Kodiak received the initial distress call from the Westpoint crew at 1:35 a.m. They stated that the crewman, Vong Sa Keobowalapha, fell off the 115-foot crabber and was wearing orange rain gear. Keobowalapha had no survival equipment, no flotation or any illuminating devices when he fell into the water. The Coast Guard stresses the importance of life jackets and proper survival equipment while working near the water.

The Westpoint is home-ported in Seattle, Wash.

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January 24, 1999
By Petty Officer Tyler Johnson
Release # 016-99

Coast Guard searching for man overboard

KODIAK, Alaska - The Coast Guard is searching for a 41-year-old man who fell overboard from the fishing vessel Westpoint at 1:18 a.m., today, 30 miles southeast of St. George Island.

The Coast Guard cutter Morgenthau searched throughout the night and was joined today by an Jayhawk helicopter, pre-staged in St. Paul.

A watch stander at Coast Guard Communications Station Kodiak received the distress call from the Westpoint crew, home-ported in Seattle, at 1:35 a.m. They stated that the crewman, Vong Sa Keobowalapha, fell off the 115-foot crabber and was wearing orange rain gear. Keobowalapha had no survival equipment, no flotation or any illuminating devices when he fell into the water.

The weather forecast in the area calls for southwest winds blowing at 30 knots with gusts up to 50 knots by this evening. Seas are currently reported at 16 to 22-feet.

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Kodiak Public Affairs Detachment

January 22, 1999
By Chief Petty Officer Tod Lyons
Release # 013-99

January 22, 1999
By Chief Petty Officer Tod Lyons
Release # 013-99

Coast Guard rescues six from sinking crab boat (Update #2)

KODIAK, Alaska - Six crab fishermen are safe after a Coast Guard HH-60 Jayhawk helicopter hoisted them from their sinking crab boat about 70 miles northwest of Cold Bay earlier today.

The 125-foot Nowitna lost power in rough weather and began taking on water just after 4 a.m., and requested Coast Guard assistance. The Jayhawk helicopter, a C-130 airplane from Air Station Kodiak and the Coast Guard Cutter Mellon all responded to the call for help.

The six men were hoisted by the helicopter crew at 9:20 a.m. and taken to Cold Bay in good condition. They are identified as: Skipper Thorne Tasker, Richard A. Johnston, Jeff Wahl, Allen Travis, Steve Ballod and engineer Marc Thompson.

The Nowitna was last seen with its decks awash late this morning. The vessel was carrying 38,000 gallons of diesel fuel and 300 gallons of lube oil when it began to sink. Coast Guard crews battled 40-knot winds and 20-foot seas during the rescue.

This is the first sinking of the 1999 Opilio crab season. The Coast Guard Jayhawk helicopter that responded this morning was pre-staged at St. Paul as part of Operation Northern Safeguard. Additionally, two Coast Guard cutters, the Mellon and the Morgenthau, are patrolling the crab grounds. Operation Northern Safeguard is designed to strategically position Coast Guard vessels and aircraft in the Bering Sea and Bristol Bay to limit the loss of life and property at sea during the dangerous Opilio tanner crab season.

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Kodiak Public Affairs Detachment

January 22, 1999

By Petty Officer Tyler Johnson

Release # 012-99

Coast Guard rescues fishermen from sinking crab boat

(Update #1)

KODIAK, Alaska - A Coast Guard H-60 Jayhawk helicopter from Kodiak, pre-staged in St. Paul for Operation Northern Safeguard, rescued six fishermen from the fishing vessel *Nowitna* that began sinking in Bristol Bay just after 4:00 a.m. today.

The distress call from the *Nowitna* crew came in at 4:12 a.m. They reported that their 125-foot boat was sinking and they were donning survival suits and preparing to abandon ship 70 miles northwest of Cold Bay.

The fishing vessel *Donya Martina* tried to assist the crew of the *Nowitna*. However, 20-foot seas and 45-knot winds prevented the fishing vessel from attempting a rescue. The Coast Guard cutter *Mellon* was 100 miles away but was unable to lend immediate assistance or launch the HH-65 Dolphin helicopter from their flight deck because of the rough weather.

Since the *Mellon* was unable to launch its helicopter, the HH-60 Jayhawk helicopter crew launched from St. Paul and arrived on the scene at 8:00 a.m. The helicopter began hoisting the six crewmen at 8:30 a.m. By 9:20 a.m., all six crewmen were aboard the helicopter to be flown to Cold Bay.

The Coast Guard will monitor the status of the *Nowitna* for pollution. The cause of the sinking is under investigation.

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January 22, 1999
By Chief Petty Officer Tod Lyons
Release # 010-99

Coast Guard responds to sinking crab boat

KODIAK, Alaska - A Coast Guard C-130 airplane, an HH-60 Jayhawk helicopter and the Coast Guard cutter Mellon were dispatched early this morning to Bristol Bay after the Coast Guard received a distress call from the crew of the fishing vessel Nowitna reporting they were sinking.

The original call came in at 4:12 a.m. reporting that the 125-foot crab boat/processor Nowitna was taking on water and beginning to sink about 70 miles northwest of Cold Bay. The vessel's well-prepared, six-person crew had donned survival suits and was preparing to abandon ship into a life raft carrying a 406 EPIRB (Electronic position indicating radio beacon) and flares.

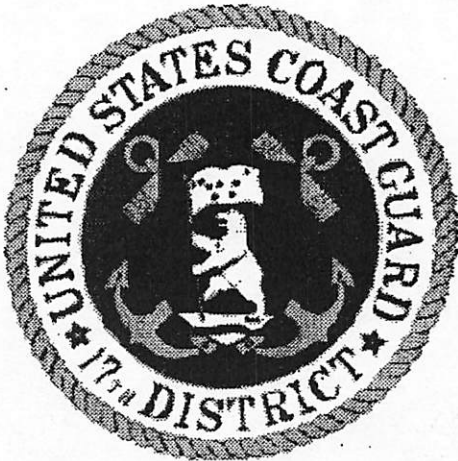
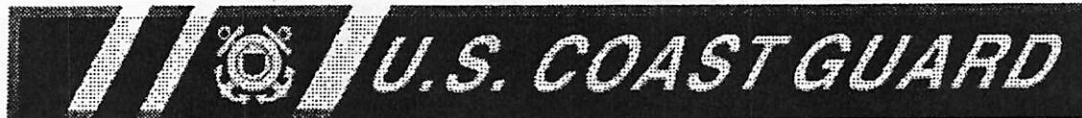
The fishing vessel Danya Martina, in the vicinity of the Nowitna when the call came in, would try to assist. At 8 a.m., the Danya Martina was trying to come alongside the Nowitna in 20-foot seas and 45-knot winds.

The Mellon, which just departed Kodiak Wednesday to patrol the crab grounds, is still about 100 miles out from the scene. The cutter crew was unable to launch the HH-65 Dolphin helicopter from its flight deck due to heavy weather.

Since the Mellon could not launch its helicopter, the Jayhawk helicopter, pre-staged in St. Paul as part of Operation Northern Safeguard, was launched at 5:33 a.m. to assist. It arrived on scene around 8 a.m. The C-130 from Air Station Kodiak took off at 5:54 a.m. A second C-130 is expected to take off at first light with a relief helicopter crew if needed.

The Nowitna is home-ported in Juneau.

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January 21, 1999
By Petty Officer Tyler Johnson
Release # 009-99

Coast Guard rescues injured fisherman

KODIAK, Alaska - A Coast Guard Jayhawk helicopter crew from Kodiak, pre-staged in St. Paul for Operation Northern Safeguard, hoisted a 28-year-old man who injured his thumb while working aboard the 170-foot crab vessel Mystery Bay, 70 miles northeast of St. Paul Wednesday.

The man, Sonny Leomiti, severely cut his thumb in a hydraulic bait cutter.

The watch stander on duty aboard the Coast Guard cutter Morgenthau received the request for Coast Guard assistance from the crew of the Mystery Bay at 5:15 p.m. The flight surgeon, Dr. Stephen Kinsley, recommended Leomiti be hoisted.

The helicopter launched at 5:47 p.m., hoisted Leomiti, and transported him to St. Paul in stable condition where he was transferred to a commercial flight to Anchorage for treatment.

The Mystery Bay is based in Juneau.

The Coast Guard helicopter and crew are pre-staged in St. Paul as part of Operation Northern Safeguard. The operation is designed to strategically position Coast Guard vessels and aircraft in the Bering Sea and Bristol Bay area to limit the loss of life and property at sea during the Opilio Tanner crab season.

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Kodiak Public Affairs Detachment

January 19, 1999
By Petty Officer Tyler Johnson
Release # 008-99

January 19, 1999
By Petty Officer Tyler Johnson
Release # 008-99

Coast Guard rescues ill crab boat fisherman

KODIAK, Alaska -A Coast Guard Jayhawk helicopter crew from Kodiak, pre-staged in St. Paul for Operation Northern Safeguard, rescued a 40-year-old man suffering from a possible heart attack aboard the 90-foot vessel the Lady Blackie, 91-miles north of St. Paul today.

The watch stander on duty at Communications Station Kodiak received the request for Coast Guard assistance at 5:30 a.m. The flight surgeon, Dr. Mathew Hall, recommended Steve Brown's airlift.

The helicopter launched at 6 a.m., hoisted Brown, and returned him to the clinic in St. Paul in stable condition.

The Lady Blackie is based in Homer.

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Kodiak Public Affairs Detachment

January 8, 1999

By Petty Officer Tyler Johnson

Release # 005-99

January 8, 1999

By Petty Officer Tyler Johnson

Release # 005-99

Coast Guard returns to Operation Northern Safeguard

KODIAK, Alaska - The Coast Guard is once again launching Operation Northern Safeguard to provide a strong presence throughout Alaska's fishing fleet during the Opilio crab season that begins Jan 15.

Operation Northern Safeguard was created one year ago to strategically position Coast Guard vessels and aircraft in the Bering Sea and Bristol Bay during the Opilio season. "The operation is designed to maximize Coast Guard assets in the area to provide protection for the fishing fleet when the weather conditions are at their worst," said Lt. Cmdr. Karl Moore, of the Coast Guard's 17th District Operations Planning and Policy Division.

During last year's Opilio crab season, Coast Guard units were in position throughout the fishery and responded to nine medical emergencies. This year more than 200 vessels are expected to fish for Opilio crab. In addition to the large number of vessels fishing this season, the operation allows Coast Guard units to monitor the vessels in the 20,000 square-mile fishery (roughly the size of West Virginia).

Eight Coast Guard cutters, complimented with H-65 Dolphin helicopters from Air Station Kodiak, will be deployed in shifts during the season. Air Station Kodiak will pre-stage an H-60 Jayhawk helicopter at St. Paul Island and daily flights will be made by C-130 airplanes.

To help combat the hazardous conditions created by rough Alaskan weather, crewmen from Coast Guard Marine Safety Detachment Unalaska will hold safety seminars in Dutch Harbor to help prepare fishermen for possible problems related to fishing in severe weather conditions.

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January 24, 1999
By Petty Officer Tyler Johnson
Release # 018-99

Coast Guard helicopter crew rescues injured fisher

KODIAK, Alaska - A Coast Guard Air Station Kodiak helicopter, pre-staged in St. Paul for Operation Northern Safeguard, airlifted a 27-year-old man with a broken leg from the fishing vessel Katrina Em two miles north of St. Paul today.

A Coast Guard flight surgeon recommended the patient's airlift to St. Paul for immediate medical attention.

The Jayhawk crew launched, hoisted John Martin at 1:46 p.m., and delivered him to an awaiting ambulance in St. Paul for further transport to Anchorage by a commercial medical carrier.

The Katrina Em is home-ported in Kodiak.

Operation Northern Safeguard is designed to strategically position Coast Guard vessels and aircraft in the Bering Sea and Bristol Bay areas to limit the loss of life and property at sea during the Opilio Tanner crab season.

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Kodiak Public Affairs Detachment

January 25, 1999

By Petty Officer Tyler Johnson

Release # 019-99

Coast Guard helicopter crew saves two fisherman

KODIAK, Alaska - A Coast Guard Air Station Kodiak helicopter, pre-staged in St. Paul for Operation Northern Safeguard, airlifted two more fishermen from the Bering Sea today.

The first rescue involved a 37-year-old diabetic onboard the fishing vessel *Liberator*, in need of medical attention. The watch stander on duty at Air Station Kodiak received the call for Coast Guard assistance at 1:48 a.m. The Coast Guard flight surgeon recommended the patient's transport to a medical facility for treatment.

The Jayhawk helicopter crew launched at 9:17 a.m., hoisted the man and delivered him to Cold Bay for further transport to Anchorage by a commercial medical carrier.

The second airlift involved a 39-year-old man with severe abdominal pain aboard the fishing vessel *American No. 1*, 20 miles northwest of Cold Bay. The Coast Guard cutter *Mellon* received the assistance request from the ship's crew at 7:35 p.m. Sunday. The Coast Guard flight surgeon recommended an airlift.

The helicopter crew departed Cold Bay after delivering the first patient, hoisted the 39-year-old man and delivered him to Cold Bay for further transport to Anchorage by a commercial medical carrier.

Both vessels are home-ported in Seattle, Wash.

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Updated: Tuesday, January 26, 1999



Kodiak Public Affairs Detachment

January 26, 1999

By Petty Officer Tyler Johnson

Release # 020-99

January 26, 1999

By Petty Officer Tyler Johnson

Release # 020-99

Coast Guard rescues Seabrooke crewman

KODIAK, Alaska - A Coast Guard helicopter crew airlifted a 27-year-old fisherman from the fishing vessel Seabrooke 150 miles northwest of Cold Bay today.

The watchstander on duty at Coast Guard Communications Station Kodiak received the request for assistance from the crew of the fishing vessel Seabrooke at 2 p.m. The crew stated that the man had crushed his foot in a crab pot launcher. The flight surgeon recommended the man be transported to Cold Bay for immediate medical attention.

The Jayhawk helicopter crew launched, hoisted the man at 4:20 p.m., and delivered him to Cold Bay for further transport to Anchorage by a commercial medical carrier.

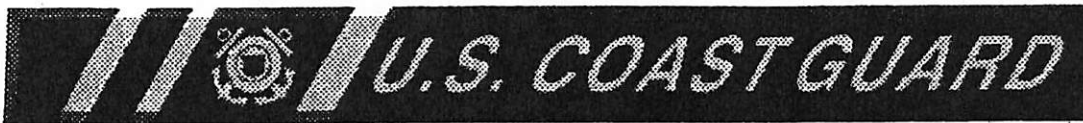
Operation Northern Safeguard is designed to strategically position Coast Guard vessels and aircraft in the Bering Sea and Bristol Bay areas to limit the loss of life and property at sea during the Opilio Tanner crab season.

Since Operation Northern Safeguard began Jan. 15, the Coast Guard has assisted 14 different people and ten different boats, with one life lost.

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Kodiak Public Affairs Detachment

January 26, 1999

By Chief Petty Officer Tod Lyons

Release # 021-99

Coast Guard medevacs another fisherman in Bering Sea

KODIAK, Alaska - A Coast Guard Dolphin helicopter crew, temporarily assigned to the Coast Guard cutter Morgenthau for Operation Northern Safeguard, hoisted a possible appendicitis patient from the fishing vessel Baranof 120 miles northwest of St. Paul Island in the Bering Sea today.

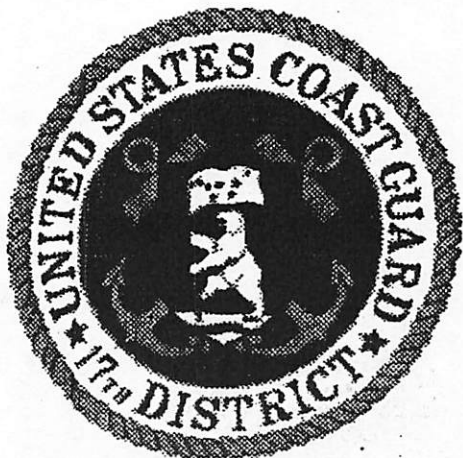
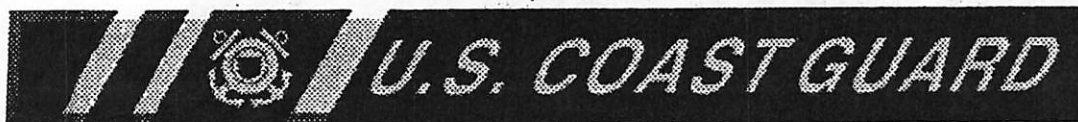
The Coast Guard received the request for assistance at 9:15 a.m., Baranof's owner. According to the Coast Guard watch stander in Kodiak, the patient, Todd Naslund, age and hometown unknown, complained of abdominal pains about eight days ago. The Baranof skipper consulted his own medical doctors in Seattle who spoke with a Coast Guard flight surgeon in Kodiak. The flight surgeon recommended Naslund's airlift.

The helicopter departed the Morgenthau at 10:50 a.m., and stopped in St. Paul to refuel, before continuing northwest of St. Paul to conduct the medevac. The Coast Guard hoisted Naslund at 11:50 a.m., and delivered him to the clinic in St. Paul for evaluation. Operation Northern Safeguard is designed to strategically position Coast Guard vessels and aircraft in the Bering Sea and Bristol Bay to limit the loss of life and property at sea during the Opilio Tanner crab season.

Formerly a Coast Guard buoy tender, the Baranof is now a 180-foot crab boat/processor home-ported in Seattle, Wash.

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January 28, 1999
By Petty Officer Mark D. Hunt
Release # 018-99

January 28, 1999
By Petty Officer Mark D. Hunt
Release # 018-99

Coast Guard cutter lends pumps to grounded vessel

JUNEAU, Alaska - Coast Guard personnel assisted the crew of a fishing vessel that grounded near Petersburg today.

The fishing vessel Providence grounded 13 miles south of Petersburg near Spike Rock. At 3:30 p.m., the vessel's crew radioed the Coast Guard for assistance. Shortly thereafter, severe flooding forced the three crewmembers into their skiff.

Coast Guard crewmembers from the Petersburg-based Anacapa used a skiff to deliver two pumps to Providence's crew. Five civilian-operated vessels also responded, providing pumps and helping to stabilize the Providence as it refloated.

At 7:00 p.m., a tug took the Providence in tow to Petersburg. There were no injuries reported in the incident.

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[U.S. Coast Guard \(Pacific Area\) Online](#)
Updated: Thursday, January 28, 1999



Coast Guard News

Release #: 23-99, 9:30 p.m.
Date: Jan. 30, 1999
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Supervisor
U.S. Coast Guard
Public Affairs Detachment
P.O. Box 190094
Kodiak, AK 99619

Coast Guard responds to capsized boat near Dangerous Cape

KODIAK, Alaska – The Coast Guard is still searching at this hour for two people aboard the capsized fishing vessel *Kavkaz*, that overturned in rough weather just north of Dangerous Cape at the mouth of Kachemak Bay around 4:30 p.m.

Despite wind gusts of more than 90 miles per hour at Air Station Kodiak, a Coast Guard HH-60 Jayhawk helicopter launched at 5:25 p.m. to respond to the capsizing and try to recover the two fishermen who may be caught beneath their 37-foot fiberglass fishing boat.

Missing are Anton Sanarov, the owner/operator of the *Kavkaz* and crewman Fred Sanarov. The Coast Guard helicopter arrived on scene at 6:30 p.m. and immediately began searching for the two men. The helicopter dropped a data marker buoy to track the winds and current, and the helicopter searched for more than two hours with no results.

The Coast Guard also dispatched the 110-foot Coast Guard Cutter *Roanoke Island*, which arrived on scene at 8:15 p.m. The *Roanoke Island* will continue searching throughout the night. Weather on scene shows 8-12 foot seas, occasional snow squalls and 30 knot winds with higher gusts.

Another fishing vessel, the 37-foot *Arizona*, was accompanying the *Kavkaz* when the accident occurred. The master of the *Arizona* called the 911 operator in Homer who then notified the Coast Guard. He reported that neither of the two people aboard the *Kavkaz* surfaced after the boat overturned.

At 8:30 p.m., the keel of the *Kavkaz* was still visible, but search crews were unable to locate any survivors.

-30-

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Editor's Note: This news release and other stories and images are available on the World Wide Web at the address listed above.



Coast Guard News

Release #: 24-99, 10:40 a.m.
Date: Jan. 31, 1999
Contact: PAC Tod A. Lyons
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Supervisor
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Coast Guard, Air National Guard, State Troopers continue recovery efforts of capsized fishing boat (Update #1)

KODIAK, Alaska – A Coast Guard HH-60 Jayhawk helicopter from Kodiak was launched this morning to continue the search for possible survivors from the fishing vessel *Kavkaz* that capsized near Dangerous Cape at the mouth of Kachemak Bay Saturday afternoon.

The Coast Guard received the call at 4:30 p.m. Saturday from the master of the fishing vessel *Arizona* reporting the 37-foot *Kavkaz* capsized with two people on board about one-half mile off Point Pogibshi. The *Arizona* and the *Kavkaz* were together when the accident occurred.

A Coast Guard helicopter launched from Kodiak at 5:25 p.m. yesterday in severe winds and searched for survivors for more than two hours Saturday night with no luck. The Coast Guard Cutter *Roanoke Island* was also dispatched and searched until after 10 p.m. with no results. Rough weather on scene did not allow the *Roanoke Island* to come alongside the capsized *Kavkaz*, so the cutter anchored in Port Graham overnight. The *Roanoke Island* will arrive on scene again this morning to continue the search. Today's HH-60 helicopter will conduct a shoreline search from Dangerous Cape to Point Pogibshi and vicinity.

An Air National Guard para-jumpers team will fly to Port Graham this morning and meet up with an Alaska State Trooper patrol boat and transit to the overturned *Kavkaz*. The team will deploy from the State Trooper's vessel hoping to find survivors trapped beneath the capsized vessel.

Missing are *Kavkaz* owner/operator Anton Sanarov and crewman Fred Sanarov.

-30-

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Editor's Note: This news release and other stories and images are available on the World Wide Web at the address listed above.



Coast Guard News

Release #: 25-99, 2:15 p.m.
Date: Jan. 31, 1999
Contact: PAC Tod A. Lyons
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Rescue crews unable to save fishermen from capsized boat (Update #2)

KODIAK, Alaska – Rescue crews from the Coast Guard, the Alaska Air National Guard and the village of Port Graham were unable to save the victims from the fishing vessel *Kavkaz* that capsized near Dangerous Cape Saturday afternoon.

Four pararescuemen (PJs) from the Air National Guard's 210th Rescue Squadron, at Kulis ANG Base in Anchorage, arrived on scene at noon today and deployed into the water in hopes of recovering survivors. A Coast Guard HH-60 Jayhawk helicopter and the Coast Guard Cutter *Roanoke Island* were also on scene to assist if survivors were recovered.

Just after 12:30 p.m., the Coast Guard received the report that both fishermen's bodies were found, but divers could not find any pulse or other sign of life on either victim. The fishermen had been trapped inside the overturned *Kavkaz* in the frigid Kachemak Bay waters for more than 18 hours when they were found.

The 37-foot *Kavkaz* is currently tied off to shore near Point Pogibshi. At low tide, the crew of the *Roanoke Island* and the Port Graham village public safety officer will recover the bodies of Anton and Fred Sanarov and deliver them to Homer.

The Alaska Air Guard also assisted by providing an HH-60G Pavehawk helicopter and an HC-130 Hercules rescue tanker in support of the mission.

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Editor's Note: This news release and other stories and images are available on the World Wide Web at the address listed above.



Coast Guard News

Release #: 26-99, 7:45 p.m.
Date: Jan. 31, 1999
Contact: PAC Tod A. Lyons
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Public Affairs Detachment
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(Update #3)

Coast Guard finds one survivor aboard capsized Kavkaz!

KODIAK, Alaska – One of two men, thought to be dead after being trapped beneath their capsized vessel for nearly 24 hours, was found alive when crews from the Coast Guard Cutter Roanoke Island were recovering what they thought would be bodies.

Anton Sanarov, 41, owner/operator of the 37-foot fishing vessel Kavkaz, was found alive at 4:13 p.m. Roanoke Island crewmen used a chainsaw to cut into the hull and extract Sanarov from his vessel. The patient was placed aboard the fishing vessel Aries at 5:05 p.m. and immediately transported to the medical clinic in Port Graham in serious condition.

A Coast Guard HH-60 Jayhawk helicopter from Air Station Kodiak was launched to fly to Port Graham, pick up Sanarov and rush him to the hospital in Homer. The helicopter, however, was unable to land in Port Graham due to blowing snow, which created near zero visibility.

The other victim aboard the Kavkaz, Fred Sanarov, age unknown, was pronounced dead at the Port Graham clinic. Both men had donned survival suits when their vessel capsized Saturday afternoon, but Fred Sanarov's zipper had failed and split open when Roanoke Island crewmen found him. The Roanoke Island will deliver him to Homer tonight.

At last report, Anton Sanarov was coherent and his vital signs remained stable. He will be monitored throughout the night in Port Graham.

-30-

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Editor's Note: This news release and other stories and images are available on the World Wide Web at the address listed above.

PA Fish Clips

**BOSTON GLOBE/ LOS ANGELES TIMES/
NEW YORK TIMES/ ASSOCIATED PRESS**

**Widespread ban on ground fishing offered to save cod
By Peter J. Howe, Globe Staff, 01/30/99**

Vast sections of the Gulf of Maine from Provincetown to Searsport, Maine, would be shut down to all ground fishing for 30 to 60 days at a time starting May 1, under a last-ditch proposal to save the gulf's severely overtaxed codfish population from collapse.

And when the areas do open to fishing crews, daily caps of as few as five pounds could be imposed on how much codfish could be taken by each boat, under a plan to be sent to the US Commerce Department for final approval as soon as next week.

With federal scientists urging that codfish catches be cut by 80 percent in the next fishing season, members of the New England Fishery Management Council worked out a plan late Thursday night that tries to spread huge economic hardship for fishermen as equitably as possible.

Scores of day-fishing boats in communities such as Gloucester, Boston, New Bedford, and Portsmouth, N.H., could be put out of business by the restrictions, which will hit Massachusetts hardest in the spring months. Official estimates of regional economic losses run to tens of millions of dollars.

"We know this will seriously impact small-boat fishermen," said Chris Kellogg, a senior technical adviser to the council. "But unless there was a substantial reduction in fishing levels, the cod stocks would have continued to drop" to a point of near collapse as has occurred on Georges Bank east of Cape Cod.

Already, numbers of cod big enough to be harvested have dropped by more than 80 percent since 1994, to what may be their lowest levels in three decades. The new restrictions will cut allowable cod harvests by several million pounds.

For consumers, it seems certain that the price of cod will rise next summer as dealers

have to turn to foreign suppliers. The rolling bans on ground fishing could also severely limit local supplies of fish other than cod, such as hake and flounder, contributing to price increases.

"Little by little they're taking away all of our options," said Frank Patania of Ideal Seafood Inc. in Boston. "We'll still get the cod from places like Canada or Iceland. But that means higher prices."

But with council members declaring their backs were against the wall, some said they were confident they had done the best job they could.

William Amaru, a Chatham-based commercial fisherman who serves on the 17-member council, said, "We think we've got the right areas closed at the right times" to protect the cod when they are most likely to be found in each area being closed.

The plan involved tough compromises between inshore, day-trip fleets in Massachusetts and New Hampshire and Maine-based crews that tend to make longer trips farther out to sea, and Amaru said last evening he believes "this is the best job that any council could have done."

One key restriction is that allowable daily catches of cod per boat will be reduced from 400 pounds to 200. Once half the government's total allowable gulf catch has been landed, which Amaru predicted will happen before the end of June, daily limits could drop to as few as five pounds, depending on federal fisheries regulators' analysis.

Areas closed to ground fishing would remain open to some other kinds of fishing operations, including lobstering, scallop dredging, and some kinds of rigs such as pelagic hooks that are drawn through waters close to the surface.

Also, some trawling vessels will have to use slightly larger mesh to allow more smaller fish to escape being caught, and new restrictions are being imposed on use of roller and rockhopper gear in some areas.

Once the Fishery Management Council puts the compromise plan into an official proposal, the Commerce Department will have 95 days to take comments and make changes.

Teri Frady, a spokeswoman for the National Marine Fisheries Service, said the agency wants to have new restrictions in place before May 1.

Material from the Associated Press was used in this report.

This story ran on page B01 of the Boston Globe on 01/30/99.
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BOSTON GLOBE

Small-boat owners fear limits signal their collapse
By Clare Kittredge, Globe Correspondent, 01/30/99

PORTSMOUTH, N.H. - Come spring, Craig Mavrikis usually takes the Marion Mae 20 miles out of Portsmouth Harbor to scour the icy seas for ground fish and flounder.

No more. Shoveling snow from his wooden trawler, the 35-year-old Portsmouth fisherman grimly predicted that sweeping new fishing restrictions will wipe him out.

"It's putting me out of business," he said, his expression somber beneath his knitted cap. "That's half my income for the year. It's hard to believe they could take your livelihood away."

After a tumultuous session, the New England Fishery Management Council Thursday voted for severe restrictions on fishing in the hopes of saving cod. The new measures would ban fishing within 30 miles off parts of the coast from Maine to the top of Cape Cod Bay.

Still stunned yesterday, fishermen from New Hampshire's predominantly inshore fleet said the severe new fishing limits will devastate them while those with larger boats will still be able to fish farther out where the restrictions don't apply.

"This has the potential to close the place right down," said Peter Kendall, manager of the Portsmouth Fishermen's Cooperative, where 25 out of 33 boats ply inshore waters. "We're drastically affected."

"I'm a day boat," said Thomas Eaton, whose 56-footer, Princess, is tied up at the Portsmouth pier. "We depend on the cod fish in the spring of the year. It's hurt me more than most - 50 percent [of my business]. I don't know what we're going to do."

Eaton says he may move south.

Mavrikis says he'll try shrimping, but has no further illusions: "I don't have a backup, really."

"I shifted my boat to lobster," said Alan Vangile of Portsmouth, methodically moving lobster traps off the Special K, one boat over from the Marion Mae. "My income dropped 20 percent."

"It's sad," said Vangile, 51, as gulls screamed nearby. "You have to put a human face on this. I have a mortgage to pay. The bank doesn't care."

Like many small-boat fishermen here, he says the new restrictions will hurt them the most. But, emerging from the fish co-op, Chris Schoppmeyer, a special agent with the National Marine Fisheries Service, insisted, "Everybody's going to be affected. It's equal."

Not so, said Vangile. "We've taken a small-boat fishery that was here hundreds of years - a subsistence-type fishery - and put them out of business for something that wasn't their fault."

"This isn't about conservation - it's about perception. It's feel-good," he said. "The big boats are the least affected by this. Politically, they have more clout."

Vangile also complains that his calling has been tarnished.

"When I got into this 20 years ago, fishermen were almost heroes. Kids used to come down here and take our pictures. Now, because of some misconception and some reality, my daughter has to defend my livelihood at school - 'Oh, your father kills all those little things.'"

Sure, he's for saving the resource. But he argues, "Fish aren't buffalo. You're never going to catch the last one. I don't think this drastic measure is necessary."

This story ran on page B06 of the Boston Globe on 01/30/99.

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BOSTON GLOBE

Clinton to urge \$48m plan to aid fishermen in region

By Aaron Zitner, Globe Staff, 01/30/99

WASHINGTON - President Clinton is proposing a \$48 million program to help New England fishermen and communities that have been hurt by restrictions on fishing, Massachusetts lawmakers said yesterday.

Some of the money is available under current law, and some will be included in Clinton's federal budget for fiscal year 2000, which he is scheduled to unveil Monday.

Authorities have been working for years to rebuild groundfish stocks in New England waters, using stringent harvesting restrictions and other techniques. While these efforts have had some success on Georges Bank, concern has risen recently over scallop fishing and about collapsing cod stocks in the Gulf of Maine.

On Thursday night, managers of New England fisheries tentatively backed a series of closures to cod fishing areas in the Gulf of Maine. They also voted to cut the daily cod catch limit to a level some fisherman said is too low for them to make a profit.

Senator Edward Kennedy has warned that the cod restrictions could idle 700 boats and put 2,500 fishermen out of work.

The president is proposing:

\$25 million for job retraining and related assistance for workers who lose their jobs as a result of the depressed fishing industry in New England. The money is available under current law.

\$5 million to assist Northeast communities with planning grants, public works construction grants, and other economic projects.

\$2 million this year and \$5 million next year for fishery management projects that employ both scientists and fishermen. These might include surveys of the fishing stocks and development of

new management techniques.

\$3 million this year and \$8 million next year for vessel buyouts.

Clinton's proposal follows an effort by at least five Massachusetts lawmakers to win \$100 million for the local fishing industry. The lawmakers included Kennedy, Senator John Kerry and Representatives Barney Frank of Newton, John Tierney of Salem, and William Delahunt of Quincy, all Democrats.

Kennedy called Clinton's plan "welcome news," but added, "It's not everything we wanted, and we'll continue the fight."

In a written statement, Kerry said he would press for money to give fishermen affordable health insurance, as well as other assistance.

This story ran on page E01 of the Boston Globe on 01/30/99.

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BEDFORD STANDARD-TIMES

Fishing industry braces for effect of cod reduction

By Paisley Dodds, Associated Press writer

BOSTON -- It just became a lot more difficult for fishermen to make a living in New England. Faced with saving fish or fishermen, the New England Fishery Management Council on Thursday did what they thought would help both: they passed tough controls that slashed the daily cod catch in half and closed a swath of sea stretching from Maine to Cape Cod Bay.

"This is going to have a huge trickle-down effect from the fish to the fisherman to the fish buyer," said Craig Mavrikis, a cod fisherman from New Hampshire.

"It's not gonna be good."

Yesterday, the day after the regulations were approved, people in the fish industry braced for the fallout.

Fishermen said they were looking for other jobs. Fish brokers said they were looking to Canada, Iceland and the Pacific to fill cod orders. And commercial buyers shrugged, saying the effects would be felt mainly by the consumer.

"Little by little they're taking away all of our options," said Frank Patania, a 39-year-old manager at Ideal Seafood Inc. in Boston. "We'll still get the cod from places like Canada or Iceland. But that means higher prices."

The restricted fishing area will be divided into four sections to be closed one at a time on a rolling basis in May, June, October and November.

The restrictions, which could start as soon as May, would also ban all gear capable of catching groundfish. The controls still need approval from the U.S. Commerce Department.

The restriction will have less effect on New Bedford fishermen for now.

New Bedford officials said the closure does not bode well for the industry.

"There are no winners here," said James Kendall, executive director of the New Bedford Seafood Coalition and a representative on the New England Fishery Management Council. "All we did, hopefully, is make it a little less painful."

Mr. Kendall said the new regulations do allow opportunity for some of the affected fishermen to be able to continue to fish off the closed waters if they meet regulations designed to preserve codfish stocks.

But if North Shore and northern New England fishermen are unable to continue fishing there, some of them may drift south to areas utilized by the city's fleet.

"I hope we have minimized the impact here," said Mr. Kendall. "These are truly small-boat fishermen caught up in this from Gloucester. Their boats are under 50 feet -- 90 percent of them. Hopefully this will allow them a little wiggle room to stay where they want to. They may not be able to do it. But at least they have a chance."

But others familiar with the industry do not see the latest regulations as sparing the New Bedford fleet any more pain.

"Every thing the (New England Fisheries Management Council) does affects us one way or another," said Rodney Avilla, the executive director of the Family Fishermen's Assistance Center. "It will drive boats into our area. A few of our boats do fish the Gulf of Maine." But closing off the waters does not exactly protect the fish in many cases, said Mr. Avilla.

"Boats chase fish all over the ocean," he said. "If you don't catch them in Massachusetts, you catch them in Maine. Go down to our port and you will see boats from Virginia, North Carolina. This will affect many people. I am not sure this is the last straw. If it is not the last straw it is the next to last one."

Howard Nickerson, the former president of the Offshore Mariner's Association, agreed.

"They always let things go to hell and then they try to do too much at one time," said Mr. Nickerson. "This is too much, too little, too late."

In the past, restrictions have been imposed to rebuild stocks in the Gulf of Maine. But after scientists in December released a report that the cod population was at its lowest in 30 years in the Gulf of Maine, the council determined that the cod catch should be cut by 80 percent. "We know this will seriously impact small boat fishermen," said Chris Kellogg, a council officer. "But unless there was a substantial reduction in fishing levels, the cod stocks would have continued to drop."

The restrictions could prompt regional economic losses ranging from \$19.9 million to \$21.8 million, according to an estimate in a draft analysis completed this week.

B-1

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FEB - 2 1999

N.P.F.M.C



an/to	von/from	
Name: Chairman Mr. R. Lauber	Name: Dr. J. Scabell	
Firma/Company North Pacific Management Council	Firma/Company Frozen Fish International GmbH Buying Department	
Ort/location: Telefon/Phone Anchorage	Ort/Location Telefon/Phone Bremerhaven 49 471 132716	
Telefax Nr. / Facsimile 001 907 271 2817	Telefax Nr. / Facsimile 49 471 132830	E-mail: joern.dr.scabell@unilever.com
Diese Nachricht besteht aus : Seiten This transmission consists of: 3 pages		Date 01.02.1999

Stock Management of Alaska pollack (*Theragra chalcogramma*)

Dear Mr. Lauber,

I got your fax number from Matthew Weber, fish buyer at the Unilever Company Gorton's in Gloucester. Before I am starting with some questions/explanations etc. I will give you a short feedback what I am doing.-I am working for Frozen Fish International, a part of the Unilever Fish & Seafood Group, located at Bremerhaven in Germany. As a member of the Buying Department I am responsible among other things for supply development and questions due to fish sustainability. As you may be already informed Unilever is working since the last three years on the implementation of fish sustainability initiative. The strategy to implement sustainability in our sourcing has been endorsed by Unilever head quarter and is an implicit part of the long-term fish sourcing strategy. Due to the above mentioned facts Unilever is looking for fisheries which are sustainable and producers/suppliers who are operating in those fisheries in a sustainable manner. Our analysis of fisheries should be not cover details such as the methodology used to calculate biomass, but rather concentrates on the overriding principles of fisheries management, such as the existence of stock management authority, the implementation of fishery controls and whether research surveys are undertaken etc..

- 1 -

At the moment we are collecting key informations from all main fishing nations. But we can not do it alone. Therefore we would like to ask you to give us support. Our interest is to get informations due to the stock management of the fish species *Theragra chalcogramma*:

1. Fishing area FAO 67, Pacific, Northeast
So far I am knowing does exist a subdivision in the sub-zones Bering Sea, Aleutian Islands and Gulf of Alaska.-If it is so, for what reasons?-Because of different stocks?
2. Stock trends
How is current status: - above safe biological limits or
- inside safe biological limits or
- outside safe biological limits?
Can we get the volumes for the landings and the TAC's from 1998 back to 1990?
What is the volume of the TAC for 1999?
What is the expected trend for the next years:
- biomass will be increasing or
- biomass will be stable or
- biomass will be decreasing?
3. Stock Management Authority, Are stock management instruments in place, such as fishery policy?-If yes, where it is documented and what are the key elements:
- TAC's/quotas for subzones,
- fishing licenses system,
- time&areas closures,
- restrictions for the gear and the fish size etc.?
Who is responsible for the Stock Management and how it is organized?
- complete name of the ministry or institution,
- important addresses/names of persons/telephon/fax-numbers/e-mail for contacts?
4. Are research surveys conducted to provide data for stock assessments?
What types of surveys, such as:
- hydroacoustics and/or fishing surveys with own research vessels or with scientists on board of catcher boats and factory trawlers,
- checks of landings etc.
Who is responsible for assessments and scientific advise?
- complete name of the institution,
- important addresses/names of persons/telephon/fax-numbers/e-mail for contacts?

- 2 -

5. Does an observer system exists and who is responsible for .. it?
- complete name of the institution,
 - important addresses/names of persons/telephon/fax-numbers/e-mail for contacts?
- What types of control elements are used, such as:
- satellite tracking and or
 - observation with own control boats,
 - inspectors on board of catcher boats or factory trawlers or at land(harbours, shore plants),
 - checks such as fish size, mesh size, discards, by-catch, log book etc.?
6. Is the control system effective enough?
The answer should based on the opinion of all stake holders and research institutes?
7. As you may be informed we are buying also Alaska pollack who was caught in Russian waters. But is very difficult to get official statements/informations about the stock situation in the Sea of Okhotsk and the Russian part of the Bering Sea. But may be the NPMC has some good connection to dedicated persons in Russia/Far East or may be does exist an exchange of assessment datas between Russia and the US?

It is planned from our side to put the above required informations in a data bank. This data bank as overview to the main fish species used by Unilever will be yearly updated. Especially due to the updating from year to the other it would be very helpful to get dedicated contacts/adresses for our further work.

If you have further questions or need more feedback about Unilever's initiative do not hesitate to contact me.

In advance many thanks for your efforts!

Kind Regards


Jörn Scabell