**Discussion Paper
For Review Purposes Only**

Fisheries Management Under Extended Jurisdiction

A Study of Principles and Policies

Staff Report to the
Associate Administrator for Marine Resources
National Oceanic and Atmospheric Administration

This discussion paper is based on a report prepared for the Associate Administrator for Marine Resources of the National Oceanic and Atmospheric Administration (NOAA) by staff from the National Marine Fisheries Service (NMFS) and other components of NOAA. The study that resulted in the staff report was initiated by the Associate Administrator for Marine Resources in recognition of the obligation of the Government to prepare for the new responsibility for fisheries management it will soon face under extended jurisdiction.

This paper examines issues and makes recommendations for new policies and for positive and innovative actions to reverse the present undesirable trends in the conservation, management, and development of U.S. marine fisheries resources. The recommendations cover seven major issues which need to be addressed in the context of a 200-mile economic fisheries zone. Certain assumptions have been made to provide a basis for the issues and subsequent recommendations. United States policy, of course, will be consistent with the terms of a U.S.-ratified LOS treaty, and this paper attempts to anticipate what these will be.

Highlights of this discussion paper were presented to the Marine Fishery Advisory Committee (MAFAC) on February 5, 1975, and to the annual meeting of NMFS/State Fish and Wildlife Directors on February 12, 1975. Some changes were made in the paper as a result of the discussions during the meetings. Summaries of the comments made at these two meetings are included in an appendix, as is a report of the Chairman of the Workshop on Extended Fisheries Jurisdiction held as part of the NMFS/State Fish and Wildlife Directors meeting. The paper is presented now to encourage discussion that can lead to an effective national policy in time to meet the urgent requirements facing the Nation. Along with the ongoing review of the National Fisheries Plan, the comments received concerning the principles and actions proposed here should make it possible to prepare the United States for the complex new situation which the country will soon face in respect to management and conservation of domestic and international fisheries.

The proposals made here have not been approved by NOAA or by the Department of Commerce and are intended primarily as a basis for discussion.

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PREAMBLE

Sometime in 1975 or early 1976, either by treaty or by unilateral action, the United States will probably assume some form of extended jurisdiction over the coastal fisheries resources out to 200 nautical miles from its shores.

It will be more satisfactory to implement the changes necessary for extended jurisdiction if they result from the Law of the Sea Conference which will reconvene in the spring of 1975; but if such agreement is not reached, most nations will probably assume the authority by their own action. In either case, the coastal nations of the world will enter a new and important phase in the management of the living resources of the sea.

The significance to the United States of extended jurisdiction can be grasped when one recognizes that the enormously increased areas over which the nation will exercise exclusive fisheries jurisdiction contain the largest fisheries resources of any nation in the world. At the same time, the United States will assume the heavy responsibility for protecting and utilizing these resources. While most countries recognize the importance of marine fish to their national economy and diet, there is a tendency to underrate their significance in the United States. In fact, fish are important to the United States. The total use of fish and fish products was around 73 pounds (live weight) per capita in 1972 . This includes around 12.5 pounds (edible weight), or about 33.5 pounds (live

weight) of commercially caught seafood, about 32.5 pounds from fish meal used in poultry and animal husbandry, and about 7.5 pounds from recreational fishing. Many nations traditionally regarded as "fish-eating" countries do not consume this much. Another strong indicator of the importance of fish to our nation is that the United States leads the world as an importer of fisheries products.

Many of our coastal communities were settled because an abundant supply of fish was available; in a substantial number of these communities, fishing is still a major economic factor. In Alaska, for example, fishing is still the most important industry; in Maine, it ranks sixth. In Gloucester, Massachusetts, fisheries or fisheries-related activities employ 21 percent of the working population. In many smaller coastal communities fishing is the major source of income; sometimes it is the only income. The economic impact of recreational fishing is substantial in all coastal resort communities, and states like Florida and Hawaii realize an important amount of their gross product from recreational fishing and supporting industries.

With the imminent imposition of extended jurisdiction, the United States is obligated to re-examine its national policy because for the first time it will be responsible for managing the fisheries resources within a 3- to 200-mile zone. There are both challenge and opportunity here. A strong policy commitment is

needed at the highest levels in Government that fisheries are an important component of our national trust, contributing food and recreation to present and future generations. Such a commitment would have the greatest positive impact on conservation of living marine resources and on U.S. fisheries in the entire history of this Nation. Without such a commitment, whatever efforts are put forward to protect and develop our fisheries resources will be substantially impaired.

SUMMARY

A major change is required in United States ocean fisheries policy. This necessity is a consequence of events which have taken place in this country and around the world in recent years, which have altered domestic and foreign attitudes toward the rights to fisheries resources and their conservation. There has been a growing conviction that existing institutions, both domestic and international, have generally failed to conserve and allocate fisheries resources in an effective manner. The most obvious manifestation of changed world attitudes has been the Law of the Sea Conference, whose preparatory and substantive sessions have occupied governments of most of the nations of the world for five years. Among the most earnestly debated and significant issues discussed at these sessions have been those dealing with the property rights to fisheries resources. At the latest series of meetings, held in Caracas, Venezuela, in the summer of 1974, the issue that came closest to being resolved was that of the width of the territorial sea (12 miles) and the width of the "exclusive economic zone" (to 200 miles^{1/}) within which the coastal nation would have full control over its fisheries resources and responsibility for their conservation and use. The Law of the Sea Conference will convene again in March, 1975, in Geneva. It is hoped that a treaty will be approved there formalizing this consensus; but if agreement cannot be

^{1/} In this report "200 miles" refers to the width of the territorial sea plus the exclusive economic zone.

reached on these issues, it seems certain that the United States (and many other countries) will take unilateral action to create an exclusive economic zone out to 200 miles.

Whether a zone out to 200 miles is created by treaty or by unilateral action, the United States will almost certainly assume the heavy responsibility for the rational use and conservation of a very large and complex fisheries resource. Creation of an exclusive fisheries zone out to 200 miles would place under United States jurisdiction fisheries stocks occupying approximately 2,222,000 square nautical miles of continental shelf and slope and the overlying water.^{2/} These have an annual potential production of at least 18 billion pounds of fish for food and recreation, or about 10 percent of the total estimated world production. Fishing these resources are hundreds of thousands of American commercial and recreational fishermen as well as fleets of many foreign nations.

Even if world events did not oblige the United States to take a significant new direction in ocean fisheries policy, including the creation of management machinery that has not existed before, the increasing pressures created by inadequacies in domestic and international fisheries management and conservation would probably very soon force the Nation to make considerable changes in policy and practice in this field. These inadequacies can be characterized as a lack of centralized policy for fisheries management and a lack of

^{2/} This study did not consider continental shelf fisheries resources beyond 200 miles (e.g., king and Tanner crabs), recognizing that any management plan for continental shelf resources within 200 miles would be applicable to the same resources outside 200 miles.

coordinated, effective machinery for management action. This is a consequence of the historical background of United States practice whereby the states were given responsibility and authority for fisheries management out to the limit of territorial waters, the Federal Government having no authority except where international fisheries are involved. The fragmentation of management and the general lack of cooperation among states for the regulation of fish stocks that cross state borders have made it difficult to implement effective and viable management programs within state waters.

Moreover, it has been a tradition in this country that marine fish resources are available to all, with the result that no limit could be placed on the number of boats allowed to engage in a fishery. The inevitable result has been overexploitation and overcapitalization, in many cases seriously damaging the stocks biologically and wasting labor and financial resources by allowing unlimited effort to be imposed. Other natural resources have not had this handicap in the United States, nor is this practice common in many of the other principal fishing nations. It will be necessary sooner or later to alter the system; and at a time when the United States is being obliged to make significant changes in its national policies regarding fisheries, an unprecedented opportunity is offered to make the change now.

In the field of international fisheries conservation, the United States has relied on international commissions and bilateral agreements to control fishing and to protect stocks. To varying degrees,

none of these arrangements has been fully satisfactory, principally because insufficient authority has been given to the management bodies. As a consequence some fish stocks have been damaged--in some cases perhaps irreparably. The inability of the United States to control effectively the activities of foreign fleets off its shores also has made attempts to manage domestic fishermen much more difficult. American fishermen argue--with considerable merit--that they should not be limited in their activities when foreign fishermen are able to operate on the same stocks in a relatively unrestricted manner. The mere presence of foreign fishermen within 12 miles of U.S. shores has been a serious irritant and has become a major issue in many coastal areas of the United States.

Recommended policies

To establish the required machinery for Federal management of fisheries in the exclusive economic zone (beyond territorial waters) and to overcome the damaging deficiencies in the existing system of ocean fisheries management, the following national policies are recommended:

A. The Federal Government will have the primary responsibility for management of fisheries in the 3- to 200-mile zone.^{3/} This will be undertaken with the fullest possible participation and cooperation of the states, recreational and commercial interests, other special interest groups, and the general public.

^{3/} See footnote #2.

B. Management programs will be developed and implemented by the most localized political entity with sufficient competence and jurisdiction, so that local social and economic considerations are fully recognized in the management actions, consistent with sound biological considerations and national priorities and policies.

C. User or consumer groups with interest or concern will advise government on fisheries management policy.

D. The United States will control access to fisheries resources in the 3- to 200-mile economic fisheries zone ^{4/} and to anadromous fish resources under U.S. jurisdiction.

E. The Federal Government will allocate fish stocks among domestic and foreign users for the benefit of the United States, under the concept of optimum utilization of the total biomass in each ocean region (i.e., taking into account biological, economic, and social factors).

F. The United States will encourage expansion of its domestic recreational and commercial fishing industries to the extent that it is in the national interest and economically efficient to do so.

G. The United States will facilitate the access of U.S. distant-water fleets into the economic zone of other countries.

H. The U.S. Government will provide assistance to displaced U.S. distant-water fishing fleets.

I. Present international fisheries institutional arrangements will be altered or abolished; new ones created will have different operating principles.

4/ See footnote #2

J. The Federal Government will be responsible for enforcement of fisheries regulations developed under exclusive jurisdiction and will utilize the services of the states as appropriate.

K. The Federal Government will create a national fisheries management regime featuring strong and active state cooperation and partnership.

Benefits from the proposed policy

The United States should derive significant gains from the new regime that would result from suggested changes in fisheries policy.

First, the Nation would assume control over the largest and most valuable fisheries resources in the world. More foreign fishing is conducted off U.S. shores than off those of any other nation, and foreign fishermen take over half the fish caught in the area that would become the U.S. 200-mile exclusive economic zone. With exclusive jurisdiction will come the authority to decide whether domestic or foreign fishermen can harvest the fish.

Second, the new regime will greatly improve the ability to conserve recreational and commercial fisheries stocks and to derive the maximum benefit from them for the citizens of the United States. Only with the full authority that will result from the United States assuming full jurisdiction over the resources can fishing effort be controlled, and this is a fundamental requirement of effective conservation management. The proposed management regime features strong state-Federal cooperation and partnership.

Third, the new system of management will improve the economic viability of the U.S. commercial fishing industry. With orderly regimes for conserving stocks, resolving conflicts, and controlling access and allocation, the industry's ability to attract capital for new investment will be strengthened.

Fourth, by limiting entry in some overexploited and overcapitalized fisheries, the United States should realize a net economic gain from the reduction of excess fishing effort.

Two fundamental changes from present practice and policy are proposed here: (1) recognition that the common property principle in fisheries resource management is obsolete and of the need to control access and allocation in at least the major marine fisheries, and (2) the assumption of authority by the Federal Government for management of fisheries that remain predominantly outside territorial waters. This paper recommends policies and actions to accomplish these changes.

INTRODUCTION

Since the turn of the century there has been a rapid increase in the utilization of living resources of the oceans; during the past 70 years the worldwide harvest of marine fishes has increased fifteen-fold, the current catch being about 70 million metric tons. The potential maximum annual sustained yield of traditional fisheries resources from the oceans is now estimated to be about 100 to 150 million metric tons; the upper limits of this sustainable yield will probably be reached before the year 2000.

Historically, use of the oceans' fisheries resources has been governed by the doctrine of "freedom of the seas," a concept which makes the ocean fish resources available to everyone having access to the ocean and having the technological capability of exploiting the fish. In an era when fisheries resources were not heavily exploited this principle worked relatively well; there were sufficient fish to satisfy the needs of all interested parties, and conflicts between nations were less frequent. In recent decades, however, and in many parts of the world ocean, too many fishing vessels have worked on the same resources at the same time. The effect has been serious depletion of certain valuable fisheries resources, with a threat of still further depletion, and of economic inefficiency from overcapitalization.

After World War II, foreign fleets began harvesting marine resources off the continental United States and Alaska in a substantial way. This exploitation has increased dramatically in the last

ten years and has finally focused attention on a major United States problem: our inability to manage effectively the fisheries resources off our own coast, whether they are exploited by American or foreign fishermen. An important aspect of this situation is that the Federal Government has had almost no role or authority in the management and conservation of fisheries and fisheries resources. This is in contrast to the strong leadership role exerted by the governments of some other major fishing nations, such as Canada. Further, by espousing the common property principle at the international level, it has been difficult for the United States to alter this doctrine at the domestic level.

Although various international arrangements have partly resolved problems and issues which confronted the world's fishing nations during the last two decades, it is becoming more apparent that in the future these institutions will be less able to cope with increasing numbers of entrants and increased fishing pressure, because they are (1) unable to insure optimum production of the resource, (2) increasingly ineffective in allocating or controlling catch and effort, (3) incapable of resolving major issues among user groups, (4) unable to make the timely management decisions required to achieve conservation goals, (5) unable to assure full compliance with negotiated agreements, and (6) not constituted to deal with major social and economic considerations.

The failure of the doctrine of freedom of access which now governs ocean fisheries activities requires that a new fisheries regime be

established. It is to this end that the United Nations-sponsored Law of the Sea Conference has been working. At the Caracas session in 1974 there evolved a general consensus among nations that some form of extended fisheries jurisdiction will become a part of the Law of the Sea fisheries convention. In the past the United States has opposed extended fisheries jurisdiction, although the waters above the shelf are the most productive in the world. This position, however, was changed at Caracas, in part due to the growing conviction that a much higher degree of authority must be exercised over the fisheries, and that this can be best achieved by granting the coastal states rights to and responsibilities for the resource.

Since the United States Federal Government will be obligated to assume responsibility for management of fisheries resources outside state territorial limits, a new mechanism will have to be created. At the same time the opportunity can be grasped to eliminate another major deficiency of past arrangements: the lack of centralized responsibility and authority for fisheries management. It is not proposed to preempt state's rights to manage fisheries within their territorial waters, but the Federal Government can provide an effective management mechanism for fisheries which come under its jurisdiction that will mesh with the management of the states and the surviving international regimes.

It must be emphasized that to establish this effective management mechanism presents a formidable challenge to both the Federal and the state governments. Management of fisheries on the scale that is

needed and is envisioned in this report has not yet been attempted anywhere. Innovations in concepts, organization, and procedures will be required. Only by understanding and solving these issues can a successful management regime be achieved. It cannot be over-emphasized that two fundamental changes from present practice and policy are proposed here: (1) the removal of fish stocks from common ownership, which involves the limitation of access (when necessary) to the right to engage in marine fishing, and (2) the assumption of authority by the Federal Government for management of fisheries that remain predominantly outside the territorial limit.

MANAGEMENT OF COASTAL FISHERIES UNDER EXCLUSIVE FISHERIES JURISDICTION

Under extended fisheries jurisdiction the United States will have its first real opportunity to deal comprehensively with the problems of its marine fisheries. However, it will not be possible to accomplish this unless exclusive rights to the resource are secured. This control must include authority to allocate rights to exploit the resource and to limit such rights in accordance with carefully devised biological, economic, and social principles. Such an ocean fisheries regime will move the United States from the traditional but outmoded "freedom of access" principle which has been a major deterrent to successful fisheries conservation and management.

The institution of a rational management plan for United States marine fisheries is one of the major goals of the National Fisheries Plan which is now under review throughout the country. When completed it will offer a basis for the future of the nation's marine fisheries. The purpose and goals of the Plan were used as overall guidelines in considering the specific issues addressed in this report. They cover the need to restore, protect, and enhance U.S. marine fisheries resources; to encourage healthy fisheries industries; and to provide for future national needs for fisheries recreation and fisheries products.

Assumptions

In considering the nature of a new U.S. fisheries management mechanism the following assumptions were made:

1. By the end of calendar year 1975, the United States will have responsibility for a 200-mile exclusive economic fisheries zone, and jurisdiction over its anadromous fish in the ocean beyond 200-miles.

2. Fishing operations of U.S. distant-water fishermen for shrimp and some other species will be controlled by coastal nations, and those for tuna will be controlled by a combination of the coastal nations and regional organizations.

3. The United States will permit some foreign fishing in its exclusive economic zone, and will be able to collect fees or rent.

4. The goal in fisheries management will be optimum yield of the total biomass in each ocean region; this will include consideration of recreational fishing interests.

5. The Federal Government will have primary responsibility for regulation of U.S. fishermen and management of the living resources that remain primarily within the 200-mile economic zone and outside state territorial waters.

6. NOAA is the Federal agency which will have this responsibility.

In Assumption 4, the definition of optimum yield is considered to mean utilizing fisheries resources for the greatest biological, ecological, economic, and social benefits to the nation over time. The determination of maximum sustainable yield (MSY) will continue to be a major requirement in management, but it will often be desirable to deviate from MSY because of non-biological considerations; i.e., economic, social, or aesthetic factors which may need to be considered. These too, are not fixed, but may vary over time by region and species.

Management for optimum yield, therefore, is a continuing process of establishing and reevaluating goals through consideration of all aspects of the national interest and the use of the best available techniques to achieve these goals.

Management for optimum benefit to the nation must give equitable recognition to all user groups--recreational and commercial fishermen, processors, consumers, and others. It must recognize that at times regional interests and needs should be given at least equal consideration to national interest. Further, while the optimum benefit to this nation is the primary concern, the needs of other nations must also be taken into account, adhering to the long tradition of United States policy and practice, and in accordance with principles which are expected to be expressed in a Law of the Sea treaty. These considerations may in some cases result in a decision to allocate fisheries resources to foreign fishermen, but such a decision should be the result of a full evaluation of the benefits to this country of all reasonable alternatives.

The use of the term "total biomass" is interpreted to mean that management decisions must take into consideration the possible effects on all living organisms in the specific ocean area.

In Assumption 5 (that the Federal Government will have the primary responsibility within 200-miles but outside territorial waters), it is concluded that if the Federal Government has exclusive jurisdictional authority beyond the territorial sea, it must have the responsibility

to determine the most effective mechanisms for regulation and management in the extended zone. This may include heavy reliance on state and regional structures, but the Federal Government will have the responsibility to ensure that the mechanisms work effectively.

Assumption 5 involves policy and judicial decisions, including the question whether the Federal Government will have responsibility for a 3- to 200-mile or a 12- to 200-mile zone, if international agreement or U.S. unilateral decision extends territorial waters. The legal questions (such as the impact of an international treaty establishing a 12-mile territorial sea) and the jurisdictional issues (such as the conflict in extending state boundaries) cannot be resolved here. Nevertheless, the principles presented here would be substantially unchanged if national policy dictated that Federal control was limited to the 12- to 200-mile zone.

Assumption 6, concerning NOAA's regulatory and managerial role does not imply that NOAA would assume sole responsibility and authority for fisheries management. Obviously there are important roles for other Federal agencies, as noted in Issue 6, page 46. Also, because the fisheries do not fit nicely into arbitrary mileage zones for certain stocks, there must be a significant sharing of responsibility with state and regional agencies and with neighboring nations. The assumption, therefore, is that NOAA will assume the focal but not sole role.

Issues

In the context of the assumptions listed above, the report focuses on seven basic issues.

1. What should be the roles of the Federal Government and state governments in the management and development of fisheries resources? What should be the roles of the commercial industry, the recreational industry, and the general public?

2. On what bases and under what conditions will access to the resource be granted to domestic and foreign fleets?

3. Should the Federal Government assist the U.S. commercial fishing industry to replace foreign fishing off the United States? Is it worthwhile encouraging the expansion of the U.S. fishing fleets, or should we allow foreign fleets to catch the fish?

4. What assistance should the U.S. Government give (a) to facilitate the access of U.S. distant-water fleets into the economic zones of other countries and (b) to displaced U.S. distant-water fleets?

5. What should be the role of international institutional arrangements?

6. How should enforcement and surveillance be conducted, and what should be the roles of Federal and state agencies in these activities?

7. What type of management organization is needed to implement the expanded responsibilities under extended jurisdiction?

ISSUE 1: ROLES

What should be the roles of the Federal Government and state governments in the management and development of fisheries resources? What should be the roles of the commercial industry, the recreational industry, and the general public?

Present status:

Management of fisheries in the United States is exercised primarily by the states. The Federal Government assists in research and in advisory and coordinating activities; it engages in certain specific fisheries restoration and management activities in waters under Federal jurisdiction; it cooperates with the states in other waters where national interest is involved. The Federal Government develops and disseminates knowledge about fisheries resources for international negotiations and for use in cooperative State-Federal management programs. It collaborates in the conservation of species shared with other nations through international commissions and bilateral agreements.

In 1966, the United States adopted a fisheries zone contiguous to the territorial sea, which extended Federal fisheries jurisdiction out to 9 nautical miles from the territorial sea. Since the United States has no legislation to regulate fisheries in this contiguous fisheries zone (although Congress has the constitutional authority to enact such legislation), the only Federal action has been to exclude or regulate foreign fishing vessels in this area. Beyond 12 miles, the United States has no jurisdiction over foreign fishermen, except as provided by international agreements.

The Submerged Lands Act of 1953 vested in the coastal states full responsibility with certain reservations for management of fisheries resources within their territorial sea, which has generally been assumed to mean out to 3 nautical miles from the ^{5/}coastline. The states also may exercise jurisdiction over their own citizens in fisheries activities occurring beyond the territorial limits of the states as long as it does not conflict with Federal law.

When Congress sought to establish a comprehensive national policy for fisheries and wildlife by enacting the Fish and Wildlife Act of 1956, it did not increase Federal authority to manage and regulate fisheries. This restraint upon the Federal authority has handicapped management programs and it will be necessary to enact new laws in order for the Federal Government to fulfill the obligations which will come with extended fisheries jurisdiction. ^{6/}These weaknesses were recognized at least as far back as 1945, and subsequently in the Report of the Commission on Marine Science, Engineering and Resources; in the first two annual reports of the National Advisory Committee on Oceans and Atmosphere, and in numerous special studies, books, and articles dealing with this subject.

^{5/} The issue as to whether or not the jurisdiction of Texas and Florida extends to fishing by foreign nationals in the Gulf of Mexico out to 9 nautical miles is before the Supreme Court.

^{6/} "Fishery Resources of the United States," Sen. Doc. No. 51, 79th Congress, 1st Sess. (1945), Committee on Commerce, pg 132.

With the exception of the Marine Mammal Protection Act of 1972 and the Endangered Species Act of 1973, Congress has not deemed it necessary to provide greater authority for the Federal Government over the fisheries resources within the 3-mile territorial sea, although there is no constitutional reason why it cannot do so.

Suggested Policy

A. THE FEDERAL GOVERNMENT WILL HAVE THE PRIMARY RESPONSIBILITY FOR MANAGEMENT OF FISHERIES IN THE 3- TO 200-MILE ZONE. THIS WILL BE UNDERTAKEN WITH THE FULLEST POSSIBLE PARTICIPATION AND COOPERATION OF THE STATES, RECREATIONAL AND COMMERCIAL INTERESTS, OTHER SPECIAL INTEREST GROUPS, AND THE GENERAL PUBLIC.

Recommendations to implement policy:

1. The Federal Government should establish regulations for domestic and foreign fisheries within the 3- to 200-mile zone, and for fisheries for anadromous species beyond the 200-mile zone. Such regulations, based on the best data and analyses available, should do one or more of the following:

- a. Prevent continued overfishing, provide for restoration of overfished stocks and enhance others, taking into account the optimum yield of the total biomass.
- b. Provide a climate for viable and efficient commercial fisheries.
- c. Recognize the importance and consider the needs of recreational fishing.
- d. Preserve U.S. options in the use of fisheries resources for future generations.

Suggested Policy

B. MANAGEMENT PROGRAMS WILL BE DEVELOPED AND IMPLEMENTED BY THE MOST LOCALIZED POLITICAL ENTITY WITH SUFFICIENT COMPETENCE AND JURISDICTION, SO THAT LOCAL SOCIAL AND ECONOMIC CONSIDERATIONS ARE FULLY RECOGNIZED IN THE MANAGEMENT ACTIONS, CONSISTENT WITH SOUND BIOLOGICAL CONSIDERATIONS AND NATIONAL PRIORITIES AND POLICIES.

These management entities could be regions, states, or tribes. In most instances, however, the lowest effective management entity will be several states working together, regional bodies, or the Federal Government.

Recommendations to implement policy:

1. Existing State-Federal Regional Councils ^{7/} devoted to fostering cooperative fisheries management plans should be used as models for developing joint management between the coastal state and Federal governments.

2. A system of Regional Marine Fisheries Councils and a National Fisheries Advisory Board (NFAB) should be organized to assist in development and implementation of plans and policies (See pg.62 for detailed discussions).

3. For fisheries and fisheries resources which occur predominantly within the jurisdiction of a single state (i.e., within 3 miles of the coastline) the management responsibility should remain with the state. Such fisheries are referred to as "Category A" (see Figure 1).

4. For fisheries resources which occur predominantly within 3 miles but are distributed or migrate across two or more state boundaries, or resources which seasonally migrate between state and Federal jurisdiction, the Regional Marine Fisheries Council should develop management policy and provide for its implementation, subject to Federal intercession only if the states concerned cannot reach agreement on such a policy. These fisheries are referred to as

^{7/} Under the present State/Federal Fisheries Management Program in the National Marine Fisheries Service, State/Federal Regional Councils have been organized, consisting of the top fisheries Administrator from each state in the Region, and the Regional Director of NMFS. These Councils have the responsibility to identify fisheries requiring management, in priority order, to develop management plans, and to recommend implementation of these plans to the appropriate state or Federal agency. The composition and role of Regional Marine Fisheries Councils are discussed in more detail under Issue #7, page 62.

"Category B" (see Figure 2). In the event of lack of effective joint state programs, the Federal Government will first act as a mediator, then as an arbitrator. If, after a reasonable period (say, 5 years), such mediation-arbitration does not produce consensus, the Federal Government may, upon recommendation of the appropriate Regional Fisheries Council, assume the management responsibility.

5. For fisheries resources which occur predominantly within the 200-mile economic zone and outside state territorial waters, or fisheries (either domestic or foreign) which are conducted predominantly beyond state jurisdiction, the Federal Government should be vested with the management responsibility, but should rely upon Regional Marine Fisheries Councils for cooperation, consultation, and advice. These fisheries are referred to as "Category C" (Figure 3).

Management programs for Category C fisheries recommended by the the Regional Councils may be implemented by the Councils through promulgation of regulations by the Federal Government. The Federal Government should reserve the right to exercise its management prerogative independently when programs recommended by the Councils are not achieving their objectives, or are not consistent with national fisheries policy, as determined by the Federal fisheries authority after appropriate public discussions and upon recommendation of the National Fisheries Advisory Board (see page 68).

6. For anadromous fish species the management responsibility and implementation should remain with the host state or states, subject to Federal intercession only if the states concerned cannot reach agreement, or if such management programs are subject to bilateral agreements or the regulations of international commissions. These fisheries are referred to as "Category D." (See Fig. 4).

7. The Federal Government may provide monetary assistance from management fees to permit non-Federal entities to conduct acceptable fisheries programs in research, management, and enforcement.

8. Criteria should be developed to establish priorities for implementation of management schemes for each fishery.

These criteria would cover such factors as (a) status of the stocks, (b) value of the fishery, (c) gains to be expected from implementation of a sound management scheme, (d) national priorities, and (e) cost of management.

9. Management authority resting with the Federal Government may be delegated to the states when:

a. A state has demonstrated the ability, interest, and resources to regulate the fishery. If foreign fishing takes place, the Federal role (besides controlling foreign fishing) would be to monitor the management plan to ensure that:

(1) It is an effective plan which conforms to national policies and principles.

(2) There is no discrimination against non-resident domestic fishermen either in the basic regulations or in enforcement.

b. It has been demonstrated that two or more states can effectively regulate the fishery.

10. High Seas pelagic species, principally tuna, even when they occur within the U.S. 200-mile zone, will remain under the authority of international fisheries management regimes (page 43). These fisheries are referred to as Category E (Fig. 5.)

Rationale

Whether a fishery is under Federal, regional, or state management, all possible use should be made of fisheries agencies in the region,

Figure 1. --

CATEGORY "A." FISHERIES RESOURCES

WITHIN ONE STATE'S WATERS

State management only

**Figure 2. -- CATEGORY "B." FISHERIES RESOURCES MIGRATING
ACROSS STATE BOUNDARIES
-- BUT MOSTLY WITHIN 3-MILES**

Joint management by states with federal assistance

Figure 3. -- **CATEGORY "C." FISHERIES RESOURCES
PREDOMINANTLY BEYOND 3 MILES**

Federal management with state advice
Possible state delegation

Figure 4. --

CATEGORY "D." SALMON FISHERIES

- State management within 3 miles
- Federal management beyond 3 miles and role in international agreements (*In accordance with LOS*)

Figure 5. -- CATEGORY "E." FISHERIES HIGH SEAS PELAGIC
(E.G., TUNA)

International Regimes

particularly the results of their research. To this end, the Federal Government may provide financial support to state fisheries activities which bear on management, even when the management responsibility rests with the Federal Government.

While the states would be encouraged to exert a strong advisory function in respect to foreign fishing activities, through their individual officials and through the Regional Marine Fisheries Councils, the Federal Government would be the only entity which would manage foreign fisheries.

This approach (1) recognizes states' rights within areas of state jurisdiction, (2) recognizes and relies upon state competence regarding fisheries resources, both within and beyond their jurisdiction, (3) provides for Federal assistance in overcoming interstate conflicts over a resource which occurs in more than one area of jurisdiction, (4) clearly defines the areas of jurisdiction of the states and the Federal Government without fracturing the management of individual stocks, (5) provides for application of principles and policies of a national character, and (6) vests the management prerogative and responsibility for individual stocks in single management entities.

Suggested Policy

C. USER OR CONSUMER GROUPS WITH INTEREST OR CONCERN WILL ADVISE GOVERNMENT ON FISHERIES MANAGEMENT POLICY.

The U.S. commercial and recreational fishing industries are strongly affected by management regulations. In addition, the general public, especially representatives of conservation and consumer interest groups, have an interest in the management and development of fisheries resources.

Recommendations to implement policy:

1. Formal advisory committees should be established to provide advice and consultation to the Federal management authority and the Regional Councils. The advisory committees should be representative of the commercial and recreational fishing and general public interests of the region (see also pg. 65).

2. The Marine Fisheries Advisory Committee (MAFAC) might provide a national advisory role.

3. Strong efforts should be made by the regional Federal management authority and the Regional Councils to solicit the advice and cooperation of those affected, through open hearings and other appropriate mechanisms.

Rationale

Commercial and recreational fisheries groups can provide valuable advice on the validity or practicality of proposed management schemes. Provision for advice from such groups is considered especially appropriate under the optimum yield concept of management, inasmuch as resource management and development actions will often have broad national public impact.

The cooperation of the various segments of the fishing industry and other interest groups will be essential in the implementation of management schemes. This cooperation includes the submission of data essential for stock assessment and provides information regarding the financial and technical aspects of fishing operations.

ISSUE 2: ACCESS TO THE RESOURCE

On what basis and under what conditions will access to the resource be granted to domestic and foreign fishermen?

Present Status:

The United States is primarily a coastal fishing nation since approximately 85 percent of the catch of American commercial fishermen is taken within 200 miles of the U.S. coast. However, this harvest, plus the recreational fishing catch, amounts to less than 50 percent of the total fish taken in U.S. coastal waters, the remainder being taken by foreign fishermen.

The U.S. commercial fishing industry often has been reluctant to adopt new technologies and to enter new fisheries, in part because of the uncertainties faced with regard to available supplies of fish. This reluctance derives, among other things, from treating fisheries as a common property resource. Under the common property principle, fisheries resources are not associated with clearly defined and enforceable property rights. Access to a resource is open, so that it may be exploited by all who wish to engage in fishing. As a fishery develops and the market for the product expands, more effort is attracted to the industry. Up to a certain point, progressively larger yields can be harvested with greater amounts of fishing effort, but continuous increases in effort beyond that required to harvest the maximum sustainable yield result in diminishing catches. In the absence of control, entry into a fishery continues as long as

there is any profit to be made and sufficient demand exists for a species; thus, depletion is inevitable.

Even if overfishing does not take place, there are sometimes undesirable economic consequences to free access. More vessels tend to be attracted to the industry than are necessary to harvest the available resource. Excessive capital and labor enter the fishery even though greater benefits might be derived if applied to other sectors of the economy. As excess fishing effort is applied, the cost per unit of production increases. The total revenues are shared by more and more producers until no profit remains to be distributed, and revenues equal costs. When fisheries reach this point, economic efficiency would be improved by the use of less fishing effort. In economic terms, the most efficient operation of the fishery occurs when the maximum net economic revenue is produced. The economic rent which results from the limitation of entry can be distributed to the fishermen, to the consumer, to the government from taxes, or to some combination of these. And in most circumstances, the capital and labor prohibited from participating in the fishery could be employed beneficially in other forms of activity.

The inability of present U.S. management machinery to limit entry into coastal fisheries has resulted in overexploitation, overcapitalization, and user conflicts, such as in the salmon fishery of the States of Alaska and the Pacific Northwest and the lobster fishery of the State of Maine.

Suggested Policy

D. THE UNITED STATES WILL CONTROL ACCESS TO FISHERIES RESOURCES IN THE 3- TO 200-MILE ECONOMIC FISHERIES ZONE AND TO ANADROMOUS FISH RESOURCES UNDER U.S. JURISDICTION. ^{8/}

E. THE FEDERAL GOVERNMENT WILL ALLOCATE FISH STOCKS AMONG DOMESTIC AND FOREIGN USERS FOR THE BENEFIT OF THE UNITED STATES, UNDER THE CONCEPT OF OPTIMUM YIELD OF THE TOTAL BIOMASS IN EACH OCEAN REGION (i.e., TAKING INTO ACCOUNT BIOLOGICAL, ECONOMIC, AND SOCIAL FACTORS).

There are some segments of the U.S. fisheries which view foreign fishing as their only real problem and therefore conclude that all foreign fishing must be terminated as soon as extended jurisdiction becomes a reality. This would not be in the national interest at present. It is certain that domestic fishermen will not be able immediately to utilize all of the available fish stocks within the economic zone. It is also probable that domestic fishermen will have no immediate or even long-term interest in fishing certain stocks, because they have little commercial value. To the extent that this is true it will be desirable to allow foreign fishing in the U.S. exclusive zone, subject to regulation and to the payment of license fees and perhaps other charges.

^{8/} See footnote #2, page vi.

Recommendations to implement policies:

1. A management scheme should be established for each significant fishery that would provide for licensing, leasing, auctioning, or otherwise allocating limited fishing rights (limited entry).

Management plans should include a provision for collection of revenues, in the form of license fees, rent, or both. These revenues would be placed in a revolving fund to offset management costs. Any excess above this would go into the public treasury.

Not all fisheries will need to be managed, or to be managed to the same degree, and management plans will vary in complexity and priority of implementation; many fisheries may not require management, but only monitoring.

2. The management scheme must recognize that certain stocks or portions of stocks have recreational value.

Recreational fishing has considerable importance to the United States and this will continue to grow. The goals of management for a recreational fishery may be at variance with those of the commercial industry and these may need to be accommodated under the principle of optimum yield.

3. Preferential access should be given the domestic industry to fisheries resources within the 200-mile zone to the extent it is economically efficient to do so and in the national interest.

4. Provision must be made to recognize that under optimum yield certain resources may not be fully utilized because their harvesting would adversely affect other stocks.

For example, the incidental catch of haddock made with the catches of the prime-target species of red and silver hake has been so large that it was a major factor in the decline in the abundance of haddock; the quota on the directed catch is now zero. The management regime might decide to reduce the catch of hake so that

the haddock can be protected until the stock has been built up to a level where it can again support a domestic fishery.

5. Foreign fleets should be given access to fisheries resources in the 12- to 200-mile zone after the domestic fishermen have been accommodated consistent with recommendations 2 and 3 above, and providing harvestable surpluses of fish remain.

6. In allocating coastal fisheries resources among foreign countries, the United States should conform to provisions which may be included in a treaty emerging from the Law of the Sea Conference. In the absence of any such treaty, the United States should take into consideration the special needs of certain nations and the rights of traditional foreign fisheries.

7. Foreign fleets should be charged fees which will at the least cover their share of the research and management costs, but which may also yield extra revenues. Such fees should conform to stipulations that may be included in a LOS treaty.

As a means of encouraging U.S. fishermen, consideration might be given to levy higher fees on foreign fishermen than on domestic fishermen. This would recognize that enforcement costs would be higher for foreign fishing activities, and that foreign fishermen do not pay taxes in this country.

8. Foreign fleets must comply fully with all requirements and regulations imposed by the U.S. Government, including provision of information required for management purposes.

9. Allocation of resources must be made in such a way as to assure minimum user conflicts among those granted access. Where

gear damage or loss is incurred to U.S. fishermen from foreign fishing activities, there should be provision for full restitution.

Rationale

The above policies and recommendations for domestic and foreign access to fisheries resources in the 3- to 200-mile economic zone are designed to ensure effective and timely decisions for optimizing benefits to the United States, and to protect and conserve fisheries resources for food and recreation. At the same time, these changes should increase the productivity of the U.S. commercial fishing industry by eliminating inefficiencies due to excess capital and labor. To bring this about, some form of allocating limited fishing rights will be required. In the past, allocation has been restricted to total international quotas with free access to all, or to national quotas with free access to this amount by members of the domestic industry. The opportunity is now presented to alter this allocation procedure and to optimize economic and social benefits.

A system to provide for the direct allocation of rights to the use of fisheries resources must determine (1) how the rights will be delimited, (2) on what basis the initial allocation of rights are to be made, and (3) what mechanism will be used to transfer or exchange these rights.

Systems of limited entry employ licensing or leasing mechanisms, of which there are a number of alternatives, including

- (a) Direct licensing of a certain number of vessels in each fishery, with an overall quota but with no specific catch limits placed on the individual vessels.
- (b) Allocation to fishermen of rights to a certain fixed quantity of fish.
- (c) Allocation of a share of the allowable catch (individual shares).

A considerable number of variations of these three basic schemes exist, including a variety of methods which might be used to make the initial allocation of rights. In any event, the rights to fish, however described, would be valuable and marketable as such, providing financial collateral and an improved investment climate for participants in the fishery.

A system of taxes or user fees could be used separately or in combination with any of the above schemes. This would tend to discourage entry to and encourage exit from a fishery by marginal operators.

There are difficulties with all of these approaches. Important considerations include how directly and accurately the scheme regulates the number of fish caught as well as the degree to which incentives exist for efficient production. Some arrangements have the advantage of requiring fewer or less complex administrative decisions, while others may be less costly to enforce. The most

appropriate scheme will depend on the particular conditions existing in each fishery.

In addition to reducing overfishing and overcapitalization, limiting entry into certain fisheries can reduce user conflicts, particularly between commercial and recreational fishermen.

A further consideration in granting access to foreign fishermen would be that the U.S. retain the option to require certain fish harvested by foreign vessels to be delivered to U.S. ports for consumption within the U.S. This, of course, would require new legislation.

ISSUE 3: REPLACEMENT OF FOREIGN FISHING

Should the Federal Government assist industry to replace foreign fishing off the United States; is it worthwhile encouraging the expansion of the U.S. fishing fleets, or should we allow foreign fleets to catch the fish?

Present status:

A number of ongoing programs have provided limited assistance to industry to encourage more productive and competitive operations. To a large degree, however, such programs have been undertaken independent of any comprehensive management scheme for any given fishery. For these reasons they have had limited impact and success.

Financial Assistance Programs:

1. The Fishing Vessel Obligation Guarantee Program provides for the guarantee of loans made to finance or refinance up to 75 percent of the cost for constructing, reconstructing, or reconditioning fishing vessels at least 5 net tons or over.

2. The Fisheries Loan Fund Program provides a source of capital for vessel operators who could not obtain commercial loans at reasonable rates because of the high risk associated with some commercial fishing ventures. However, a moratorium on applications was declared in February 1973, due to the need to establish new regulations.

3. The Capital Construction Fund Program extends tax-deferment privileges to owners of domestic commercial fishing vessels to facilitate the accumulation of capital replacement and expansion

reserves. The fund consists of deposits made by the fishermen into their local financial institutions.

The total annual cost of these three programs to the Federal Government is approximately \$560,000 for program administration; there are no direct subsidies.

Fisheries Development Programs:

1. New England Development Program: The thrust of this program is to develop underutilized species off New England waters as alternatives to the heavily fished species, several of which are severely depleted. This is a joint effort, involving the active support and participation of the industry, state agencies, academia, and NOAA.

2. Pacific Tuna Development Foundation: The South Central Pacific Ocean contains an estimated potential annual harvest of over 100,000 tons of skipjack tuna. Harvesting techniques used in other parts of the world do not appear to be transferable to this region, and a joint industry/government program was established in 1974 to develop new techniques.

3. Alaska pollock: Foreign fleets presently harvest over a million metric tons of pollock in the Bering Sea and the Gulf of Alaska. U.S. companies lack information needed to develop a U.S. pollock fishery, and several companies have agreed on a joint program with the U.S. Government to evaluate the potential of a U.S. fishery and solve logistic, harvesting, and processing problems.

4. Croaker: U.S. companies harvest over 50,000 tons of mixed groundfish annually from the Gulf of Mexico, over 90 percent of which is processed as pet food. Recent interest by Japan in croaker for use in a minced fish product called "surimi" has stimulated expansion of the fishery. The U.S. industry has been provided with an investment analysis of "surimi" as an export product, and detailed resource surveys are presently determining the resource capacity.

There are various service-type activities in NOAA, principally in the National Marine Fisheries Service and the Office of Sea Grant, which help fisheries improve their operations, but which ultimately benefit the consumer. These include the advisory and market news services, economic analyses and profiles, and programs in fisheries product technology.

Several financial assistance programs in the Department of Agriculture, Small Business Administration, Economic Development Administration, the Coastal Plains Regional Commission, etc., are available to give assistance to fishermen, processors, and others.

Suggested Policy

F. THE UNITED STATES WILL ENCOURAGE EXPANSION OF ITS DOMESTIC RECREATIONAL AND COMMERCIAL FISHING INDUSTRIES TO THE EXTENT THAT IT IS IN THE NATIONAL INTEREST AND ECONOMICALLY EFFICIENT TO DO SO.

A 200-mile economic zone and the changes in the institutions which will have to be created to manage it will contribute

significantly toward encouraging the U.S. industry to expand, and will reduce some of the risks associated with long-term investments. Replacing some foreign fleets, and the removal of redundant labor and capital will also contribute to the productivity of U.S. commercial fishermen and processors, increasing their competitive position both domestically and abroad.

Under exclusive fisheries jurisdiction up to 8 billion pounds of fish now taken by foreign fishermen could be available to U.S. fishermen, plus an estimated 4 billion pounds of presently unutilized resources. To the extent that it is in the national interest and economically efficient to do so, the United States should encourage the harvest of these resources by U.S. fishermen. In addition to increasing domestic food production and recreational opportunities, expanded fishing would provide substantial benefit to local communities and regions whose economic base is heavily dependent on the fishing industry. On the other hand, if foreign fleets have a clear competitive advantage, they should be allowed to harvest part or all of the resource; the benefit to the United States would come in the form of fees or taxes, perhaps with the option that part of the catch would be made available to U.S. consumers. When the U.S. industry demonstrates its ability to become competitive, foreign fleets would be gradually phased out.

Recommendations to implement policies:

The Federal Government should:

1. Help create the climate for viable commercial and recreational fishing operations without direct subsidization or long-term financial assistance programs.
2. Provide information about the resources, including their extent and location.
3. Provide appropriate technical and economic information services.

Rationale

The development of new U.S. coastal fisheries by replacing foreign fleets and by exploiting latent or underutilized resources could double the present domestic catch within five to ten years. The most important contributions the Federal Government can make to the domestic fishing industry would be to provide healthy resources and to make it more likely that a profit could be made in exploiting these resources; this will include limiting access where appropriate. In such a climate, excessive competition, overcapitalization, overfishing, and the consequent loss of economic rent will be greatly reduced.

The authority to limit entry into the fisheries will be a fundamental aspect of the management structure under exclusive jurisdiction. And on the other side, whether or not vessel owners enter a particular fishery (either one now carried out by foreign

vessels or one presently under-exploited) will depend on individual decisions as to economic feasibility of the enterprise. Thus, the industry should require little financial assistance and no direct subsidization.

A precondition to U.S. industry investment in the development of a fishery is the availability of certain basic information, such as: (1) the size of the resource and its location, (2) the amount that can be harvested, (3) harvesting techniques, (4) processing techniques, (5) market potential. If information of this sort is available, a rational decision can be made to invest in a given fishery. The Government would collect this information as a part of the fisheries management function and would collate and analyze the data. Development of the fisheries would be a cooperative venture between the Government and industry.

Limited financial assistance services to the industry are recommended if the industry is to make the adjustments necessary to take advantage of the new opportunities which will be open to it. These are ongoing programs provided by statutory authority, and are common to many segments of the Federal Government.

ISSUE 4: DISTANT WATER FISHERMEN

What assistance should the U.S. Government give: (a) to facilitate the access of U.S. distant-water fishermen into the economic zones of other countries, and (b) to displaced U.S. distant-water fishermen.

Present Status:

There have been several areas where access by U.S. fishermen to distant-water fishing grounds has been limited by actions of foreign governments. Some of these problems have been dealt with by specific actions:

The Fishermen's Protective Act (1954)

The Fishermen's Protective Act authorizes the payment of fines, fees, or other direct charges levied against U.S. vessels seized for fishing in waters considered by the United States to be high seas, as well as for certain damages arising from such seizures. The Act was designed primarily for U.S. tuna fishermen seized in alleged violations of the 200-mile claims of Chile, Ecuador, and Peru.

U.S.-Canada Reciprocal Fishing Agreement (1970)

This agreement for reciprocal access reflects the desire of the United States and Canada to recognize traditional fisheries in certain areas off their coasts.

U.S.-Brazil Agreement on the Conservation of Shrimp (1972)

In 1970, Brazil claimed a 200-mile territorial sea and began to harass U.S. shrimp vessels fishing off its northern coast. The United States negotiated access arrangements as part of a conservation agreement temporarily resolving the access problem, yet specifying

that neither the United States nor the Brazilian juridical or Law of the Sea positions were compromised.

Suggested Policy

G. THE UNITED STATES WILL FACILITATE THE ACCESS OF U.S. DISTANT-WATER FLEETS INTO THE ECONOMIC ZONES OF OTHER COUNTRIES.

Recommendations to implement policy:

1. Negotiate access rights for U.S. distant-water fisheries for fishing in the economic zones of other countries.
2. Negotiate reasonable license and other fees for U.S. fishermen, when these are appropriate.
3. Offer U.S. fisheries research and technical assistance.
4. Negotiate reciprocal fishing rights when these are appropriate.
5. Provide opportunity and technical assistance for establishing joint ventures in foreign countries.
6. Establish with other governments an international management scheme for high seas pelagic fish in the context of whatever regime emanates from LOS.

Rationale

These recommended actions would all be taken within the context of an LOS treaty, if one is concluded. The continued access of the U.S. distant-water fleets to the economic zones of other countries will depend upon the policies of the foreign states, the U.S. policy and the adherence to agreements by U.S. fishermen. When it is in the national interest, the Government should take the lead role in

negotiating access for U.S. distant-water fleets.

Policies which would embargo fisheries or non-fisheries products, in an attempt to coerce other countries to continue access for U.S. distant-water fishermen, are not generally recommended. It is also not deemed appropriate to pay fees which might be levied by other countries on U.S. fishermen since this likely would encourage imposition of higher fees.

Suggested Policy

H. THE U.S. GOVERNMENT WILL PROVIDE ASSISTANCE TO DISPLACED U.S. DISTANT-WATER FISHING FLEETS.

Recommendations to implement policy:

1. The Government should provide technical and financial assistance for vessel and gear modifications and training to displaced fleets (a) to replace foreign fishing fleets within the U.S. economic zone, (b) to participate in established U.S. domestic fisheries not already over-capitalized, or (c) to develop capability to utilize undeveloped resources.

2. The Government should provide employment retraining assistance for individuals who have lost employment because of either direct or indirect displacement from the fishing zones of other countries.

Rationale

The exclusion of U.S. vessels from foreign economic zones will be a political action uncontrollable by U.S. industry. The extent to which it will occur as a direct result of a LOS treaty cannot be

predicted, but as a normal consequence of development, coastal nations have excluded foreign investors and skilled personnel (including fishermen) when their own nations acquired the necessary skills. Such actions are expected and planned for by foreign investors. Nevertheless, in the event of extreme adjustment problems which may follow extended jurisdiction, and to help ease the resultant financial burden, it may be in the national interest of the United States to assist the industry to evaluate alternate possibilities for business opportunities, both domestically and internationally.

In many instances those affected most by the displacing of U.S. fleets will be fishermen and workers in processing plants. Existing employment retraining assistance programs should be brought to the attention of such people, and if the local situation should demand it, temporary arrangements might be made to provide necessary services.

ISSUE 5: INTERNATIONAL ARRANGEMENTS

What should be the role of international institutional arrangements?

Present status:

The United States is a party to a number of international fisheries commissions, bilateral agreements and fisheries bodies established by the Food and Agriculture Organization (FAO). The FAO bodies have presented few problems for the United States, since they have not been directly involved in the regulation of fish stocks exploited by U.S. fishermen.

Four of the international commissions of which the United States is a member (the International Commission for the Northwest Atlantic Fisheries (ICNAF), the International North Pacific Fisheries Commission (INPFC), the International Pacific Halibut Commission (IPHC), and the International Pacific Salmon Fisheries Commission (IPSFC), have authority chiefly in areas which would fall under the coastal nation authority of the United States or the United States and Canada jointly if jurisdiction were extended to 200 miles. The charge of these organizations has, in general, been limited to (1) investigating the stocks, or where no independent scientific staffs exist, coordinating the research programs and assessing the research findings of scientists from member countries, and (2) proposing and adopting conservation measures.

The first problem limiting effectiveness of the commissions is the fact that they do not have the authority to obligate member

countries to apply conservation measures without their consent. This has prohibited timely and effective regulation in many cases. It has been particularly true of the International North Pacific Fisheries Commission (INPFC) because unanimous agreement of all three countries (U.S., Canada, and Japan) is needed to implement decisions.

The situation regarding the groundfish and related stocks in the North Pacific is generally unsatisfactory in that there is no commission concerned with all the stocks and fisheries participants. The existing commissions have not been able to deal with multi-species interactions, nor have they had the authority over all the harvestors or over the entire range of the species under their purview.

In the North Atlantic, effective conservation by the International Commission for the Northwest Atlantic Fisheries (ICNAF) has been handicapped, since it depends on the agreement of a large number of nations (14) on such matters as size of the total catch, species and national quotas, gear, etc. It is only in the last few years that ICNAF has had better success in conserving stocks, and while this may be attributed to more refined scientific assessment data, it is also due to the threatened withdrawal of the United States and increasing pressures for coastal state jurisdiction.

The United States has supplemented these international commissions with a number of bilateral agreements. Each of these has required concessions on the part of the United States within the

9-mile Contiguous Fisheries Zone (CFZ) in return for the other party's agreement to conservation measures outside 12 miles.

The commissions pertaining to high seas fisheries have presented problems of a different nature for the United States. Of these the Fur Seal and Whaling Convention are special cases. The former is generally considered to be the most successful conservation arrangement the United States is involved in, but the circumstances are different from any other. The Whaling Commission has been less than successful, due to the failure of members to agree on appropriate conservation measures. The International Commission for the Conservation of Atlantic Tuna (ICCAT) is the newest organization; it has been concerned chiefly with assessment and coordination of scientific research, but has taken steps towards establishing a conservation program. The Inter-American Tropical Tuna Commission (IATTC), on the other hand, has implemented important conservation measures and has succeeded in maintaining the yellowfin tuna resource. This Commission faces a number of problems, however. Lesser developed coastal countries are demanding greater shares of the resource and can see no means within the Commission to satisfy their desires. A second problem is one which plagues all the arrangements discussed above, to a greater or lesser extent: overcapitalization and economic waste resulting from the Commissions' inability to address the problem of distribution of catch.

To varying degrees and for differing reasons, most of the international institutional arrangements--fisheries commissions and

bilateral or multilateral agreements--have not been satisfactory in solving the problems faced in protecting fisheries resources or providing fair allocation among users. International commissions have been able to limit the harvest of exploited species, but in no case has direct control over fishing effort been granted. They have been limited in their effectiveness by inadequate terms of reference (e.g., too small a geographic area or too few species, only biological objectives, etc.) and by the difficulties in reaching agreement among member countries, which has usually resulted in actions being "too little or too late." Furthermore, the machinery for resolving differences and for enforcement was inadequate.

Suggested Policy

I. PRESENT INTERNATIONAL FISHERIES INSTITUTIONAL ARRANGEMENTS WILL BE ALTERED OR ABOLISHED; NEW ONES CREATED WILL HAVE DIFFERENT OPERATING PRINCIPLES.

Recommended operating principles: The roles of the various new international institutions that will need to be established under extended fisheries jurisdiction will vary depending on a number of factors.

1. For coastal fisheries resources under full U.S. control
 - a. Fisheries will be managed by the United States in a manner consistent with policies stated elsewhere in this report.

- b. Programs of cooperative scientific research will be maintained with all nations participating in the fisheries.
 - c. International institutions will be used as forums for discussion of (1) access and allocation to foreign nations; (2) fees to be imposed by the United States; (3) foreign violations in cases where disagreement exists; and (4) planning for research, assessment, and statistical programs.
2. Coastal fisheries resources not under full U.S. control
- a. Fisheries will be managed in accord with joint decisions of the coastal nations concerned.
 - b. Programs of cooperative scientific research will be maintained with all nations participating in the fisheries.
3. Anadromous fisheries (salmon) extending beyond 200 miles
- a. Fisheries will be subject to U.S. authority beyond 200 miles unless a different regime is stipulated by LOS.
4. High seas pelagic fisheries

The United States should strive to establish the strongest possible international authority over high seas migratory species (principally tuna). New arrangements should provide for the following:

- a. Membership of all nations fishing the resource in any commission or formal international body.
- b. Establishment of management measures for resources both

inside and outside the 200-mile economic zone, with authority to control access and allocation among all fishing fleets.

- c. Coordination of the enforcement by coastal nations with the international body.
- d. Imposition of license fees and of requirements for reporting catches and fishing effort.
- e. Research by scientists in all parts of the range of the species, including the economic zone of coastal nations, to ensure that the necessary scientific data become available.
- f. Allowance for economic and social as well as biological considerations to be used in setting total allowable catch and catch allocations.

Rationale

Under any proposed form of extended jurisdiction, coastal nations will have full responsibility for management of fish stocks in their economic zone. Existing international institutions are based on the common property principle, but this will be changed. Therefore, international institutions that control fisheries within the 200-mile zone must have greatly altered roles. Agreements which continue should be modified to become essentially forums for discussion; otherwise, national sovereignty would be abrogated. For stocks shared by neighboring nations, bilateral or international bodies for joint

management should be established in accordance with the operating principles listed above, modified by provisions of an LOS treaty.

For tunas, existing commissions will need to be substantially modified to make them effective. The United States will need to pursue vigorously the establishment of strong international regimes for such fisheries.

ISSUE 6: ENFORCEMENT AND SURVEILLANCE

How should enforcement and surveillance be conducted, and what should be the roles of Federal and state agencies in these activities?

Present status:

Enforcement is those activities directly related to enforcing applicable U.S. laws and bilateral or multilateral agreements. Surveillance is those activities directly related to monitoring foreign and U.S. fishing vessels to obtain information essential to effective enforcement and rational management, including (1) numbers and disposition of vessels, (2) methods of fishing, and (3) indices of size and compositions of catches.

NOAA, through the National Marine Fisheries Service and in cooperation with the Coast Guard and the State Department, develops and enforces fisheries regulations required under authority of 20 international fisheries agreements, as well as certain domestic laws. It also polices the activities of foreign fishing fleets in the contiguous fisheries zone and territorial waters, and provides intelligence on foreign fishing fleets off our coasts for enforcement and for international fishing negotiations. The NMFS also enforces the provisions of the Lacey Act, the Black Bass Act, the Marine Mammal Protection Act, and the Endangered Species Act of 1973. The primary concerns of these acts are with importation, exportation, taking, and interstate sale or transportation of affected species.

Suggested Policy

J. THE FEDERAL GOVERNMENT WILL BE RESPONSIBLE FOR ENFORCEMENT OF FISHERIES REGULATIONS DEVELOPED UNDER EXCLUSIVE JURISDICTION, AND WILL UTILIZE THE SERVICES OF THE STATES AS APPROPRIATE.

It is feared by many that the cost for enforcement and surveillance of fisheries regulations following extended jurisdiction may cost more than the value of the fish harvested. However, the cost will be determined to a large degree by the kind of enforcement and surveillance employed.

Under a 200-mile economic zone, the U.S. Coast Guard will have greatly expanded regulatory responsibilities that will include traffic control, policing of marine mining activities, pollution control, as well as fisheries. Conceivably, with these added responsibilities, there are some advantages for the Coast Guard to assume the lead role in fisheries enforcement and surveillance. Since the role of the Coast Guard has not been clearly determined, the recommendations, especially as they apply to Coast Guard and NOAA, are not fully developed.

Recommendations to implement policies:

1. Enforcement of regulations rely heavily on mechanisms such as at-sea and dockside inspections, mandatory reporting, and recordkeeping.

2. Expanded research and development in new and innovative enforcement and surveillance techniques be undertaken.

3. Surveillance (but not enforcement) of foreign fleet activity be achieved largely with mandatory reporting of position and catch data through communication and positioning equipment and remote sensing, which will provide basic information related to position and other data.

4. Authenticity of these reports be verified by surveillance flights, by observers on selected vessels, and by at-sea boardings.

5. Random vessel patrols be conducted to perform at-sea inspections for deterrence effect and to detect the presence of non-licensed vessels.

6. Surveillance of the domestic fleets be made by increased inspection of catches at landing sites, by requiring mandatory minimum data in the form of log books, and by use of advanced technology (e.g., "black boxes").

7. As the agency responsible for the management of the marine fisheries resources, NOAA should develop an effective national enforcement and surveillance program, in cooperation with the Coast Guard and, as appropriate, with the State Department.

: The program should spell out the fisheries enforcement and surveillance requirements, including protection of the U.S. territorial sea from incursions by unauthorized foreign fishing vessels, policing of foreign and U.S. fisheries in the 3- to 200-mile zone, and policing of certain domestic and foreign fisheries beyond 200 miles (e.g., for salmon).

Regulations will vary both in time and by fishery. Establishment of an effective enforcement and surveillance program will require an understanding of fisheries

and a knowledge of present regulations and their effectiveness. The regulations will determine the type and magnitude of enforcement and surveillance required.

8. Legislation should be passed to provide NOAA with the authority to impose civil penalties for violation of fishing regulations.

The prosecution of violations should be quick and equitable, and violators, whether foreign or U.S. citizens, should be prosecuted under civil proceedings when possible.

9. The Coast Guard should complete the ongoing evaluation of its role in enforcement and surveillance activities under a 200-mile economic zone.

The extent to which the Coast Guard's role will differ or be expanded under the 200-mile economic zone needs to be determined as quickly as possible.

10. Military and intelligence agencies should be canvassed to determine their current or future capabilities of providing surveillance information, such as locations of foreign (and perhaps U.S.) vessels in and adjacent to U.S. jurisdiction.

11. NASA should be contacted to determine its capabilities of providing surveillance information, particularly from satellite monitoring.

12. The Department of State should continue its role regarding enforcement upon foreign fisheries as it relates to U.S. foreign policy.

This would include consultation with NOAA, Commerce, Justice, and Coast Guard regarding the degree and possible implications of penalties upon foreign violators.

13. The U.S. Attorneys and the Federal Courts should remain responsible for prosecution and trial of foreign violators of the U.S. contiguous fisheries zone.

It is anticipated that Justice will handle both civil and criminal proceedings against foreign fishermen in the 3- to 200-mile zone. It would also have jurisdiction over criminal proceedings against U.S. fishermen violating Federal regulations in the 3- to 200-mile zone. It is unclear what system would be used in the salmon fisheries beyond 200 miles, until a LOS convention has been agreed upon. It was recommended (see #8 above) that prosecution of civil violations by domestic fishermen would be undertaken by NOAA, or possibly the Coast Guard.

14. The U.S. Customs Service should continue to be involved in initial confiscation/seizure procedures.

This agency also would become involved in the issuance of licences, collection of fees, possible installation of "black boxes," inspection of cargo, and other administrative procedures related to clearance of foreign vessels through selected U.S. ports as a requirement for allowing them to participate in fisheries within the 3- to 200-mile zone. Some of these functions (e.g., fish cargo inspections) would be carried out with the assistance of NOAA fisheries specialists.

15. A formal mechanism should be developed to ensure that all valid interests are given consideration in deciding actions to be taken involving interrelated responsibilities and resources.

A number of Federal responsibilities other than fisheries will be affected by extended jurisdiction, including activities such as pollution control, mineral exploitation, ocean dumping, offshore power or port facilities, and marine sanctuaries.

16. Those states which demonstrate an interest in the management of fisheries beyond their jurisdiction should be encouraged and in some cases financially assisted to participate in joint enforcement of fisheries regulations under Federal deputization.

Rationale

Existing enforcement and surveillance activities cover all fishing areas adjacent to the United States, with a frequency that provides generally good coverage. The expanded responsibilities under extended jurisdiction could be accommodated with a relatively modest increase in costs, provided the regulations are written with the enforcement aspects in mind.

The functions of surveillance and enforcement require different approaches. Most of the surveillance of authorized foreign fleets can be accomplished by requiring daily reports of their position, catch, and other pertinent information. Shore stations can check their position by means of triangulation. Records can then be required of the fishing activities for each vessel, including the total catch and effort expended in any given area. Verification of data can be obtained by surveillance flights and by placing observers on a few of these vessels. It may be necessary to increase surveillance flights for detection and policing of foreign fleets fishing for salmon beyond our 200-mile zone. Surveillance can also be achieved by remote-sensing devices. The cost of these additional functions can be paid by user fees.

The Coast Guard and NOAA have been the Federal agencies primarily involved in the enforcement of regulations on foreign fisheries in and near waters under U.S. jurisdiction, on U.S. fisheries subject to Federal regulations (e.g., tuna and halibut), and on U.S. fisheries subject to international agreements on the high seas. Under exclusive jurisdiction NOAA should continue to assume the lead role to develop and implement, in cooperation with the Coast Guard, the expanded enforcement program.

It will be necessary to study the new role which the Coast Guard might be given under extended jurisdiction, to consider whether it should assume the lead role for all enforcement and surveillance activities outside the territorial sea. However, NOAA should have the principal role in determining the surveillance requirements and the enforcement objectives. As the Federal agency with the greatest fisheries expertise, NOAA should (1) provide to key officials the fisheries enforcement and surveillance data needed for proper management decisions, (2) keep other enforcement agencies informed of developments which affect their responsibilities and activities, and (3) cooperate with the Coast Guard to appraise and improve the enforcement and surveillance systems.

The present cooperative effort should be continued, and Coast Guard patrol units relied upon whenever available, particularly where foreign fisheries or distant offshore patrols are involved. The Coast Guard equipment will presumably be used for other purposes

when not assigned to fisheries duties. It is assumed that additional Coast Guard equipment which will be acquired will have other functions besides fisheries enforcement.

ISSUE 7: MANAGEMENT ORGANIZATION

What type of management organization is needed to implement the expanded responsibilities under extended jurisdiction?

Present status:

Fisheries management in the United States is the responsibility of the states within 3 miles and over their own citizens beyond 3 miles, subject to Federal law; Federal authority is limited to fisheries under international agreements. Consequently, no Federal organization exists which is capable of undertaking the management task which will be placed on the Government under extended fisheries jurisdiction.

The Federal management of marine fisheries that does exist (related primarily to fisheries under international treaty agreements) is focused in NOAA/NMFS; enforcement and surveillance activities are undertaken in cooperation with the Coast Guard. International fisheries negotiations are the responsibility of the Department of State in cooperation with the Department of Commerce.

Since close state and Federal interaction and cooperation will be required under the new management regime, it is well to review briefly the various types of state fisheries organizations that exist.

In some states, one agency is responsible for all fish and game management; other states have an agency responsible for fisheries but not game management; in still others there are separate agencies for marine and freshwater fisheries or for commercial and recreational fisheries. Some fisheries agencies report directly to the Governor,

others to a department head responsible for several agencies. Some state agencies have authority to promulgate fisheries regulations; others must go to their state legislatures. A few coastal states have no authority to cooperate formally with other states in fisheries management activities. Cooperation among states, therefore, is legally as well as practically difficult. Model state legislation is now being prepared by the Council of State Governments, and if this becomes the basis of state policy and action it should eliminate some of these institutional barriers to effective national fisheries management.

In addition to the state fisheries agencies, three inter-state marine fisheries commissions (the Atlantic States Marine Fisheries Commission, the Gulf States Marine Fisheries Commission, and the Pacific Marine Fisheries Commission) have been organized, among other things, to recommend or stimulate coordination of regulations and research activities between two or more states. In addition, the Atlantic and the Gulf States Marine Fisheries Commissions now may be designated by the states concerned to carry out specific fisheries management functions, including regulation. To date, no states have designated either Commission as a regulatory agency, although the Atlantic States Marine Fisheries Commission was used recently as the vehicle to bring about uniform regulations for the northern shrimp among Maine, New Hampshire, and Massachusetts.

Suggested Policy

K. THE FEDERAL GOVERNMENT WILL CREATE A NATIONAL FISHERIES MANAGEMENT REGIME FEATURING STRONG AND ACTIVE STATE COOPERATION AND PARTNERSHIP.

The management of coastal fisheries resources within the context of exclusive fisheries jurisdiction will be a new Federal function. For the first time the Federal Government will assume control of fisheries resources that remain entirely within the 200-mile economic zone and outside state waters. It will need to enter into active cooperation and coordinated management programs with the states and neighboring countries for species which migrate into state territorial waters or into other exclusive zones. These new management functions and associated administrative responsibilities will require the creation of a suitable organization. It is not appropriate in this report to recommend the details of any organizational structure, but in order to address fully the important issues under exclusive fisheries jurisdiction it is essential to consider the Federal organization philosophy, and the various functions an organization would need to assume. Ten basic principles are suggested as guides for a Federal management agency which can fulfill its responsibilities effectively under exclusive fisheries jurisdiction.

The Federal fisheries management agency:

1. Must be the final authority for management of fisheries

between 3 and 200 miles, subject to advice and policy decisions as noted on pages 62 and 68.

If there is to be cohesive, uniform and effective management for fisheries resources there must be one management entity. Logic suggest that this should be a Federal agency that can interact with state agencies, other Federal agencies, and other nations.

2. Must provide protection for those making major policy decisions from improper pressures of user groups.

This means, for example, that a mechanism must be provided to separate major policy decision-making (such as allocation) from the day-to-day operations of the agency, and that the fisheries management and service roles must be separated at the operations level.

3. Must easily interface with state fisheries agencies and those Federal agencies with related responsibilities and interests.

Management under exclusive jurisdiction will be difficult with the best of organizations. Lines of communications will need to be clear.

4. Must facilitate maximum coordination of programs at the state, regional, and Federal levels.

The organization must be capable of obtaining advice and specialized services from state and Federal agencies. The scarcity of competent personnel, funds, and facilities makes such a responsibility of maximum importance.

5. Must permit effective, quick, responsive and flexible decision-making.

The agency must (a) hear the views of the people affected by the regulations, (b) identify the factors to be optimized, (c) evaluate the technical and economic data, including forecasts of alternate courses of action, and (d) make the decisions. Decisions include such things as total catch, allocation of stocks among U.S. user groups, fees or rent, trading of fishing rights, length

of season, type of gear, areas to fish, and shut-off dates for fishing. Sometimes decisions need to be taken within days, or even hours, when lack of action would mean damage to a resource or create severe economic or social problems.

The agency must be flexible enough to delegate all or parts of these tasks to the lowest organizational entity capable of performing them effectively.

6. Must provide for a timely and effective analysis and research system.

Such a system must (a) identify the stocks which require management, (b) determine their population size relative to former years, (c) predict the effect of changes in regulations on the size of the stock and on the catch, (d) predict effects of changes in regulations on earnings of the participating fishermen, and (e) develop various social and economic criteria necessary to optimize harvests.

7. Must provide a comprehensive and effective data system for the stocks to be managed.

This requires timely information on the catch by species and stock, with suitable breakdown into time and area categories. When exploitation is substantial it also requires measures of the amount of fishing effort and size and age composition of the catch. If the catch is near the maximum sustainable level, routine data on economic condition of the fishermen are desirable. For recreational fisheries, information on fishermen satisfaction, access sites, and additional economic and social data may be required.

8. Must provide for credible and efficient enforcement.

Responsibility must be assigned to appropriate jurisdictions, which will establish procedures suitable for inspecting operations, and apprehending and prosecuting violators. This is discussed in more detail under Issue #6.

9. Must provide for a quick and equitable dispute settlement system.

For the most part, the prosecution of violators, whether U.S. citizens or foreign fishermen, should be through civil rather than criminal proceedings. This will make it more likely that the procedures will be uniform, equitable and rapid. Thus, the adjudicatory processes must be separated from enforcement in the organizational structure.

10. Must provide a formal mechanism to receive advice and consultation from user groups. This is discussed in more detail on pages 65 and 68.

Organizational Options

Following its review of the various possible institutional arrangements for a Federal fisheries organization, the Stratton Commission suggested three organizational options which appeared to be acceptable, and which could promote coordination among the states and permit a greater Federal role. These are:

1. Regional compacts for economic development.

This option would require an amendment to the interstate marine fisheries compacts to make the Federal Government a voting member. Decisions of the extended commission could be based on the affirmative vote of the Federal member, plus a majority of the member states. Federal and certain state funds would be placed under the control of the commissions and expended by them directly, or through contracts with the states, or others, in accordance with the national fisheries policies and priorities established by the Federal Government.

2. Federal-state cooperatives modeled after the Federal Water Pollution Control Act.

This would require the states to establish their own fisheries management plans, consistent with Federal

criteria. If they failed to do so, the Federal Government would be authorized to prepare and implement a management plan.

3. Regional compacts with enforcement powers.

This is essentially a combination of Numbers 1 and 2, above.

4. Institutional arrangement considered by the Stratton Commission, but not included in their recommended organizational options, (possibly because there was then no foreseeable opportunity for exclusive Federal fisheries jurisdiction in a wide economic zone) was an approach similar to the Federal jurisdiction over migratory birds, as authorized under the Migratory Bird Treaty Act of July 3, 1918, with amendments. Since an adoption of this arrangement might serve well as the basis for fisheries management, it is worthwhile to describe it.

The hunting and sale of migratory birds are controlled by conventions between the United States and Canada and Mexico. The Act authorizes the Secretary of the Interior to adopt regulations governing the taking of migratory birds, but permits the states to give further protection to these birds.

The regulations list the migratory birds included in the terms of the conventions, prescribe hunting methods and open seasons, set conditions and restrictions for transportation and importation, and place restrictions on possession.

Responsibility for administration of the treaty has been delegated to the Director of the Fish and Wildlife Service, who works in coordination with the states, Canada and Mexico.

Data and surveys on migratory waterfowl are conducted by the Service, with the help of state employees. Enforcement is accomplished by Federal wardens under the Service, assisted by state wardens, many of whom have been deputized as Federal wardens.

The Service meets annually with two types of advisory groups to present the results of their research and to make staff recommendations for regulations for the coming year. In early August, the Service meets with the Flyway Councils, which are comprised of official State government representatives, and with the National Waterfowl Advisory Committee, which represents a broad segment of the public interest plus representatives from the Flyway Councils. Recommendations are made by both advisory groups to the Director of the Service, where they are reviewed and presented to the Secretary of the Interior.

More recently, the National Fisheries Plan has developed a series of options which might be considered in an extended fisheries management regime. Except for one option, which would be a management regime giving states control out to 200 miles, these are essentially similar to the institutional arrangements considered by the Stratton Commission. In all of these, regulation of marine fisheries in the territorial sea would remain the primary responsibility and right of the states.

Recommended Organizational Structure

The option that best satisfies the ten criteria listed on pages 56 to 60 for an effective Federal organization under exclusive fisheries jurisdiction is one that combines the scheme for migratory waterfowl management (through its Flyway Councils and National Waterfowl Advisory Committee) ^{9/} with Option #2 above, which provides Federal authority to assume full management responsibilities if such is deemed necessary. Under this scheme, an approximate equivalent of the National Waterfowl Advisory Committee would be a National Fisheries Advisory Board (NFAB), which is described later. The equivalent to the Flyway Councils would be the Regional Marine Fisheries Councils.

Regional Marine Fisheries Councils

Each Council would be comprised of the chief fisheries officer from each state having membership in the Council, a representative from the appropriate interstate Marine Fisheries Commission, the Federal Regional Fisheries Administrator, and the NMFS Center Director. Each state member and the representative from the Fisheries Commission would have one vote, but the Federal representatives would be nonvoting ex officio members. The chairman

^{9/} For a more comprehensive review of this management scheme, see "The Waterfowl Councils, A Conservation Partnership," Circular 78 U.S. Dept. of Int., F&W Service, 1959.

would be elected by the members to serve one year terms. Each Council would be provided a full-time Executive Director by the Regional Fisheries Administrator. Four Regional Marine Fisheries Councils are proposed:--Atlantic, Gulf, Pacific and Alaska.

The Regional Marine Fisheries Councils would have different management responsibilities within the four kinds of fisheries categories noted on page 14. These fisheries, and the Council responsibilities for each are defined as follows:

1. Category "A" fisheries: Fisheries which are conducted entirely within the boundaries of one state on stocks occurring only in one state. (See Figure 1)

Council responsibilities: None

2. Category "B" fisheries: Fisheries which are conducted predominantly within 3 miles but are distributed across two or more state boundaries, or are prosecuted on resources which migrate between state and Federal jurisdictions (see Figure 2).

Council responsibilities: (see Fig. 6, p. 66)

Develop and provide for the implementation of a management regime for Category "B" fisheries. The Councils would:

- a. Recommend to the Administrator of NOAA the fisheries that should be in Categories "B" or "C".
- b. Identify which Category "B" fisheries require management, in priority order.

- c. Develop management plans for these fisheries, to include research needs, regulations, allocations, access, management fees, etc.
- d. Recommend to the Regional Federal Fisheries Administrator the programs requiring Federal funding.
- e. Exert influence on state governments to implement state management programs for approved Council programs.
- f. Recommend dispersal of Federal funds for approved Council programs.
- g. Recommend Federal intercession to the Administrator of NOAA when it becomes clear that a B or D fishery is not being effectively managed by a state, or states.
- h. Advise the Administrator of NOAA, or the NFAB, on Category "B" fisheries problems that require national attention.
- i. Hold public hearings.
- j. Appoint Regional Technical Committees.

The Technical Committees would act as scientific advisors to the Regional Councils. They would prepare fisheries management plans and recommendations. They would draw on the resources of the state and Federal governments, and on non-government sources. They should be composed of biologists, economists and other technical persons concerned with fisheries management.

k. Appoint Regional Advisory Committees.

Advisory Committees would be created to provide a formal mechanism for the commercial fishing industry, recreational fishing interests, conservationists, and the general public, to have a direct advisory input to the management regime. These committees would advise the Regional Fisheries Administrator, the Regional Councils, and the Technical Committees.

3. Category "C" fisheries: Fisheries which are conducted predominantly beyond state jurisdiction, outside state territorial waters, or on resources on which a significant foreign fishery occurs (see Figure 3).

Council responsibilities: (see Fig. 6, p. 66)

Advise the Regional Fisheries Administrator and the Administrator of NOAA on the management of Category "C" fisheries. The Councils would:

- a. Advise the Regional Federal Fisheries Administrator on those fisheries which are considered to require management, in priority order.
- b. Advise and assist the Federal Government in developing management plans, to include research needs, regulations, domestic/foreign allocations, access, management fees, etc.
- c. Recommend to the Regional Federal Fisheries Administrator those activities which could be undertaken by state or regional organizations.

Figure 6. --

MANAGEMENT ORGANIZATION REGIONAL MARINE FISHERIES COUNCILS (STAFF SELECTION)

COMMITTEES

ADVISORY

- INDUSTRY
- CONSUMER
- CONSERVATIONISTS

TECHNICAL

- BIOLOGICAL
- ECOLOGICAL
- ECONOMIC
- SOCIAL

REGIONAL
COUNCIL

STATE/FEDERAL
MANAGERS

RECOMMENDATIONS

STATE
NOAA
NFAB

- FISHERIES CATEGORIES
- MANAGEMENT PLANS
- MANAGEMENT REGULATIONS
- POLICY

Figure 7. --

d. Appeal adverse rulings to NFAB.

4. Category "D" fisheries: Salmon fisheries which extend beyond 200 miles.

Council responsibilities:

None, unless requested by the states involved to develop a management regime for a stock that occurs in more than one state, or where bilateral or multilateral international negotiations are required. In such cases the Council role would be advisory to the Administrator of NOAA or to the NFAB.

The Federal Regional Fisheries Administrator would have the following responsibilities as they pertain to the Regional Marine Fisheries Councils:

1. Serve as an ex-officio nonvoting member of the Council, and provide staff and administrative support, including a full-time Executive Director.
2. Provide the national perspective to Council recommendations.
3. Provide guidance and appropriate support for preparation of management plans.
4. Organize background documents for recommendation of the Council that need to be brought to the attention of the National Fisheries Advisory Board (NFAB) or to the Administrator of NOAA (see below).
5. Provide, in cooperation with the Center Director, technical support and staffing to the Technical Committee.

6. Arrange for meetings of the Regional Advisory Committee, and for public hearings.

The Directors of the NMFS Fisheries Research Centers (Center Directors) would have the following responsibilities as they pertain to the Regional Marine Fisheries Councils:

1. Serve as ex-officio nonvoting member.
2. Provide guidance and appropriate technical support for preparation of management plans by the Technical Committee.
3. Serve as scientific consultant.

National Fisheries Advisory Board (see Fig. 7)

The national focus for fisheries management in the 200-mile economic zone would be NOAA/NMFS, with policy guidance from the Secretary of Commerce. Advice on major policy issues would come from the National Fisheries Advisory Board (NFAB). This Board would consist of about nine members, with the Administrator of the National Oceanic and Atmospheric Administration (NOAA), or his designate, serving as chairman, and the Director of NMFS, or his designate, serving as Executive Director. Members of NFAB would be appointed by the Secretary of Commerce, and would be selected as follows: one representative of each of the Regional Marine Fisheries Councils; a representative from the commercial fishing, recreational fishing, and conservation communities, plus at least two members selected on their ability to represent the broad national interest. The Board would be provided with a full-time Executive Secretary and

appropriate staff by the Director of NMFS, and would have the authority to call upon consultants.

The role of NFAB would be to provide the Secretary of Commerce or NOAA/NMFS advice on such policy matters as:

1. Optimum yield.
2. Domestic/foreign split in allocations.
3. Foreign allocations.
4. Domestic user conflicts.
5. Fees to be charged.
6. Other policy matters at the discretion of the Secretary or the Administrator of NOAA.
7. Conduct hearings on adverse decisions affecting Regional Councils or user groups.

Most policy issues would be developed by the Director of NMFS, although they could be submitted by the Regional Councils, the Secretary, user groups, or other government agencies. Where appropriate, NFAB could seek additional advice and consultation from Regional Marine Fisheries Councils, the other Federal agencies, Inter-State Marine Fisheries Commissions, other interested groups, or special consultants. Public hearings could be held if deemed appropriate or necessary. The policy advice developed by NFAB would be transmitted by the chairman to the Administrator of NOAA (if he is not chairman of NFAB) and to the Secretary of Commerce. All major issues brought before NFAB, if not acted upon in a reasonable

time specified by the Secretary of Commerce, would be resolved at his discretion.

In addition to advice received from NFAB, the Secretary of Commerce would consult with other appropriate department heads (e.g., State, Treasury, Transportation, Justice, Interior) on issues of direct interest or concern to them.

The Director of the NMFS would have the following responsibilities as they pertain to NFAB:

1. Serve as Executive Director of NFAB.
2. Provide an Executive Secretary and other administrative support to NFAB.
3. Integrate the recommendations from the Regional Fisheries Administrators and provide the national perspective.
4. Make recommendations to NFAB on matters under the Board's jurisdiction.
5. Promulgate regulations implementing the Secretary's decisions, and perform the enforcement function in cooperation with the U.S. Coast Guard and other agencies.
6. Participate with the Department of State in matters regarding foreign allocations, fees, and regulations covering the activities of foreign fishermen.
7. Participate with the Department of State with respect to joint management with neighboring countries and in matters affecting the U.S. distant-water fisheries.
8. Exercise his management function through Regional Fisheries Administrators.

The Director of NMFS should have a Policy and Technical Committee to assist in the preparation of policy issues to NFAB. The Director, or his designate, would chair the Committee, and the Executive Secretary to NFAB would serve on this Committee. Members of the Director's Policy and Technical Committee could include the Regional Fisheries Administrators, Center Directors, the Associate Directors and other appropriate headquarters staff.

The responsibilities of the Policy and Technical Committee would be to:

1. Review fisheries management recommendations proposed by the Regional Fisheries Administrators and make a consolidated recommendation to the Director, NMFS, for NFAB consideration.
2. Advise the Director of NMFS on policy issues that need to be brought to the attention of NFAB and the Secretary of Commerce.
3. Prepare appropriate background documents on these issues to be forwarded to NFAB.
4. Recommend policy to the Director of NMFS on those issues to be forwarded to NFAB review.

Rationale

Effective fisheries management requires a structure which can operate on a timely basis for information analysis, decision-making and regulation. There must be a close relationship among state, regional, and Federal management plans and operations. There must be adequate allocation of time and resources for biological and economic studies, and socio-political aspects must be understood. Recommendations

for Federal decisions must include consideration of the many public interests involved, the analysis of scientific and economic data, the advice of state and regional management agencies, and the counsel of the program managers. All of this must be geared to a specific and often critical time sequence within which the key decisions are made.

This proposed fisheries management organization would satisfy these requirements. Further, the possibility of receiving state endorsement seems good, since it proposes an approach that is adapted from a scheme that is understood by state conservation officials and has been generally effective; i.e., the Flyway Councils and the National Waterfowl Advisory Committee. The contentious issue of possible Federal preemption of states' rights could be overcome by requiring that such a move, in the case of Category "B" fisheries, would be authorized only if recommended by a Regional Council. The scheme would also permit the states to participate in the management of offshore coastal fisheries--in some cases very actively. Finally, the proposed organization provides for a formal mechanism for advice and consultation with the commercial fishing industry, recreational fishermen, and other interest groups at both the regional and national levels.

It should be stressed again that three important new elements are provided in the organizational scheme proposed here: (1) a strong Federal role in the management of marine fisheries resources, which requires (2) a close interface with the states, thereby guaranteeing

them active participation and providing the Federal Government with an important resource of trained and knowledgeable specialists and resource managers, and (3) a buffering of those making major policy decisions on allocation, Federal preemption, etc., from the day-to-day operations of the National Marine Fisheries Service. Since the Federal Government will be performing a quasi-judicial role in this new regime, the independence and impartiality of those making these kinds of decisions is essential.

An aspect not adequately considered in this study is the annual cost of a new management regime. At present it is not possible to provide reliable figures, but a first-order estimate suggests that an increase of about \$40 million over present NMFS operations would be required. This would include the Federal funding of some state management activities, but does not consider the costs of non-NOAA agencies (principally the U.S. Coast Guard). Such a management regime would be in support of an activity that harvested 14 billion pounds of fish in 1973 by domestic (commercial and recreational) and foreign vessels. The dockside and retail values of U.S. commercial landings of coastal fish and shellfish in 1973 was \$740 million and \$2.2 billion, respectively. By way of comparison, the dockside value of the foreign catch of U.S. coastal species, evaluated at U.S. prices, would be \$780 million. In addition, it is estimated^{10/} that the U.S. marine recreational fishing had a value

^{10/} Wilson and Pfetsch 1973 file manuscript No. 157 - NMFS Economic Research Division.

to the economy of about \$3 billion in 1973. A levy of one-third cent per pound on the total harvest of 14 billion pounds would generate sufficient revenues to cover the projected increased management costs within NOAA.

UNRESOLVED ISSUES AND PROPOSED STUDIES

The major issues arising from the extension of exclusive fisheries jurisdiction to 200 miles have been addressed in the preceding sections and specific policies have been recommended. However, a number of other issues remain unresolved, primarily because information was not available for making firm recommendations. Resolution of these issues must occur before a management regime under extended jurisdiction can be fully implemented. It is recommended that studies be initiated to address these problems:

1. Development of criteria for determining optimum yield, particularly the economic and social factors.
2. Development of techniques and procedures for allocating fishing rights (a) between domestic and foreign users and (b) among domestic users.
3. Development of criteria for determination and disposition of revenues collected for fishing rights and the formulae for supporting cooperative state-Federal management activities.
4. The economics of foreign fishing off U.S. shores: Kinds and quantities of fish caught within 200 miles of the United States

shoreline; the costs of foreign vessel operation; the alternatives foreign vessels would have to fishing off U.S. shores, the charges that can be made to foreign vessels for right to fish in the U.S. 200-mile zone.

5. The economic benefits to the United States of an extended fisheries zone to 200 miles: How much of the catch now made by foreign vessels off U.S. shores which could be made by domestic vessels; how much of this could be sold; where; at what prices? The regional impacts on prices, income, and employment of an extended economic zone. How world trade and U.S. balance of payments would be affected by an extended zone.

6. Action required by the United States in abolishing or amending present international fishery treaties and other fisheries agreements.

7. Policies to be adopted with respect to foreign investment in U.S. fisheries.

8. Policies in respect to Federal Government indemnification to those segments of the U.S. fishing industry adversely affected by extended fisheries jurisdiction.

9. The operational implications of fisheries management (legal, social, research, etc.) under exclusive fisheries jurisdiction.

10. The administrative and operational structure within NOAA and other parts of the Federal and state government systems to implement fisheries management under extended fisheries jurisdiction.

11. The development of personnel and budgetary requirements.

SUMMARY OF MAFAC COMMENTS ON FISHERIES MANAGEMENT
UNDER EXTENDED JURISDICTION

1. Optimum sustained yield

In discussing the principle of optimum yield, some Committee members expressed concern that management under this principle would not provide as much food as under the maximum sustained yield (MSY) principle. Concern was expressed about the lack of precise definition of optimum yield. A need was felt to develop criteria to permit evaluation of optimum yield in each fishery.

One member noted that "optimum yield" departs from the "full utilization" principle that is part of the U.S. Law of the Sea position. Without full utilization, he pointed out, many countries might not make their fisheries resources available to other nations even if they could not use them themselves. But the general view was that in the U.S. fisheries full utilization might be desirable in some instances but not in others. For example, full utilization of Pacific hake might produce damagingly high incidental catches of species of greater importance to the U.S., such as ocean perch, rockfish, and salmon.

Many members viewed optimum yield as better than the fixed principle of MSY.

2. Controlled access and allocation

Several Committee members were concerned about the implications of limiting entry into the fisheries. One member urged that control of access and allocation be used only as a management tool, not as a means of regulating the industry, since the latter was not seen to be the business of Government. Another expressed the opinion that the resource could best be managed by closed seasons, closed areas, and quotas, but not limiting access or allocation. Some believed that limited entry would encourage monopoly and increase the cost of fish. One member stated that such a management scheme would have destroyed the tuna industry in the 1960's.

One member felt that limited entry emphasizes economics and gives too little consideration to the resource. The opinion was expressed that limited entry should not be applied only to foreign fishermen. One member noted that any scheme of limited entry may be overruled in the courts when minority groups are involved.

The limited entry program for salmon in British Columbia was discussed and cited as an example of a generally effective approach to limiting access to a fishery. It also was noted that it may not be necessary to impose limited entry in certain fisheries. It was agreed by many members that a limited entry scheme can be devised which can protect the present fishermen by recognizing historical fishing rights and by other means. Some expressed the view that control over access would mean more fish at lower fishing cost, with the savings passed on to the consumer.

3. State/Federal partnership

It was agreed that State-Federal partnership is necessary for management. One member observed that as the Nation moves to the new regime, the states must be convinced again that the Federal Government is in earnest about a State-Federal partnership.

4. State vs. Federal authority

The width of the state territorial waters, whether 3 or 12 miles, was discussed, and it was agreed that the matter would ultimately be resolved in the courts or by Congress.

There was general agreement that any management scheme should be sufficiently flexible to permit consideration of unique state or regional problems. The Federal Government should have the option to delegate specific tasks outside territorial waters to the states if this is in the best interest of the Nation and if the states are capable of doing the work. There was agreement that the Federal Government should retain full authority in the area of international negotiations, in consultation with states and the industry.

5. Disposal of fish caught by foreigners

There was general agreement that foreign fishermen permitted to fish within the 200-mile economic zone should not be allowed to land their fish in U.S. ports for sale to U.S. consumers.

6. General

One member strongly urged that the Federal Government should have a major role to assure that adequate resource assessment data become available to permit the strongest possible management schemes. The Federal Government has the further obligation to ensure that sound regulations are developed and that effective enforcement of all fisheries regulations are carried out. It was observed that it would be useful for the states to have copies of the study report as they consider their own plans under extended fisheries jurisdiction. The members also expressed an interest in receiving further written documentation of this study since the issues were too complex to comprehend fully at a MAFAC meeting.

REPORT FROM THE WORKSHOP ON

FISHERIES MANAGEMENT UNDER EXTENDED JURISDICTION

State Fisheries Directors--National Marine Fisheries Service
Meeting of February 12-13, 1975

The state and Federal fishery representatives discussed the possible roles of the state and Federal governments in fishery management schemes that may be implemented when the United States obtains jurisdiction over its offshore marine fisheries. The group first reviewed and agreed upon some assumptions prerequisite to further discussion.

1. By the end of calendar year 1975, the United States will have responsibility for a 200-mile exclusive economic zone and jurisdiction over the anadromous fish beyond 200 miles.

2. Fishing operations of U.S. distant-water fishermen will be controlled by coastal nations or a combination of coastal nations and a regional organization.

3. Fishery management plans will be established for individual stocks wherever they occur, rather than developing separate plans for each geographical jurisdiction in which the stock occurs.

4. Management of such stocks will be a cooperative effort to include both the state and the Federal governments.

The group discussed in some detail the individual responsibility of the state and Federal governments within (a) the 3-mile territorial sea and (b) the area from the territorial sea out to 200 miles.

There was not complete agreement among the committee on who should have the primary responsibility in each of the two offshore areas. There was general agreement that each stock should be managed cooperatively and as a unit regardless of where it occurred.

Some states felt the Federal Government should be involved in cooperative management programs within the 3-mile territorial sea. However, the point was made by one individual that some state legislatures take their rule making authority very seriously and will resist change. This would impose a serious obstacle to establishing cooperative decision making regimes in those states.

All states recognized that international negotiations are the responsibility of the Federal Government and, therefore, beyond territorial waters the Federal Government would have to have a dominant role.

The group also recognized the general need for Federal research and enforcement efforts beyond state territorial waters. However, those states that presently have these capabilities expressed a preference for continuing their current management schemes even under extended jurisdiction. Such program continuation was considered primarily for those fisheries that took place off the shores of a single state.

The group also reviewed and agreed on the following list of items that a new management organization should provide:

1. A maximum amount of state-Federal cooperation and communication.
2. A recognition of regional interests consistent with national policy.
3. A timely and effective research and analysis system.
4. An ability to be flexible and to make rapid decisions when necessary.
5. A comprehensive and effective data collection and retrieval system for each fishery and stock under its jurisdiction.
6. An efficient enforcement system.
7. A system for rapid and equitable settlement of disputes.
8. Must provide for appropriate input by advisory groups and the interested public.

The group unanimously rejected a proposal for buffer between policy makers and user groups. It was the feeling that decision makers should be accessible to the public and user groups.

COOPERATIVE MANAGEMENT SCHEMES

Interstate Commissions

The group recognized that the interstate commissions were performing valuable roles in initiating and coordinating state-Federal management programs. However, past responsibilities of interstate commissions have not included authority for regulatory decisions, and the states agreed a new and different organization

should be formed to handle the state-Federal cooperative program. We recognized that a new organization may include representation from the interstate commissions.

Regional Councils

The group was asked to consider a Regional Marine Fisheries Council. We viewed a Regional Council as operating similarly to councils currently established under the state-Federal program and agreed this approach was the most acceptable to date.

We unanimously agreed that any Regional Council should be composed of the appropriate states and the Federal Government, but not to include representation by the fishing industry in a decision making capacity. Our group recognized the need for commercial and recreational industry committees to advise the Regional Councils.

Some individuals again reminded us that their state legislators felt strongly about retaining control of the decision making process within state territorial waters and this could be an obstacle to a Regional Council approach.

The committee felt that Regional Councils should be geographic in scope and that subcouncils should be formed to manage specific stocks of fish which are not of interest to all Council members. They also recognized that large states such as Alaska and perhaps California have major fisheries sufficiently isolated from other states so that they might individually form a Regional Council with the Federal Government.

Interstate Compacts

We agreed that formal compacts between states and the Federal Government could provide an effective regional fishery management scheme. However, the group seemed to prefer a "less formal" cooperative State-Federal-Regional Council approach. They recognized that the Regional Council could eventually evolve into a more formal compact between states and the Federal Government.

Maximum Sustained Yield vs. Optimum Utilization

The group only briefly addressed the concepts of managing for maximum sustained yield vs. optimum yield. The general preference was to manage for optimum utilization. It was recognized that the two concepts are compatible and that in some circumstances the MSY will be the optimum yield. One state pointed out that its law required management for maximum sustained yield and had no flexibility in this regard.

THOMAS E. KRUSE
CHAIRMAN

HIGHLIGHTS OF DISCUSSIONS

State Fisheries Directors--National Marine Fisheries Service
Meeting of February 12-13, 1975

The following are excerpts of discussions which followed the presentation of the Discussion Paper and the oral report of the Chairman of the Workshop on Fisheries Management under Extended Jurisdiction. This was prepared by NOAA staff from the transcripts. The full transcript can be seen by contacting the Director, National Marine Fisheries Service, National Oceanic and Atmospheric Administration, Washington, D.C. 20235.

1. Need to "Buffer" Decision Makers

Among the criteria proposed as a guide for the development of fisheries management agencies was the following: "Those making major decisions must be buffered from excessive pressures of user groups." (page 57)

The State Directors appeared to interpret this criterion to mean "insulation," and unanimously rejected it; they felt that decision makers should be accessible to the public and user groups. This was not the intent of the report and the latter has been clarified accordingly.

2. Fishery Categories

The staff proposed fishery categories to identify clearly who would have primary responsibility for each stock. The purpose of the categorization was to manage each stock throughout its range and to assign explicitly lead responsibility for a particular fishery.

The State Directors agreed with this purpose, but appeared to feel that the fishery categories might lead to management plans following jurisdictional lines. The report attempts to stress that the categories are designed to take into consideration the jurisdictional responsibilities of the state and Federal governments, within the concept of managing each fish stock as a unit.

3. Migratory Waterfowl Management

Some Directors did not consider the management mechanisms under the Migratory Bird Treaty Act (p. 60) as a good model for the fisheries management program. For fisheries management, the states want an active partnership role in the formulation of regulations, not merely advisory and review functions.

4. Fisheries Management Options.

A major problem foreseen as facing any cooperative management system is that of one state refusing to implement programs agreed upon by Councils or other cooperative bodies. One suggestion was that a condition of membership in a management program should be that the state agree to put into effect programs which had received Council approval. Some states also suggested that the Federal Government should be given power to impose regulations if states fail to act on plans agreed upon.

According to one State Director, only two major options are available for an effective management plan; (a) some type of regional council with regulatory powers cutting across territorial waters, or (b) Federal management control over fisheries resources in state territorial waters that occur in more than one state. Thus, any system adopted should allow for some measure of Federal jurisdiction inside territorial waters. There was mixed reaction to this view.

It was noted that some state legislatures will want to continue to control decision-making authority within territorial waters, which would be an obstacle to Regional Council operations. However, it was noted that if states adopted proposals for model fisheries legislation that would come out of the study by the Council of State Governments this could be overcome. It was recognized, in any case, that much education of legislators was necessary and that solutions would take several years.

5. Financing

Considerable concern was expressed about how such a complex mechanism as the proposed national management scheme would be paid for. A principal concern was that since the Federal Government was presently unable to finance what was generally agreed among the states and the Federal Government to be essential programs, how did it expect to finance a far larger program, like the one outlined?

When the hope was expressed that the program would be self-sustaining by the imposition of license or landing taxes, several concerns were voiced. First, the question was asked, who would collect the tax? Next, what would happen to the revenue now derived by the states from their license and landing taxes?

Systems for taxing foreign vessels for the right to fish should be carefully prepared in order not to price these out of the fisheries.

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