

# **Implementation of the Fishery Conservation and Management Act**

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The Fishery Conservation and Management Act of 1976 began a new era in American fisheries which has already made enormous changes in this industry, and in its management and development. The Act has affected the activities of foreign fishermen off the coasts of the United States, reducing the amount of their catch and controlling the manner in which they operate. In addition, it has imposed controls no less stringent on United States fishermen, and in many cases has required them to operate under regulation for the first time in their history.

The Act requires the United States to conserve and manage the fishery resources off its coast out to 200 nautical miles—an area covering over two million square miles including somewhere between 10 and 20% of the world's ocean fishery resources. Some think that the Act came none to soon, since nearly unrestricted fishing by domestic and foreign vessels over many years had reduced some fishery stocks to dangerously low levels. When the Act was passed many people thought that it would affect only foreign fishermen, but it is now obvious that Americans are being impacted as much or more than foreigners. The reason, of course, is that conservation of a fish stock requires control over the amount of catch, and the biological effect on the stock is the same no matter who harvests it.

The Act operates through eight Regional Fishery Management Councils, created to put the development of management plans in the hands of local people who best understand the fisheries of a region, and who have the biggest stake in their well-being. The membership of the Councils consists of persons selected by the Secretary of Commerce from among nominees of the Governors of the coastal states. In addition, the principal fishery official in each State is a member of the Council, as are representatives of the Federal Government agencies involved. The number of members on the Councils varies from 7 to 19.

The principal task of the Councils is to develop Fishery Management Plans for their regions. These Plans are the heart of the FCMA, since they spell out how conservation of the stocks will be accomplished. From the best biological data available, scientists advise the Councils of the quantity of fish that can safely be taken from the stocks. The Councils use the information as well as data on the size and other characteristics of the fishery, and on the economic and social factors, to develop the Plans. These plans are then examined by specialists in the Department of Commerce who advise the Secretary of Commerce whether they conform to the seven standards set forth in the Act: (1)

Conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery. (2) Conservation and management measures shall be based upon the best scientific information available. (3) To the extent practicable, an individual stock of fish shall be managed as a unit throughout its range, and interrelated stocks of fish shall be managed as a unit or in close coordination. (4) Conservation and management measures shall not discriminate between residents of different States. If it becomes necessary to allocate or assign fishing privileges among various United States fishermen, such allocation shall be (A) fair and equitable to all such fishermen; (B) reasonably calculated to promote conservation; and (C) carried out in such manner that no particular individual, corporation, or other entity acquires an excessive share of such privileges. (5) Conservation and management measures shall, where practicable, promote efficiency in the utilization of fishery resources; except that no such measure shall have economic allocation as its sole purpose. (6) Conservation and management measures shall take into account and allow for variations among, and contingencies in, fisheries, fishery resources, and catches. (7) Conservation and management measures shall, where practicable, minimize costs and avoid unnecessary duplication.

If the plans do conform to these standards, and also comply with other provisions of the FCMA and other United States law, they are approved by the Secretary of Commerce. Before this happens, there is an opportunity for public review of the Fishery Management Plan. Details of the Plan and of the proposed regulations arising from it may be changed as a result of public comment. Meanwhile, a complex process must be completed in the preparation of an Environmental Impact Statement, which evaluates the potential effects of implementation of the Plan on the environment.

After the Plan receives approval, the Secretary of Commerce issues regulations. These usually include the designation of the total allowable catch, and a sharing of this between domestic and foreign fishermen. If the domestic fleets have a demonstrated ability to take the full amount declared to be available for capture, none is allotted to foreign vessels. If, however, there is a surplus above the potential American catch the remainder may be allocated to foreign vessels. The latter amount is called the "total allowable level of foreign fishing" (TALFF).

The TALFF is allocated to foreign countries asking for it on the basis of four criteria set forth in the Act: (1) whether, and to what extent, the fishing vessels of such nations have traditionally engaged in fishing in such fishery; (2) whether such nations have cooperated with the United States in, and made substantial contributions to, fishery research and the identification of fishery resources; (3) whether such nations have cooperated with the United States in enforcement and with respect to the conservation and management of fishery resources; and (4) such other matters as the Secretary of State, in cooperation with the Secretary, deems appropriate.

In order for a foreign country to be allowed to fish in the United States Fishery Conservation Zone (FCZ) several steps must be taken. First, the USA and the country applying for fishing rights must sign a Governing Interna-

tional Fisheries Agreement (GIFA). In this agreement the foreign country acknowledges the right of the United States to regulate the fisheries in the region. The agreement sets forth the broad conditions under which the foreign fishing may take place. The GIFA is reviewed by the Secretary of Commerce and the Secretary of State, and must be approved by Congress. If it is approved, the foreign country can then apply for permits for its vessels to fish in the FCZ. The application must include information on the number and exact description of the vessels which want to fish. Each of the applications is reviewed and those approved are issued individual licenses. The status of the Governing International Fishery Agreements as of September 20, 1978, is summarized in an appendix table.

The final step before fishing can begin is for the foreign government to pay the fees assessed for each vessel, based on the expected catch. The licenses issued to a foreign country to operate in the FCZ specify the amount of each species allocated to that country. When this amount has been caught, fishing by that nation's vessels for that species must cease. The foreign licenses specify the areas and seasons where fishing can be conducted, and may specify size and other kinds of restrictions on the catch, and limit the kinds and size of gear that can be used.

#### Implementation

Implementation of the Act began March 1, 1977. At that time regulations were imposed on foreign fleets in 13 fisheries. These regulations were the result of Preliminary Fishery Management Plans (PMP's) prepared by the National Marine Fisheries Service. The Act provided for the preparation of PMP's by the Government because it was recognized that the Councils would not have time to prepare their own plans by the time the Act had to be put into force. In some of these fisheries evidence was available that overfishing was taking place by a combination of foreign and domestic fleet activity, and in some cases it was urgently necessary to reduce pressure on the stocks. Gradually Fishery Management Plans (FMP's) developed by the Councils are replacing the PMP's. The FMP's include regulation of domestic as well as foreign fishing.

As of October 1, 1978, there were 13 PMP's still in effect, and 4 FMP's had been approved and were operating. An additional 9 FMP's are in various stages of preparation by the Councils.

Enforcement of the FCMA is the joint responsibility of the National Marine Fisheries Service and the Coast Guard. In the first year of implementation of the Act the two agencies made about 1500 boardings of foreign and domestic vessels, and in 1978 the number will be about 2600. In the first year, 350 citations were issued to foreign vessels and 130 to domestic vessels for minor infractions of the fishery regulations; no monetary penalty is imposed for these. In that year, 108 violations were issued to foreign and over 200 to domestic vessels; these are for more serious offenses which can result in fines and in some cases seizures of vessels and cargo. Since January 1, 1978, 227 citations have been issued to foreign vessels and 51 to domestic vessels; 82 violations have been issued to foreign and 115 to domestic vessels. In 1977 three foreign vessels were seized for FCMA violations, and through September of

this year nine foreign vessels have been seized.

Implementation of the FCMA has resulted in increased protection for many overfished stocks, regulations reducing the catches sharply in some cases. The catch by foreign vessels in the US Fishery Conservation Zone dropped in 1977 to about 1.7 million metric tons (from an allocation of 2.1 mmt) from the 1976 total of 2.6 mmt. The 1978 foreign allocation was about 1.9 mmt, and the catch may be less than that when the fishing year ends. In a number of fisheries, unrestricted fishing by domestic vessels has been halted in order to begin rehabilitation of depleted populations. Overall, however, the catch by US fishermen in 1977 was about the same as the previous year, approximately 2.5 mmt; the domestic catch in 1978 will probably be slightly higher. It is expected that the effect of the regulations will become more apparent in catches and in profits to the fishermen as the stocks recover in the next few years.

To increase the amount of biological and other data on the fish stocks, to get improved estimates of catch, and to monitor foreign compliance with fishery regulations, the Department of Commerce has placed observers on some foreign fishing vessels. In 1977, we had observers on about 34% of foreign fishing vessels off Alaska and the North Pacific, and about 50% off the Northwest Atlantic coast.

#### Problem Areas

It is not surprising that in carrying out the mandate of such a complicated document as the FCMA, difficulties and frustrations should have been encountered. The Act requires the creation of an entirely new kind of management machinery for the United States, with which scientists, government administrators and the industry have had no experience. Furthermore, several other United States laws, notably the Environmental Protection Act and the Marine Mammal Act, impose additional complex and sometimes conflicting requirements and regulations. Some of these requirements take a long time to satisfy, and delay the implementation of management regulations. These can endanger some stocks by delaying conservation measures, and they sometimes impact heavily on the industry and on Councils and administrators attempting to put needed management measures into effect. Nonetheless, it is recognized that many of these regulations imposed by the FCMA and other laws constitute necessary checks and balances for the protection of the environment and other values, and while continued efforts are being made to streamline and shorten the procedures, the general process is accepted as necessary in most quarters.

#### Inadequacy of Information

Among the most troublesome problems facing those implementing the FCMA is the inadequacy of information, especially biological data on the size and condition of the fish stocks. The foundation of any Fishery Management Plan is the estimate of the "optimum yield," the amount of fish that can be taken without damage to the stock and which makes the optimum use of the fish available. Estimates of the size of fish stocks are made by indirect means, and accuracy is made harder to achieve by the notoriously variable nature of

fish populations, affected as they are by changes in weather, climate, predators, water currents, and a host of other variables. There have not been enough studies in the past to provide background information about many of the fish stocks that must now be managed, and while data are gradually becoming more precise, estimates are not always as reliable as desired. Since the amount of fish allowed to be caught depends on the estimates made by biologists, fishermen have great interest in the accuracy of such estimates. In some cases, biologists' estimates have been questioned, and more research is clearly required to improve this data base.

The definition of optimum yield was left deliberately vague by the drafters of the bill since they recognized the difficulty and danger of being too rigid about which factors should determine the amount of fish to be caught and the relative amount of influence to be given to each. The meaning of the concept of optimum yield, and the fair and appropriate way of applying it in the design of Fishery Management Plans continues to be a major source of difficulty to the Councils and the Federal managers. A national conference was held in Houston, Texas, in 1977 to discuss this problem, and some light was shed on it then. As the Councils gain more experience, they are learning to apply OY more confidently, altering their approach to take into account the differences among fisheries.

Another major difficulty in achieving a satisfactory estimate for optimum yield is the lack of adequate information on the economic and social aspects of the fisheries involved. This inadequacy is a combination of lack of research and the difficulty of getting appropriate data even if the research is conducted. It is clearly recognized that much more effort must be applied in this area.

#### Fees

The Act provides that the United States Government shall impose fees on foreign vessels fishing in the US Fishery Conservation Zone:

"Reasonable fees shall be paid to the Secretary by the owner or operator of any foreign fishing vessel for which a permit is issued pursuant to this subsection. The Secretary, in consultation with the Secretary of State, shall establish and publish a schedule of such fees, which shall apply nondiscriminatorily to each foreign nation. In determining the level of such fees, the Secretary may take into account the cost of carrying out the provisions of this Act with respect to foreign fishing, including, but not limited to, the cost of fishery conservation and management, fisheries research, administration, and enforcement."

Fees are charged in two ways. First, permit fees are imposed at the level of \$1.00 per gross registered ton for each foreign fishing vessel, 50 cents per ton (not to exceed \$2500) for vessels that only process fish, and \$200 per vessel for support vessels that neither catch nor process fish. Secondly, foreign vessels are charged a poundage fee of 3.5% of the dockside value of the catch allocated to the foreign nation.

United States officials are not certain that this fee schedule, which was developed without previous experience, is the right one. For one thing there is uncertainty how much of the cost of the research and management of the fishery should be recovered by the fees; the Act is not precise in its instructions

here. Further, whatever the level of the poundage fee (the present 3.5% or some other value) there remains the uncertainty about the level of prices on which to impose the fees. In 1977, the price level used was from a published table of values contained in the National Marine Fisheries publication "Fisheries of the United States 1976." These prices were almost two years out of date, and for that reason low. Furthermore, in several instances, prices reflected substantially different values than the "fair market value" of a particular species in the foreign country where it was sold. In 1978 and 1979, some of the prices were adjusted, but in general they still reflect the values of the original schedule. This schedule of fees is generally below that charged by most other foreign nations. An amendment to the Fishermen's Protection Act in 1978 authorized the Government to raise fees by as much as 20% to create a fund from which payments can be made to fishermen who sustain loss or damage to their gear. This will go into effect in the 1979 fee schedule.

A major question that has not been answered in the United States is whether fees should pay part of the "rent" for the resource. Hence, the problem of the level of fees is still under review, and is likely to be so continuously for many years to come. The United States intends to maintain a fees schedule that is fair to the foreign fishermen, but at the same time amounts to a fair payment for the value of the resource exploited.

#### Allocation of Catch

In the great majority of cases there are not enough fish available from stocks occurring off the United States to satisfy all users. This causes a difficult problem in allocating the fish equitably among those requesting them. The Act gives United States fishermen first call on the harvest, but in some cases (e.g., some stocks in the Northwest Atlantic and salmon on the Pacific coast) the allowable harvest is below the amount the US fleets can catch and sell. These fishermen are understandably dissatisfied with their allocation, and there is often considerable pressure to have the scientists re-examine their estimates and to have the quotas increased. In the same way, the amounts allocated to foreign fleets are usually often less than desired, and very difficult decisions have to be made by United States officials as to which of the applying countries will be given the available quotas.

In order to take into account the uncertainty in some fisheries about the amount of fish that the US industry can catch and process, a reserve is set aside amounting to 20% of the foreign quotas. If the domestic fleet does not catch the amount set aside for it, or if a particular foreign quota is not fully used, this fish can be reallocated. This is being done as quickly and efficiently as possible, but the procedures sometimes require considerable time, which can make fishing operations more difficult. Gradually, with experience, these procedures are being improved and it is expected that fewer problems will be encountered in future years.

#### By-catch

In most fisheries, especially those operating with bottom trawl gear, one or more incidental species as well as the primary or target species are caught, and

fishery management plans make small allocations for "by-catch" species. This by-catch sometimes includes overfished stocks, and this has created some vexing problems for those implementing the FCMA. The total harvest of incidental by-catches may be large enough to endanger a species, or at least seriously delay a program of restoration under management. Allocations for catches of incidental species are naturally made as low as possible in order to protect the overfished species, and sometimes the result is that the by-catch allocation is filled well before the quota for the target species, so that the fleet must cease operations before its main allocation has been filled.

#### Joint Ventures

With the stimulus of the FCMA it is expected that the United States vessels will increase their harvest of fishery resources off the US coast. It will take many years, however, for some of these resources to be used fully, as markets are developed and as US catching, processing and distributing facilities are built. In the interval before the US industry reaches the state where it can make full use of some fish stocks, foreign countries are allowed to catch or buy US fish. One way is through joint ventures between foreign and domestic groups. In 1977, applications were made by some foreign firms to buy fish (principally Alaska pollock and Pacific hake) caught by United States fishermen and process them on factoryships in the US Fishery Conservation Zone. This kind of joint venture scheme was controversial since while it would create an expanded market for US fleets, it would create competition for US processors. Furthermore, most of the applications were made after the preliminary fishery management plans were in place, and to grant such permits might cause the optimum yield to be exceeded. After extensive hearings conducted by the Councils and the National Marine Fisheries Service, the Congress passed an amendment to the FCMA which permits joint ventures under certain conditions. The bill: (1) Makes it clear that it is the intent of Congress to encourage the development of underutilized fisheries by the entire U.S. fishing industry, both harvesters and processors. (2) Gives preference to U.S. fish processors of U.S. harvested fish. (3) Authorizes the Secretary of Commerce to allow U.S. fishermen to transfer at sea to foreign fishing vessels only the excess fish which she has determined will not be utilized by U.S. fish processors. The foreign vessels must have a permit from the Secretary authorizing the receipt of the fish. U.S. fishermen are prohibited from making any transfer without such permit. (4) Provides that fishery management plans promulgated pursuant to the FCMA must include a statement with respect to the capacity of, and extent to which, domestic processing facilities, on an annual basis, will process fish harvested by U.S. vessels. (5) Requires the Secretary of the Treasury, in cooperation with the Secretaries of Commerce and State, to submit an annual report to the Congress and the President setting forth (a) a list, by species, of all allocations made to foreign nations by the Secretary of State; (b) all permits issued to foreign nations by the Secretary of Commerce; and (c) all tariff and nontariff trade barriers imposed by these foreign nations on the importation of such species from the United States.

With these kinds of safeguards, the Congress expects that the various

interests within the United States fishing industry will be protected and that better use will be made of the fish stocks than if US fishermen were prohibited from selling to foreign buyers under any circumstances.

### International Fish Stocks

The new fishery management regime in the United States seems certain to slow down and eventually to halt the damaging decline that has been taking place in many of our fish stocks, and to restore valuable fisheries through increasingly effective management. But the FCMA and the new fishery management regimes of other countries cannot in themselves solve all the fishery conservation programs of the world ocean. There still requires to be international cooperation in the conservation of stocks that are shared by more than one nation, and which occupy areas of the ocean beyond the limits of the national fishery conservation zones. Problems in the implementation of the FCMA have been posed, for example, by the fact that many salmon stocks in the North Pacific and a complex of groundfish stocks in the western north Atlantic Ocean are shared by Canada and the United States. Closer to the interest of people at this meeting are the common stocks of shrimp in the Caribbean and adjacent areas, and the large anchovy stock shared by the United States and Mexico on the Pacific coast. The oceanic tunas were specifically excluded from the FCMA since they are far-ranging fishes which spend a significant part of their lives beyond 200 miles. Several species of billfishes, which are of great interest to U.S. recreational fishermen, are caught incidentally by longline gear fishing for tunas; these species are far-ranging over the mid-latitudes of the world ocean.

It is certain that no management plan for any of these shared species can be effective without full and sympathetic cooperation among interested governments.

I believe that it will be necessary for the countries sharing valuable fishery resources in the Caribbean and adjacent areas to develop some effective machinery not only for joint, cooperative research but also for cooperative management. The economic, political, and social barriers to international cooperative management of fisheries are many and difficult, and no group is more acutely aware of this fact than those assembled here. Yet the price of not accomodating the differences of opinion and overcoming the political and other barriers may be heavy, and may include damage or even destruction of some valuable stocks. It will take time to develop the necessary mechanisms, but the issue should be faced head-on, and work started to design cooperative fishery management systems in the Caribbean and adjacent regions. Research is of major importance in order to make this cooperative management possible. In respect to the Caribbean, it will depend to a large degree on the wisdom and active cooperation among the scientists and administrators gathered at this meeting to promote and carry out the essential cooperative research and management. Events of recent times have shown that this is not an easy task, yet we must persist.

### Summary

The Fishery Conservation and Management Act is by far the most power-



ful piece of fishery legislation ever passed in the United States. It has imposed a complex and difficult responsibility on many people in the Government and the industry, and it is to the credit of the designers of the bill and to those who have worked hard to implement it fairly and effectively that the difficult task has been accomplished so far with considerable success. Impatience has been expressed, sometimes very forcefully, by some people because of the cumbersome-ness of many of the procedures, and because of some of the decisions and actions taken, but overall the Act is working well. Fish stocks are getting protection, domestic fishermen are being helped and encouraged to increase their use of the resource, and foreign fishermen are being given a share of the stocks. As information and experience are gained, implementation of the Act will become smoother and more effective, and conservation and use of the fishery resources off United States coasts will be significantly improved. For resources shared by more than one country, cooperative research and management are imperative, and the countries of the Caribbean face a challenge to assume leadership in this difficult yet urgent endeavor.

### Appendix Table

Status of Governing International Fishery Agreements (September 20, 1978)

Country	Signed	Entry into Force
Bulgaria	12/17/76	2/28/77
Canada*		Not in Force
China (Rep. of)	9/15/76	2/28/77
Cuba	4/27/77	9/26/77
European Economic Community† (Federal Rep. of Germany, France, Italy)	2/15/77	6/9/77
German Democratic	10/ 5/76	3/4/77
Japan	3/18/77	11/29/77
Korea (Rep. of)	1/ 4/77	3/3/77
Mexico	8/26/77	12/29/77
Poland	8/ 2/76	2/28/77
Romania	11/23/76	1/18/78
Spain	2/16/77	3/10/77
U.S.S.R.	11/26/77	2/28/77

\*A 1977 Reciprocal Fisheries Agreement between the United States and Canada was signed on February 24, 1977, and received Congressional approval on July 26, 1977. That agreement expired on December 31, 1977. A 1978 Reciprocal Fisheries Agreement between the United States and Canada was effected by an exchange of diplomatic notes dates April 10 and April 11, 1978. That agreement received Congressional approval on May 25, 1978. However, Canada suspended provisional application of the 1978 Reciprocal Fisheries Agreement on June 4, 1978. Consequently, that agreement has not entered into force.

†Denmark, on behalf of the Faroe Islands, Portugal, and Venezuela have also expressed interest in negotiating Governing International Fishery Agreements with the United States.