Chapter VIII: Buyback Programs

Abstract

Buyback programs funded entirely or in part by the federal government have reduced the number of licensed fishing vessels in New England, Texas, and Washington. Although documenting this one dimension of fishing capacity is straightforward, the full impact on national fishing capacity is less clear. Latent capacity—the ability of remaining licensed vessels to expand their rate of harvest, or of unused vessels to become active again—is large in each fishery that has experienced buyback programs. Also of concern is whether vessels, gear and fishermen who leave one fishery shift to other heavily exploited fisheries and contribute to problems there. However, these and other concerns are clearly understood by those designing new buyback programs, especially the industry-funded buyback proposed for the Pacific groundfish limited entry fishery and the fishery for crab in the Bering Sea and Aleutian Islands. If buyback programs are to contribute to the goals set out in the Magnuson-Stevens Fishery Conservation and Management Act, they must be carefully designed by members of the specific regional fisheries. Although not every fishery will profit from a buyback program, arguments in favor of such programs are sufficiently strong that the industry should be encouraged to explore the full potential of this mechanism as set forth in the Sustainable Fisheries Act.

Introduction

For more than two decades, the federal government has provided funding for programs that assist fishermen who wish to leave specific fisheries. Responding to the interest in expanding these programs and the arguments of those who believe that industry should both play a more central role in designing buyback programs and pay for profitable programs, the Sustainable Fisheries Act amended the Magnuson-Stevens Fishery Conservation and Management Act to create new buyback program options. The Task Force believes these new programs are promising, but face substantial challenges. This chapter reviews past and current programs and discusses problems that have been identified in them. The chapter closes by explaining why the Task Force supports the development of additional buyback programs; and identifies key issues that are central to their success.

Description of Buyback Programs

Beginning in 1976 and continuing to the present, programs financed partly or entirely by the federal government have awarded cash compensation to people surrendering salmon fishing licenses in the Pacific Northwest. More recently, federal funds have been used to purchase licensed vessels in the New England groundfish fishery; and they contributed to the fishing license buyback program in the Texas bay and bait shrimp fisheries. Although new fishing vessel reduction programs authorized by Section 312 of the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA) will draw primarily on industry funding, these programs operate under federal guidelines and assistance, and they will use loans from the federal treasury. In this section, we describe the general features of some of these programs. A description of the federal financial assistance available to industry-funded buybacks is referenced in Chapter VII.

Pacific Northwest Salmon

Points of Concern

Chapter VI dealt with a series of changes in the Pacific salmon fishery, including the excess capacity in the non-treaty salmon fisheries caused by the reallocation to Indian tribes of fishing opportunities, a series of adverse environmental changes in the ocean and freshwater environment, emerging scientific concern about the full implications of hatchery rearing of salmon, the cumulative impacts of degraded and lost salmon freshwater habitat, and a social commitment to protection of individual stocks of wild salmon. These issues, which are highlighted in many scientific studies such as the one conducted by the National Research Council (1996), were compounded by the falling price of salmon in response to rapid global expansion of farm-reared salmon and an economic crisis in such important export markets as Japan and other nations in Asia.

As a consequence, salmon fishermen accustomed to operating off the coasts of California, Oregon, and Washington had to switch fisheries, relocate, or find other jobs. Many of the other fisheries became fully utilized or overcapitalized during this time period, making it difficult for an individual to maintain a presence in the fishing industry. Concurrently, the decline in the number of jobs in the forest products sector, which is the principal economic sector in many Pacific fishing communities, severely limited alternative employment opportunities.

Although some of these forces can be the result of unwise investment decisions by fishermen, a consensus has emerged that many of them are due to factors beyond the ability of the fishermen to foresee. Buyback programs have been one of many initiatives to help fishermen adapt to change. Unfortunately, they are seen as too little and too late for many of the suffering participants in the industry.

WASHINGTON: 1976-86

In 1974, two events laid the groundwork for the first of several buyback programs. First, the Washington State legislature passed a two-year moratorium on new commercial salmon fishing licenses except for those associated with the charter boat industry. Second, a federal district court held that treaties between the United States and local Indian tribes entitled the latter to harvest half of the salmon and trout caught in the Puget Sound area ("the Boldt decision"). In 1975, Washington licensed 1659 Puget Sound gillnetters, 702 gillnetters in the Columbia River, Willapa Bay, and Grays Harbor, 385 purse seiners, 3,030 trollers, 404 charterboats, and 81 reef nets to harvest salmon. Three years later, the moratorium was renewed with charter boat licenses included. By 1977, the year charterboat licenses became limited, their license numbers had grown to 569. In 1979, the moratorium was made into a permanent license limitation law.

Anticipating major adverse economic impacts to non-treaty fishermen, Washington passed legislation necessary to initiate a buyback program and subsequently obtained a $3.5 million grant from the Economic Development Administration. The gear reduction program received $2.7 million plus administrative overhead funds, with which it bought 244 Puget Sound gill netters, 4 Puget Sound reef netters, and 5 Puget Sound seiners plus associated nets and licenses. Reports from the program manager and federal auditors indicated that the program had little effect on fishing capacity. Many of the retired vessels were marginal. Because many fishermen held more than one license, funds distributed were frequently used to upgrade other vessels and gear.

The vessels purchased in the initial buyback program were to be resold, with an exception of enough money being collected to expand the program and buy still more vessels and licenses. Instead of the financial windfall expected, vessels in storage deteriorated and created greater costs for the program, leading to an investigation of the managers and bitter feelings about vessel buyback programs. When an additional buyback round was held in 1979, two options were provided: Under the 30% option, the state purchased all the current licenses on the vessel and then paid 30% of the fair market value of the vessel to the owner. The owner retained the vessel but could not resume fishing in the Washington salmon fishery for 10 years. The second option was to purchase the vessel's license(s) but with no payment for the vessel itself.

Because federal Indian treaty fishing rights had been extended outside Puget Sound, this program included gill net fisheries on the Washington coast and in the Columbia River as well as ocean troll salmon fisheries. In the 1979 program, priority was assigned to buying licenses without the associated vessels and gear. Of the 3,029 troll licenses, 210 were sold back to the state without associated vessels and gear and another six were sold with a vessel payment. In Puget Sound, two of the 1,485 remaining gill net licenses were purchased alone and another five with vessel payment. Twelve gillnet licenses that combined Columbia River and either Willapa Bay or Grays Harbor were purchased, none with the

vessel included. Four reef net licenses were bought. When charter vessels were made eligible later in the year, two of their licenses were purchased.

In 1980, Congress appropriated $1 million for a license-only buyback, with priority to license holders based on the length of time they had held their licenses. With 3.3% of the funds used for administrative costs, 37 Puget Sound gill net, 20 Washington coast/Columbia River gill net, four purse seine, four reef net, 14 charter boat, and 119 troll licenses were purchased. Between 1981 and 1986, 32% of Washington licenses were removed through a license retirement program funded at $2.5 million per year from 1981 to 1985 and $1 million in 1986. The proportion lost from each sector varied, from 13% for seine vessel licenses to 43% for trollers.

Oregon: 1983-86

Buyback programs for Oregon gill net salmon licenses grew out of the Washington State buyback programs and other events unfolding in the Columbia River net fisheries. In 1969, Federal Judge Robert Belloni ruled that treaty Indian tribes have a right to harvest salmon in their usual and accustomed fishing sites. In 1975, one year after Judge Boldt interpreted the "in common" fishing rights of Native Americans in Puget Sound to imply that they were entitled to 50% of the salmon returning to their usual and accustomed fishing grounds, Judge Belloni extended that 50 % allocation principle to the treaty fishing rights of Columbia River Native American fishing tribes. Prodded by the federal court, negotiations between the state of Oregon and the tribes led to increasing restrictions for non-treaty harvests. In addition to the need to allocate secure fishing opportunities for treaty Indian tribes, passage of the Northwest Power Planning Act signaled a public impatience with the decline of naturally produced salmon in the Columbia River, which now amounted to only about one-eighth the abundance prior to economic development of the river.

A moratorium on salmon gill net and troll fisheries was enacted by the Oregon legislature in 1979 and took effect in 1980. Two years later, these became permanent license limitation programs. At that time, the legislature also approved the idea of a state buyback of Columbia River gill net licenses using funds approved through the 1981 Congressional appropriation of buyback funds. Four rounds of buyback took place between 1983 and 1986, each following a reverse auction bid system in which the lowest offers were accepted first. Altogether 133 licenses were bought back drawing on federal funding of $715,000. About 26% of the valid licenses held in the early 1980s were retired. However, many people held Columbia River salmon gillnet licenses issued by Oregon and similar licenses from the state of Washington. One-fourth of the people surrendering Oregon salmon gillnet licenses were able to continue participating in the Columbia River gillnet fishery by using their Washington state licenses (Read and Buck). Consequently, much of the Oregon buyback program was probably removing latent rather than active effort.

Northwest Emergency Assistance Program[1]

Since 1976, a major change has occurred in the Northeast Pacific Ocean with favorable carrying capacity conditions for salmonids from northern British Columbia to Alaska, and highly unfavorable conditions for many salmon stocks from southern British Columbia to California (Pearcy 1997). These conditions hampered efforts to recover fish populations

that had been depressed by loss or degradation of inland habitats. These conditions, which include weak upwelling and warm sea temperature, have become especially acute for coho salmon during major warming of the ocean waters across the eastern and central tropical Pacific Ocean, known as the El Nino/ Southern Oscillation (ENSO). Of the ten most severe ENSO events of the twentieth century, several occurred in the recent years of 1983, 1987, 1992, and 1997. The recent events not only harmed ocean survival of several salmon stocks, but survival was made more difficult by drought, flooding, and minimal snow pack in the fresh water spawning and early life stage portions of salmon habitats.

The Northwest Emergency Assistance Plan (NEAP) was developed to assist fishermen affected by the fishery resource disaster declared in May of 1994 by the Secretary of Commerce. This $15.7 million aid package was generated to alleviate economic hardship and assist in the voluntary transition of fishermen to other fields of work. Twelve million dollars of the package were distributed among three programs aimed directly at disadvantaged fishermen: (1) a vessel permit buyback program ($4.0 million), (2) a habitat restoration jobs program ($1.6 million for work in Washington, and $2.2 million each for Oregon and California), and (3) a data collection jobs program ($1.0 million in Washington and $0.5 million each for Oregon and California). [2]

By August 2, 1995, the Secretary of Commerce had determined, based on a review of scientific findings, landings, and ex-vessel revenue trends, that the status of the salmon fishery had not sufficiently improved to warrant the removal of disaster status. An additional $12.7 million in aid was proposed to further assistance programs under the NEAP. Additional funds for the Habitat Jobs program totaled $4.8 million, $2.65 million for the data collection program, and $5.25 million for the permit buyback program.

The intent of the first round of the buyback program was to provide short term financial assistance for fishermen who suffered an uninsured loss attributable to the salmon fishery disaster and to provide long term benefits for both the remaining fishermen and the resource by reducing the size of the salmon fleet.

Only Washington demonstrated an interest in a buyback program. Consequently, Washington state was the sole intermediary for the vessel permit buyback program and administered the program through their Department of Fish and Wildlife (WDFW).

The NEAP buyback program required that the maximum benefit derived from the programs must not exceed 75% of a fisherman's uninsured loss. No purchase price could exceed $100,000. All fishermen participating in NEAP programs had to demonstrate an uninsured loss. Any fisherman receiving a permit buyback grant could not participate in either the habitat restoration jobs program or the data collection jobs program. Finally, no fisherman with a gross income of greater than $2 million could participate. The WDFW contacted all current license holders by mail, sending out more than 1,300 applications in all. Twenty different public workshops were held at ten different locations to assist in the preparation of applications prior to the March 29, 1995 starting date for bid submission. After closing on May 12, 1995, the permit buyback operated as a sealed bid/ reverse auction until funds were exhausted.

At the time the program was developed, many of the licensed vessels either were not fishing for salmon or only participated to a limited degree. To spread the funds across the

largest number of qualifying fishermen and to remove much of the latent effort, the program was designed to remove the maximum number of vessel permits. The sum of $4 million was allotted to reduce the capacity of the Washington fleet by 50%. Of these funds, a total of $1 million was intended for troll licenses and $3 million for gill net permits. Of 459 ranked packages, 302 offers were accepted (~66%). Eight of the people whose bids were accepted did not respond when informed that they had been selected. Funds that had been set aside for those eight permits were used to buy three additional, higher priced permits. The 190 troll licenses were purchased for $1,735,756 at an average of approximately $9,100 per license. Eighty-three gill net licenses accounted for $1,825,820 of the budget at an average of around $22,000 per license. An additional 23 charter boat licenses were also purchased for $319,610 or an average payment of $14,000 each. Allocations among gear types shifted from the original to a more balanced distribution. More than 60% of the administrative allocation was returned for the purchase of an additional three licenses. If the number of licenses bought and remaining is any indication of the overall reduction of the salmon fleet, then the program fell short of their goal of 50% by half. Further, even the 25% reduction in number of licenses does not translate into a comparable reduction in the fishing power of the fleet because the prices paid for these permits were too low to adequately compensate the losses of the larger/ more powerful vessels.

Final approval of funding for the second round of the Washington State License Buyout (WSLB) came through on September 30, 1996 but the official announcement of the program's new criteria was delayed for a month to evaluate public comments on the proposed program options. Of the $5.25 million allotted, $50,000 was directed to support another round of the Data Collection Jobs Program in the State of Washington in addition to the buyback requested by the Governor.

The specifications for the second round varied from the first round. In the second round, awards could not exceed $75,000. Also, demonstration of "uninsured loss" was no longer necessary under newly amended Interjurisdictional Fisheries Act (IFA) and was replaced by "salmon disaster impact" (SDI) which is equal to 2.5 times the difference between a fisherman's highest gross salmon fishery income derived from fishing during any calendar year between 1986 and 1991 (base years) and the least amount of gross salmon fishery income derived from commercial salmon fishing between 1991 and 1995 (comparison years). Participants were no longer excluded from other NEAP programs. Finally, no fisherman with a gross income of greater than $2 million in any year could participate.

Based on the responses during the public comment period, NMFS chose to adopt a competitive ranking system based on the actual losses suffered by fishermen for the second round. NMFS determined that this option would give productive fishermen a better opportunity to exit the fishery if they so choose. Fishermen were to calculate their SDI based on the same information used to calculate their "uninsured loss" in the first round and were ranked accordingly. Fishermen also had to agree to refrain from the commercial salmon fishery in the State of Washington for a period of 10 years (unless the license in question was purchased before 1995). The new eligibility criteria for the second round required that fishermen derive income from the commercial salmon fishery in at least one year between 1986 and 1991, possess or be eligible to possess a commercial salmon license in 1994 and possess that same license in 1995, demonstrate

an SDI of greater than $0, and agree to refrain from participating in the commercial salmon fishery for a period of 10 years.

Fishermen divided their buyback offer by their calculated SDI to obtain their "offer ratios." Licenses were then ranked according to their offer ratios from lowest to highest. In the event of a tie, the lower offer was selected. The fate of the vessels attached to these permits was again left in the hands of the vessel owners, as no scrapping provision accompanied the changes to the program in the second round.

In arriving at these new criteria the WDFW held seven meetings with industry representatives, made thousands of phone calls and mailings, and sponsored 16 workshops to further involve fishermen and the fishing industry in this second round. They even went so far as to hire an industry-based staff person to assure that the needs of fishermen were met.

The $5.2 million earmarked for the second round of the WSLB was to be allotted as follows: $2.25 million for troll licenses, $2.3 million for gill net, $400,000 for charter boats, and $250,000 for administrative costs. Of 1138 eligible applicants, 357 packets were submitted to the program (~31%). There were 136 offers made and accepted based on these applications. Seventy-two troll licenses were purchased for $2,285,271 at an average price of $31,740 per license. At a slightly higher rate of $45,145 per license, 52 gill net permits accounted for $2,347,561. Lastly, WDFW purchased 18 charter boat licenses for $443,138 at an average price of $24,619. The prices paid for charter and gill net licenses roughly doubled and troll licenses more than tripled over those in the first round. Final expenditures in all three gear types increased from their initial allocations thanks to frugal spending of the administrative funds. Over half of these administrative funds ($126,783) were cycled back into the program to purchase an additional two troll, two gill net, and two charter licenses.

In an analysis of rounds one and two, Stern (1997) noted the difficulty in comparing two different programs that were attempting to balance two conflicting objectives: short-term relief for those leaving the industry and long-term economic relief for those continuing in the industry. He concluded that the 1995 program purchased 296 licenses, more than double the 142 licenses removed in the 1996/1997 program. By purchasing licenses based on the lowest offer, the 1995 program removed more potential harvest capacity than the later program. On the other hand, to the extent that the harvest capacity is reflected in the income history of the license surrendered, the 1996/1997 program reduced more "historical" harvest capacity than the 1995 program. Stern provides information comparing earning history and average prices paid to illustrate his points.

In the 1995 program, the gillnet licenses were purchased at an average price of $21,998 and the licenses removed showed an earning record in their best year in the base period of $23,924. In the 1996/1997 program, the average purchase price rose to $45,145, but the removed licenses had more productive histories with an average of $61,372. An increase occurred for charterboats, with prices rising from $13,896 to $24,619, with salmon income histories shifting from $30,208 to $53,020. Salmon troll purchase prices jumped more rapidly from $9,136 to $31,740, but so did income histories which rose from $9,317 to $34,638.

Stern made six recommendations, which are repeated here because some of them influenced the current (round three) buyback program and many of them are similar to conclusions reached by this Task Force. Stern

recommended: 1) a single clear goal to avoid the difficulties in balancing conflicting goals of economic assistance and downsizing the fleet; 2) a clear picture of what success will be and adequate resources to reach that benchmark; 3) a mechanism to purchase inactive licenses because these are the cheapest to purchase and have the same impact on long-term harvest capacity as the more expensive permits; 4) continued restrictions on license sellers purchasing the same type of license and re-entering the fishery in the short term; 5) use a single public input process to reduce confusion to the fishing industry and streamline the process; and 6) inclusion of Puget Sound in future programs.

On August 19, 1998, the Secretary of Commerce announced that $3.5 million of federal disaster relief would be matched by $1.17 million appropriated by the Washington State Legislature. These funds, which were designated for another salmon license buyback program, were a response to a decline from a 1987-1991 average commercial salmon landings value of $126 million to an all-time low of $17 million in 1996. The natural disaster was caused by environmental fluctuations including flooding in the Northwest, including the Puget Sound. The natural elements were compounded by continuing stress from manmade elements.

Sixty-three percent of the funds were available for the purchase of Puget Sound salmon gill net licenses ($2,040,000), salmon purse seine licenses ($660,000) and reef net licenses ($105,000). The other 37% is to purchase salmon troll and delivery licenses ($750,000), gill net licenses used to fish in the Columbia River and Willapa Bay or the Columbia River and Grays Harbor ($840,000), and salmon charter licenses ($152,000).

The WDFW ran the program in two phases. In the first phase, a fixed offer amount was available on a first-come, first-served basis among eligible license holders. The offer amounts for commercial fishing vessels were $7,500 for troll and salmon delivery licenses, $10,000 for Grays Harbor/Columbia and Willapa Bay/Columbia gill net licenses, $12,000 for Puget Sound gill net licenses, $15,000 for reef net licenses, and $30,000 for salmon purse seine licenses. In the case of charter vessels, the offer was for $1,000 per angler permit not to exceed $10,000.

Except for Columbia River gillnet fisheries, the number of offers exceeded the funds available and buyback funds were allocated using random drawings to choose among offers submitted on the same day. "Columbia River gillnetters submitted 64 applications of which 61 were purchased, 146 were received from trollers and 100 were purchased, 58 were received from charter license holders and 20 were purchased, 568 were received from Puget Sound gillnet license holders and 172 were purchased, 29 were received from Puget Sound reef net license holders and 7 were purchased, and 144 were received from Puget Sound seine license holders and 22 were purchased." (Muse 1999)

Because the Columbia River gillnet license holders did not exhaust their designated share of the funds, a second phase of the buyback took place in November 1998 following the procedures of the 1996-97 program. The program purchased 9 gillnet licenses for $246,400, out of the 75 Phase Two applications. The average payment of $27,378 per license was about 61% of the price paid in the 1996-97 program but 274% of the price paid for similar licenses in the first phase of the 1998 program (Muse 1999).

As Muse points out, it is very hard to calculate how many licenses were removed by

buyback and how many disappeared due to the hardships in the salmon fisheries and lack of interest in continuing to keep licenses current. However, he does estimate that the total impact is considerable with 41% of the 1994 Columbia River gillnet licenses, 54% of the troll licenses, 23% of the charter licenses, 7% of the Puget Sound reef net licenses, 16% of the Puget Sound gillnet licenses, and 14% of the Puget Sound seine licenses being bought back. As perspective, he adds that "In the Puget Sound seine and gillnet fisheries uncompensated expirations took more licenses out of the fishery than buybacks" (Muse 1999). Muse's conclusion that "the programs probably did not make a significant inroad into current fishing capacity" (Muse 1999) is consistent with the analysis of the Task Force.

New England Groundfish

Perhaps no Regional Fishery Management Council has faced a task quite as difficult as the New England Fishery Management Council with the groundfish resources of the Northwest Atlantic. Although the Magnuson-Stevens Fishery Conservation and Management Act was expected to protect valuable fish stocks on Georges and Grand Banks from heavy foreign fishing, the expansion of domestic fishing effort led to frequent and lengthy seasonal closures. This plan was superceded by an interim groundfish plan from 1982 to 1986, which substituted minimum fish sizes and net mesh size regulations for Georges Bank and the Gulf of Maine for the unpopular quotas. However, these measures were unable to restrain rising exploitation rates, growing landings, and declining resource abundance. Consequently, a comprehensive multispecies groundfish fishery management plan was introduced in 1986 and continues to this time.

In 1991, litigation led to a consent decree with an agreement to reduce groundfish fishing mortality by 50% in a five-year stock rebuilding period. Implementation of these reductions took the form of Amendment 5 to the Multispecies FMP. Among the measures in Amendment 5 were a moratorium on issuance of additional vessel permits during the rebuilding phase, except for smaller and lower power vessels, an effort allocation system allocating and limiting individual days at sea, and an effort reduction program to reduce the initial days at sea allocation by 10% per year and down to 50% of the initial allocation in five years.

Under the provisions of the Emergency Supplemental Appropriations Act of 1994, $30 million were granted to support the Northeast Fisheries Assistance Program to address the needs of people affected by the decline of Northeast fisheries. These funds were appropriated from disaster relief money intended mostly for earthquake relief in California. One year later, a $2 million pilot buyback program designed for the Northeast was modeled after plans implemented in the United Kingdom. The program was intended to remove as many vessels as possible from the northeast fleet as quickly as possible at the lowest possible cost.

This program, known as the Fishing Capacity Reduction Demonstration Program (FCRDP), was intended to help determine whether a substantial buyback program could be designed to be broadly acceptable to fishermen and fishing communities while significantly reducing the size of the fishing fleet. NOAA and NMFS officials spent long hours in open meetings throughout New England to craft the program in response to public comments and create substantial support for the program. The FCRDP permanently retired 11 groundfish fishing vessels and 26

federal fishing permits. Although this is only a small fraction of the 5,128 vessels with Northeast multispecies permits in October 1995, it demonstrated the feasibility of conducting a buyback program.

At the same time that Amendment 5 was being developed and implemented and while the Northeast Emergency Assistance Program was providing modest relief to distressed fishermen and fishing communities, haddock stocks achieved a record low level, two yellowtail flounder stocks collapsed and the collapse of the Georges Bank cod stock seemed imminent. Additional restrictions were placed on the groundfish fisheries including expanded coverage of the limited access permit program to smaller vessels and shortening of the time period for reducing the number of days at sea. On March 29, 1995, the Governor of Massachusetts requested that eight coastal counties be declared natural disaster areas. This request was denied on several grounds, including that the scientific evidence on the role of natural forces did not fit the standard for natural disasters. The shift in ocean regime was not similar to a single episode such as a hurricane, tornado or flood, but Massachusetts argued that it did resemble the sort of adverse cumulative environmental phenomenon associated with droughts. On August 2, 1995, the Secretary of Commerce announced that the continued weak conditions of some New England fish stocks constituted a fishery disaster. As a result, funds from several existing federal aid programs were shifted to finance a comprehensive package of measures that were designed to address both short-term hardships in fishing communities and long-term needs to recover fish stocks.

One of the elements of the northeast fisheries disaster relief package was the Fishing Capacity Reduction Initiative (FCRI). Both the FCRDP and the FCRI were funded under the authority of the Interjurisdictional Fisheries Act. Also like the FCRDP, this program was voluntary, with the Government accepting bids from applicants according to the lowest ratio between the bid (offer to sell) and average groundfish fishing revenues. Applicants calculated their revenues as the average for sales of regulated groundfish species in any three of the years 1991, 1992, 1993, and 1994 for which sales of those groundfish species accounted for 65% or more of their total sales. Funds of $22.4 million were used to purchase 79 vessels. These 79 vessels accounted for 20.3% of the value and 20.1% of the weight of groundfish landed in the region between 1994 and 1996 (Kitts and Thunberg, 1998). To avoid transfer of the fishing capacity to other fisheries, the vessels had to be scrapped, legally sunk, or used for purposes other than fishing. Most were scrapped, seven were sunk, six are being used for research or education and four for harbor patrol or humanitarian pursuits.

The FCRDP and FCRI placed restrictions on a purchased vessel from being used in the Northeast groundfish fishery, but did not restrict the rights of those who sold vessels from purchasing a vessel and attaching permits from another member of the industry. Some studies of the source of fishing power suggest that the most important factor is the skill of the skipper. If some of the retired vessels were sold by skilled skippers, and if these people use funds received through this program to purchase a permitted vessel from a less skilled skipper and upgrade it, some have suggested that the programs may actually increase fishing capacity (Gates et al., 1997).

The most widespread concern, which is shared with most fishing capacity reduction programs, is with latent fishing effort. Latent effort is the fishing effort for which the physical capacity at least theoretically existed, but was not previously used, and it is closely related to

the concept of excess capacity discussed elsewhere in this report. Fishing fleets have low rates of capacity utilization for many reasons. For example, fish stocks may be at a low abundance level. Fish prices may be low due to either competition from other food sources or displacement in marketing channels when fish are not regularly available. On the other hand, stock recovery (or at least, greater availability), higher fish prices, different fishery regulations, or a host of other changes can increase the fishing mortality from a given fleet by stimulating the use of previously latent effort.

Many of the permits allowing vessels to participate in the New England groundfish fishery are attached to vessels that are out of commission, but are eligible to be attached to a new or reconstructed vessel. Others are held by people participating in other fisheries or only working part time in the groundfish fishery while waiting for the fishery to recover. In 1997, 1,592 vessels that held permits to land groundfish landed no fish at all. However, these are mostly small vessels, many of them in the open access fishery. Another 826 vessels landed some species of fish, but not groundfish. Of the vessels that were allocated days at sea to harvest groundfish, 936 used less than half of that allotted fishing time. The remaining 421 vessels used 82% of their days at sea on average, and also could have expanded their fishing rates (Kitts and Thunberg, 1998).

In summary, this buyback program did retire a significant fraction of the currently active fishing vessels in the New England groundfish fishery. However, the amount of latent fishing effort is so large that it is unclear whether it had a noticeable impact on fishing capacity. In fact, many believe that one result of the program was to move latent effort back into the fishery. On the other hand, because a vessel participating in the buyback program had to surrender all its permits, not just the groundfish permits, beneficial impacts may have taken place in some of the other overcapitalized fisheries in the region.

Although many fishery moratoria become permanent limited entry systems, there is also a possibility that popular sentiment could lead to pressures to remove the moratorium and allow the size of some or all components of the fishery to expand once again. Even if these factors do not contribute to an expansion in fishing mortality, researchers note that, historically, technological advances increase the fishing power of vessels (Gates and Roy, 1989). Also, if the permits are limited in only some respects, other limited entry programs have experienced an increase in investments to increase the power of whatever is limited (this is popularly known as capital stuffing). The more general question of how to establish incentives to prevent capital stuffing is beyond the purview of the Task Force. The Task Force believes, however, that government subsidies, in the broad sense in which that term is used in this report, should be designed so they do not encourage capital stuffing.

Texas Shrimp Fishery Management License Buyback Program

On August 2, 1995, the Secretary of Commerce announced a $53 million disaster assistance program, which provided funding of $25 million for groundfish programs in the northeast, $13 million for losses in California, Oregon, and California salmon fisheries, and $15 million for fishery disasters in the Gulf of Mexico. Among the many sources of disaster were high levels of non-point source nutrients and debris entering the Gulf due to Mississippi River floods, causing oxygen depletion in

coastal waters with resultant damage to marine life. Flood debris created underwater hazards for fishermen. In addition, hurricanes harmed fish habitat and caused major economic damages and social disruption. On June 10, 1996, up to $5 million was committed to direct grants to commercial fishermen suffering uninsured fishing vessel gear damage or loss caused by the hurricanes, floods, or their aftermath.

On March 11, 1997, NMFS established a Gulf of Mexico Sustainable Fisheries program that provided $10 million in fishery disaster assistance to the Gulf of Mexico. These funds were to go to Gulf states, subject to requirements that the funded projects 1) be consistent with the Secretary's original resource disaster declaration, 2) address the long-term benefit of the fishery resource and associated habitat and seek healthy, sustainable fisheries in the Gulf of Mexico, 3) not duplicate existing federal, state, or local projects (although maintenance of existing projects was acceptable), and, 4) in the case of new data collection projects, show a clear relationship to long-term benefits to the fishery resource that will not require additional funding. Among the examples of acceptable projects were "fishing capacity reduction projects to alleviate the excess capacity targeting the depleted stocks and to mitigate the financial harm suffered by fishermen who targeted these stocks." (62 FR 11158).

Texas had recently begun a buyback program and applied its share of funds ($1.25 million) toward that program. Although heavy fishing pressures for shrimp in nearshore areas and environmental degradation have long created problems for the Texas shrimp fishery (Griffin and Stoll 1981; Johnson and Libecap 1982), problems in managing the fisheries in Texas coastal bays finally became so challenging that the Texas Legislature approved a limited entry program in 1995.

The central issue revolves around the life cycle of brown and white shrimp, the two most valuable species in Texas. Both species spawn in the Gulf of Mexico, but the young shrimp drift into coastal bays and live there for several months before migrating back to open waters. The large size of the bay and bait shrimp fisheries makes it difficult to contain the harvest of the young shrimp until they can grow to a size that contributes the most economic benefit. On top of the chronic problems of excess capacity in the nearshore bay and bait shrimp fisheries, floods and hurricanes in the early 1990s damaged both the shrimp resource and its habitat, creating short-term economic disaster conditions as well as further illustrating the need to reduce the size of the fishing fleets.

Among the provisions of the 1995 shrimp licensing law was a provision for a license buyback program (section 77.119 of subchapter F of chapter 77 of the Texas Parks and Wildlife Code). Although the Director of Texas Department of Parks and Wildlife was given much flexibility to set criteria, buyback programs were subject to final approval by the Texas Parks and Wildlife Commission and oversight by the Texas Legislature. Funds for the buyback program were provided through modest fee increases for several shrimp licenses (bait-shrimp dealer, wholesale fish dealer, wholesale truck dealer, retail fish dealer, shrimp house operator, commercial bait-shrimp boat, commercial bay shrimp boat, commercial gulf shrimp boat, individual bait-shrimp trawl). These license fees were to rise by 15%, but not by more than $25.

Since the implementation of the limited entry program, there have been three rounds of commercial bay and bait shrimp license buybacks. The first two rounds resulted in a purchase of 67 licenses from 380 applicants at

a cost of $228,507. The average payment for the 37 bay and 30 bait licenses purchased was $3,410. The third round, which was completed in March 1998, led to another purchase of 59 licenses from 211 applicants, at a cost of $217,855. Bids accepted ranged from $1,500 to $6,400.

The Texas program was a reverse bid auction process with criteria such as license history and vessel length. The objectives were to provide funds to fishermen who had suffered the greatest losses from the natural disasters, while also removing as many licenses as possible. Although the reverse auction process probably means that many of the licenses removed were latent, this buyback program is seen as a politically feasible way to address chronic excess capacity in an equitable manner.

To insure that reduction in capacity is not offset through capital stuffing, vessels with bay or bait licenses may not be longer than 60 feet nor can their engines have manufacturer ratings of more than 400 horsepower. Vessels that exceeded these dimensions before the beginning of the limited entry program may continue to operate, but if they are replaced, they must also meet the length and horsepower limits. Licenses are transferable, but restricted to favor people currently in the Texas shrimp fishery or their heirs.

Discussion of Current and Past Programs

The Importance of Historical Context

The Task Force believes that evaluation of all subsidy programs must be made in context. Programs that were designed to meet social objectives at an earlier time and drew on information available then can easily be misunderstood years later. This is particularly important in the case of buyback programs that have been funded by the federal government over the past two decades. Buyback programs in the Pacific Northwest salmon fisheries in the 1970s and early 1980s were designed to assist non-treaty fishermen in adjusting to changing legal interpretations of treaty fishing rights. More recently, buyback programs in the state of Washington were funded by the federal government primarily as a component of natural disaster relief, but also in response to new scientific information about the likely availability of salmon for harvest in the near future, and thus the need to assist the fishing industry as it adjusts to more realistic and current expectations about the size of sustainable fisheries in the future. The more recent buyback program in the Texas bay and bait shrimp fishery must also be judged in the context of historical evolution of the Gulf shrimp fishery including the challenges in reshaping the inshore fishery. In the New England groundfish fishery, the objectives of the buyback programs remained unclear to some of the industry participants, and the success of the programs in reducing fishing capacity has been widely questioned.

Latent Effort

Data limitations prevented the Task Force from providing an estimate of what is thought to be the most important problem in the New England buyback program: latent effort. The most significant criticism of the New England program is that latent capacity is so large that removal of even several of the most active licensed vessels resulted in the program having negligible impact. Some have argued that capacity may have even increased by providing license holders with the financial resources to

buy other licensed vessels and to upgrade their fishing power (Gates et al. 1997). Because the Texas bay and bait shrimp fishery is so large and funds are so limited, it may be true that increases in technology will increase capacity faster than the buyback will remove licensed operators. There is a view within the Texas Department of Parks and Wildlife that the fair baseline for comparison is not current capacity, but the capacity in the absence of a program. [3] The argument that technology will advance with or without buyback is reasonable, but it is an empirical question. For similar reasons, whether the license removal in Washington salmon fisheries will reduce capacity can only be assessed over time as the salmon fishery continues to evolve. However, some of the participants in the salmon fishery also argue that some of the money received in buyback is being channeled toward greater fishing power of remaining licenses. In particular, allegations have been made that people who owned both Washington and Oregon salmon gillnet licenses were selling their Washington licenses and using the funds to upgrade their fishing capacity in either the Oregon gillnet salmon fishery or other fisheries.

Leakage

A major concern with operating buyback programs in specific fisheries is that the vessels, gear, financial resources, or skipper skill (human capital) will move (leak) into other fisheries. The manager of the first Washington state salmon license buyback program in the early 1970s, who had managed an earlier salmon vessel buyback program in British Columbia, said "I have had the pleasure of buying and selling a number of vessels more than once and look forward to seeing them again as limited entry programs expand" (Bell 1978). Although the New England program was designed to either scrap vessels or impose other restrictions to keep them from entering other U.S. fisheries, critics argue that some of the compensation provided to those surrendering licenses has already contributed to more effective fishing capacity in New England. Although the recent Washington buyback program, by concentrating on license (instead of vessel) buyback, did permit associated vessels to move to other fisheries, it is not clear that the vessels in question are well suited for many other purposes. For example, in personal communications, some Columbia River gillnetters reported that their vessels are suitable only for the sheltered waters found in rivers or bays and cannot be adapted for ocean fishing. Nevertheless, the possibility of leakage has raised concern among fishermen in adjacent states.

Moral Hazard

In addition to the direct consequences of buyback programs on fleet capacity, indirect consequences may emerge due to altered expectations and incentives to act in ways counter to the goals of the programs. Most license limitation programs have been introduced after widespread discussion led to an expectation of increased value of a fishing license. This is the common explanation for an increase in the rate of participation in fisheries during qualification periods and a reduction in exits from the fishery while licensing programs are undergoing changes. For analogous reasons, some people have remained in fisheries in which active discussions of a buyback are under way. Also, expectations of higher compensation if one waits for a later round of participation may slow involvement in a buyback. This is closely related to the problem of "moral hazard": the incentive of people to alter their behavior in

anticipation of compensation.[4] Only as more programs get under way are we likely to be able to fully assess the consequences of speculative holding of capacity and the success of measures to avoid it. Although people holding Washington state salmon licenses have reported that the possibility of a buyback caused them to remain in the fishery, most appear to be retaining their licenses through a reluctance to acknowledge the end of a deeply treasured tradition. Consequently, although the anticipation of future compensation is a plausible explanation, it appears to be only one of many factors in the slow exit of license holders from a fishery.

The Task Force identified three principal arguments for government involvement in buyback programs. First, many disaster relief programs are defined as social insurance programs. When disasters can truly be unanticipated, society prefers to provide assistance after the fact rather than requiring universal insurance and protection against all possible hazards. Of course, for this to be a valid reason, the resource disaster must be unanticipated, and for it to take the form of a buyback the disaster must be expected to continue for a long time. Second, a buyback must be an equitable process for compensating people when the cause of the mismatch between the resource and fishing capacity lies outside the fishery. Third, the government has a fundamental governance responsibility to assist people in an industry reshape the fishery in the public interest. Each of these motivations may lead to more involvement by the federal government in funding buyback programs. However, most of the discussion of future buyback programs centers on programs funded entirely or largely by the fishing industry. We now turn to these programs.

Capacity reduction programs under the Magnuson-Stevens Act

Provisions

The Sustainable Fisheries Act authorized fishing capacity reduction by amending section 312(b) through (e) of the Magnuson-Stevens Fishery Conservation and Management Act (Section 312 and MSA) and adding a new section 1111 to Title XI of the Merchant Marine Act, 1936 (Section 1111 and Title XI). The Secretary of Commerce can fund capacity-reduction programs through: 1) Saltonstall-Kennedy (S-K) funds; 2) funds appropriated explicitly for capacity reduction by Congress; 3) an industry fee system; or 4) funds from any State or other public or private sources. Two programs are under development using the industry fee option, and additional programs are being discussed in other parts of the country. The possibilities for federal assistance in financing those programs is discussed in Chapter VIII.

The Pacific Groundfish Limited Entry Trawl Fishery

At its June, 1998, meeting, the Pacific Fishery Management Council (PFMC) voted to send a buyback business plan for the Pacific coast groundfish limited entry trawl fishery to the U.S. Secretary of Commerce.[5] The next steps are for the National Marine Fisheries Service, in consultation with the PFMC, to develop an implementation plan and refer it to the industry. Under the SFA, for the buyback to proceed two-thirds of the voting trawl permit holders must support it. This section, reviews the factors leading to this submission, briefly summarizes the business plan, and reviews

some of the concerns of those opposed to its submission.

Following passage of the Magnuson Act, the number of trawlers operating off the coasts of Washington, Oregon, and California expanded from 286 in 1977 to 472 in 1979. This expansion in capacity, made even more significant by addition of improved electronic, navigational and fish-finding equipment, was partly in response to displacement of foreign fishing fleets from the U.S. extended economic zone and partly due to the displacement of domestic trawlers from other fisheries including waters off the coast of British Columbia. Joint ventures for Pacific whiting began in the late 1980s and completely displaced the foreign groundfish fishery by 1989. Late the following year, U.S. factory trawlers began exploiting the whiting resource and, in combination with an expanding shore-based processing sector, preempted the joint venture fishery by 1991. As is noted in the buyback business plan, "the overall result was that in just a few years the Pacific coast groundfish fishery had progressed from harvesting surplus production from generally healthy or under harvested fish stocks, to the point of excessive effort, with stocks at maximum sustainable yield levels and limited room for expansion of traditional fishing operations."

The PFMC groundfish fishery management plan, which was implemented in 1982, included many of the measures that had evolved over many years under state management: primarily area closures and minimum mesh sizes. The Groundfish FMP relied heavily on aggregate harvest quotas (or guidelines) which limited the length of seasons, set maximum weights of landings of selected species, and limited the number of trips for those species. These cumulative trip limits were developed to extend the length of the fishing year and to keep groundfish actively in market channels. Although this system has been effective in preventing the acceptable biological catch from being exceeded, tighter trip limits (in both frequency of trips and amount landed at the end of each trip) have reduced the economic efficiency of many trawlers. Following several years of development, a license limitation plan was approved and became effective on January 1, 1994. However, additional restrictions on groundfish landings in response to new information about some fish stocks, and to new conservation requirements under the Sustainable Fisheries Act, have convinced many trawler owners that their fleet has excessive capacity and could be aided by an industry-funded buyback program.

The groundfish capacity reduction program is designed to reduce the fishing capacity of the non-factory trawl fleet by one-third from the 280 current permits in the fleet to somewhere between 190 and 200. If the proposed program is approved by two-thirds of the eligible permit holders, a first round of buyback will be conducted at a total cost of $10 million. If bids submitted in the first round do not meet program goals for $10 million or less, a second round of bidding will be held for $15 million, with successive rounds at $20 million and $28 million, if necessary. This four-round system is intended to achieve program goals at the least cost to the remaining industry.

Five principal issues have emerged in the consideration of this buyback program. These are latent capacity, shift of effort into other fisheries, distribution of benefits and costs of the program among those who remain in this fishery, allocation of the total allowable catch between limited entry license holders and others fishing for the stocks in question, and the need for the program if other management measures are adopted.

Featured in the buyback proposal is the single largest concern: allocation. The motivation of the buyback is to reduce the capacity of the commercial limited entry trawl groundfish fishing fleet in order to provide a more sustainable economic future for those remaining. With improved net earnings, the commercial operators then have an incentive to pay increased fees for the next 20 years. However, these fishermen are only one of several user groups competing for access to the resource. Although the trawl fishery has been the principal gear type for harvesting various species of rockfish and flatfish, Pacific whiting, sablefish, lingcod, Pacific cod, and several species of skates and sharks, several of these species are taken by other gear types: pot, longline, and hook and line (both commercial and recreational). If the share of the resource currently taken by limited entry trawlers is reallocated to the other groups, the business plan is no longer valid. On the other hand, the other groups would like to expand their share of the harvest, and see allocation as limits to their growth. Because no fishery management council can bind future councils to long-term allocation blocks, no ironclad assurances can be given.

Also of great concern is the possibility that vessels that surrender permits to trawl for groundfish will expand their activities in other fisheries such as pink shrimp, Dungeness crab, swordfish, albacore, spot prawn, and market squid. In a letter to the Secretary of Commerce dated June 26, 1998, PFMC Chair noted that several of these fisheries require state-issued permits that some groundfish trawl permit holders already hold. After agreeing that some unknown level of effort increase may result from a buyback program, the PFMC observed that "the status quo of not reducing capacity in the trawl fleet may also have adverse effects on other fisheries. With recent harvest guideline reductions and ocean conditions, many trawl permit holders may already be diversifying and increasing effort in other fisheries. If effective, the capacity reduction program could in fact reduce effort by the trawl fleet in other fisheries by providing higher trip limits and longer seasons."

Designers of the buyback program are aware of the difficulties of latent capacity found in most capacity reduction programs. Although they believe this issue merits additional study, the timing of this proposal is promising. In the year following the initial issuance of the permits, approximately 100 permits were purchased by factory trawler interests. These purchases are believed to have removed a large fraction of the latent permits, leaving an active fleet. This fleet has become accustomed to the appropriate use of trip limits (limits on the number of fishing trips in a given time period and limits on landed weight of managed species). This combination of trip limits and license limitation (which restricts upgrading of vessels to larger size) functions much like a nontransferable individual quota system.

Distributional equity has emerged as a point of concern. The argument is that the limited entry groundfish fleet is not homogeneous and that some of those who would be assessed increased landing fees would receive little benefits in future years while bearing much of the cost.

One additional argument against an industry-funded buyback program is that it may not be needed if some other management approaches are adopted. Individual Transferable Quota (ITQ) programs in the United States and in other countries reduce fleet capacity, sometimes markedly as in the Mid-Atlantic surf clam and ocean quahog fishery where 21 to 25 vessels are expected to "remain active under the ITQ regime as compared to 128 vessels under the previous limited entry

program."[6] Although there is a current moratorium on new ITQ programs, this moratorium will expire well before the 20-year financing period associated with an industry-funded buyback. Thus those advocating adoption of ITQ systems argue that buyback systems are not needed. A similar argument has been put forward for some other approaches such as license stacking, where license stacking suggests that one vessel can hold more than one license and thus can either land more frequently or land larger amounts under any specified trip limits program.

Capacity Reduction in the Crab Fisheries of the Bering Sea and Aleutian Islands

In October, 1997, the North Pacific Fishery Management Council (NPFMC) requested that the Secretary of Commerce move forward the development of an industry-funded buyback program for the crab fisheries in the Bering Sea and Aleutian Islands (BSAI) king and tanner crab fisheries of the federal exclusive economic zone (EEZ).

The NPFMC directed the Capacity Reduction and Buyback (CRAB) Group, which had developed a preliminary draft business plan for the buyback, to work with the Secretary in this development. This business plan has since moved ahead to a more advanced draft. The NPFMC took final action in April 1999, on a recent participation requirement to reduce latent effort in the licenses to be issued for Bering Sea and Aleutian Islands crab fisheries. The NMFS estimates that 290 separate vessel licenses will result.[7] This action is anticipated to provide sufficient change in the FMP to allow NMFS to move the buyback business plan into planning for implementation.

The BSAI king and tanner crab fisheries are under duress from excess capacity in the fishing fleet. The NPFMC, the Alaska Board of Fisheries (BOF), and the Alaska Department of Fish and Game (ADF&G), which share management responsibilities for the BSAI king and tanner crab fisheries, recognize that overcapacity poses a risk to the recovery and long-term conservation of these depressed resources. Each of the affected fisheries — the Bristol Bay king crab, Bering Sea tanner crab and Bering Sea and Aleutian Islands king crab fisheries — exhibits the effects of overcapacity: resource declines leading to episodic, ineffective and costly fishery closures and unsustainable harvests; and lost revenues to the increasingly hard-pressed fleet, which has experienced a 58% decline in gross revenues between 1990 and 1997. The social and economic conditions in fishery-dependent communities are adversely affected, and the safety of fishermen is threatened. This last point deserves particular emphasis. Due to the race for fish by the excessive numbers of vessels in brief openings, fishing for crab in the Bering Sea has become the most dangerous occupation in the United States according to federal statistics.[8]

The Bristol Bay red king crab stocks, for example, are at a historically low level of abundance, and are being managed for rebuilding. Despite this restrictive management, the fishery exceeded its 1996 guideline harvest level (GHL) of five million pounds by more than three million pounds. The ADF&G, which manages the fishery, testified to the BOF in August, 1997, that the fishery was unmanageable at the 1996 level of participation, when 196 vessels fished. The BOF responded with new regulations, severely restricting the number of pots each vessel may use (50% reduction), removing any requirement for advance notice of closure of the fishery, and declaring that, during seasons in which more than 250 vessels register, the

in-season management of the fishery would be extremely difficult, and therefore, the number of hours for the fishery could be set in advance.

The catch quota for the 1997 season was exceeded by a wide margin, despite these new measures. A variety of other management measures have been adopted, including conditional fishery status for king crab (in 1975. See discussion in Chapter VII, p. 81), quotas, time and area closures, size and sex restrictions, gear restrictions, pot limits and restrictions on entry - a moratorium on entry of new participants to the fishery, and the pending License Limitation Plan (LLP), to be implemented on January 1, 2000.[9] As originally configured, there would be approximately 368 Bering Sea and Aleutian Islands LLP crab vessel licenses issued. For the past four years, the active fleet has been about 235 vessels. If the anticipated number of licenses (290) is issued, over time the number of active licenses can be expected to grow, as licenses are traded and new owners are compelled to show return to investment. The attempt to solve the problem of overcapacity through limited access would thus lead, paradoxically, to an individual increase in capacity.

A poll of crab vessel owners, conducted by the McDowell Group of Juneau in May 1997, found that 90% of vessel owners agree that it is important to reduce the size of the fleet that is presently fishing. This poll was mailed "cold" to the vessel owners, and a remarkable 171 responses were returned, of which 58% indicated they would support an industry assessment of between 2% and 3% of gross stock to pay for a license buyback that would accomplish reduction of the fleet.

Based on this expression of interest, an Alaska nonprofit corporation, the CRAB group, began to work with NMFS, NPFMC, and the industry, in order to design a business plan and an implementation plan that are sensible and well-crafted enough to meet the approval of two-thirds of license holders in a statutorily required referendum.

After a great deal of work, discussion, meetings and written input, a draft business plan for a proposed industry-funded buyback of licenses has been prepared. This draft is available to the public. Review of the plan by affected license holders is welcomed and encouraged and comments are solicited. The objective is to devise the best possible plan that will retire the best judgement of those seeking to remain in a sustainable fishery, taking into account its manifold risks and opportunities, in the form of a negotiated payment to those leaving the industry.

The buyback will apply to fishing for crab in the FMP fisheries of the Bering Sea and Aleutian Islands. No vessels will be purchased. Only voluntarily submitted bids will be accepted for surrender of licenses in the proposed buyback. The surrender of licenses and the future fishing rights of the vessel in the fisheries of the buyback will be permanent. The offer at bid will be binding and irrevocable, until the auction is concluded.

Funding for the proposed buyback will be obtained through a loan authorized under provisions of the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA) and the Merchant Marine Act of 1936 (MMA) (MSFCMA §312(b)-(e)). The MSFCMA authorizes loan amounts up to one hundred million dollars, subject to an amortization period of up to twenty years, an interest rate set at 2% above the Treasury cost of borrowing, and assessments of up to 5% of ex-vessel revenues in the fisheries to repay the loan.

The proposed buyback business plan provides for a sixty-million dollar loan and a 2.5% assessment, except that a lower rate will apply to small boats. Based upon the past ten years experience, the contemplated assessment on the ex-vessel income from the fisheries involved in the proposed buyback will generate sufficient revenue to retire the planned loan amount on a 20-year amortization schedule.

The proposed buyback will be a one-time occurrence. This will encourage responsible bidding, discourage unreasonable bids, and provide for an immediate reduction of licenses, and an immediate benefit to both the sellers of licenses and the remaining fleet.

The proposed buyback will pay for itself, and return direct benefits to those remaining in the fleet. This will be accomplished through setting a high minimum performance standard - at least 10% of current harvesting capacity must be qualified for purchase at auction before funding obligations allowing the proposed buyback can proceed.

The proposed buyback will be composed of two separate auctions, each tailored to a specific sector of the fleet. The amount paid for selected licenses will be the amount bid. The allocation of funds between the two auctions will be adjusted according to actual numbers of licenses issued. At the original configuration of 368 licenses, $45 million would be designated for an "A" License auction, and $15 million for a "B" License auction. If the number of licenses originally issued is 290 or fewer, the proposed plan provides the option of eliminating the two-auction approach, and proceeding with a single auction, operated in the "A" auction mode.

The "A" auction is designed to quantify the current harvest capacity that is to be removed, and to assign priority of purchase to the most productive licenses offered at a given price. This is to be accomplished through a reverse, scored-bid, auction. A license holder taking place in the "A" auction will submit his or her lowest acceptable price for sale of the license, together with records of catch and appropriate releases to verify catch figures, etc. The bid tendered will receive a license score based upon the catch records. The more productive the license, the higher will be the assigned score. The bid amount will be divided by the license score to assign bid ranking. Thus, the higher the license score, the lower will be the bid rank. "A" Licenses will be purchased beginning with the lowest ranked bids, proceeding until the funds allocated have been spent, provided that the performance standard above (10% minimum of current capacity retired) has been met. The reduction of capacity under the "A" auction provides the immediate benefit that will pay for the buyback.

The "B" auction is designed to provide opportunity for sale and retirement of licenses without sufficient current catch to obtain competitive scores in the "A" auction. This is to be accomplished through a reverse auction. A license holder taking part in the "B" auction will submit his or her lowest acceptable price for sale of the license. After the "A" auction performance standard has been met, "B" Licenses will be purchased beginning with the lowest bid, and proceeding until the funds allocated have been spent. The "B" Licenses not auctioned will be subject to limitations on use, transferability, and life. This could be done by the NPFMC identifying a category of "interim licenses" that accompany the "B" License category. The reduction of capacity under the "B" auction provides the long-term benefit of stability in the number of licenses, and will benefit the continuing fleet, the fishery resources, and the communities which depend on them.

The target date for implementation of the program is January 1, 2000.

Discussion of Industry-Funded Programs

Because no industry-funded buyback program has been implemented under the new section 312 of the MSFCMA, the Task Force could not assess the effectiveness of these programs in influencing fishing capacity and investment in fisheries. However, the initial development of plans for two major U.S. fisheries has already identified one extremely valuable component, and it has also identified a major difficulty. Both relate to the business plan.

As explained in the discussion of the Bering Sea and Aleutian Islands crab fishery buyback program, an industry-funded buyback requires a careful business plan. Comments received by the Task Force indicate that this type of careful planning is a useful way for fishing industries to think about their future and to consider ways to improve future profitability. However, in many fisheries, expertise to develop this information is limited and data may be incomplete. Fortunately, analysis provided to the PFMC for other actions in their groundfish fishery was sufficiently detailed to provide helpful information for the Pacific groundfish limited entry trawl fishery buyback program. In some fisheries, such as the crab fishery in the Bering Sea and Aleutian Islands, there may be willingness and expertise to retain outside help and to develop the data needed. However, if these programs are to meet the expectations of Congress implicit in the MSFCMA, careful thought should be given to explicitly staffing NMFS or Regional Fishery Management Councils with an adequate number of analysts and to begin developing the type of data required for business plans. This ranges from models that can forecast response of different configurations of fishing fleet to price forecasting models that can project probable future revenues forward for many years.

There appear to be many potential advantages for the use of industry-funded buyback programs. Those who expect to benefit from a closer match between fishing capacity and the resource are those people planning to stay in the fishery or to transfer a license to participate in a fishery that is more profitable in the future. Successful industry-funded buyback programs must be carefully designed to take into consideration the special circumstances of the fish stock, the fishing fleets engaged in the fishery and the fishing communities in which fishermen, processors, and suppliers live. Fortunately, the MSFCMA requires the industry to lead the planning effort, and its requirement of endorsement by a regional fishery management council should require the additional consideration of other regional issues.

Additional Issues

Funding for buyback programs has always been, and continues to be, a critical question. Past programs have been plagued by fishery participants with economic problems and have posed questions about future economic viability. In fisheries where excess capacity is thought to be the fault of people outside the fishery, interest continues in funds coming all, or in part, from other sources including the federal government. However, the willingness of the federal government to provide funding appears to have declined over time, and industry appears to expect to take on more of the cost of removing capacity. As mentioned

earlier, this is often in the public interest and this suggests a greater commitment to assist interested industries by collecting needed data and providing help in formulating business plans.

Fisheries that have participated in or considered buyback programs have several things in common. The fishery resource has been severely stressed, often from damage to habitat or other environmental change that has reduced available fish harvest. There is a need to carefully restrict total fishing capacity. Many fishery participants have become sufficiently concerned that they are willing to act and have already introduced limited entry programs. To make the limited entry program politically acceptable, eligibility criteria often allow more people into the limited-access fishery than can make a reasonable living. This sets the stage for a difficult transition to a sustainable fishery. The question then is whether buyback can assist in that painful transition. Some other options, such as allowing many fishermen to become bankrupt, are even more painful.

If property-rights based approaches, such as individual transferable quota (ITQ) programs, are adopted, buyback programs may not be needed. ITQ programs tend to reduce capacity by providing the owners of ITQs incentives to harvest at least cost so that they can increase profitability. However, the moratorium on new ITQ programs set by Congress in the Sustainable Fisheries Act (MSFCMA §303(d)) suggests that many believe that ITQ programs may not be suitable in all fisheries or that they may need to be designed quite differently from past programs. Until an option of developing new ITQ programs becomes available, buyback may be the only viable method to reduce fishing fleets that have grown too large. Other options, such as allowing many in the fishery to continue to earn low incomes until they are driven into bankruptcy, are certainly possible, but not attractive.

Even if a fishery moves toward ITQs, a transition will be needed. As the fishery adjusts to a smaller size, some vessels and gear will become redundant. If these are not to leak back into other fisheries, actions will be needed to scrap or find another use for the surplus vessels and gear. The role of a well thought through buyback as a precursor to ITQs or other management options merits serious consideration.

Both ITQ and buyback programs have been criticized for failure to consider the consequences for crew members, workers in processing facilities, shipyards and other fishery-related sectors, and for fishing communities at large. The Task Force agrees that these are valid concerns and that they merit study. However, Schrank (1997) and Hannesson (1997) point out that deferring a transition in fisheries in which fish are simply not sufficiently abundant to support all who wish to fish also brings large costs. The maritime provinces of Atlantic Canada are particularly graphic examples of ways that deferring fleet reduction may simply increase the pain when reduction is finally forced.

One final outstanding issue relates to the tax treatment of buyback proceeds. In recent buyback programs, participants report surprise that most, if not all, of their compensation was subject to treatment as ordinary income and taxed at a high marginal rate. In the state of Washington's program, the response was primarily frustration and disappointment, but in New England, full understanding of tax consequences caused some program participants to withdraw their bids. Assuming that any payments from future industry-funded buyback programs continue to be taxed primarily as ordinary income, this will limit

the amount of capacity that will be reduced for any given level of program funds.

Summary and Conclusions

1. Buyback programs have been created to respond to varying objectives and should be evaluated in terms of those objectives.

2. Requirements of business plans for the new industry-funded buyback programs make many useful contributions including careful consideration of objectives. However, to provide for successful implementation, several steps are needed by NMFS:

a) promptly implement regulations for industry funded buyback programs;
b) collect data and provide assistance in formulating business plans; and
c) collect data needed to evaluate the success of the buyback programs.

3. The process of implementing effort limitation programs usually allows more participants than can sustainably pursue the fishery. This commonly creates a large amount of latent capacity. The existence of latent effort is a key problem in every buyback program. In many programs, many licenses removed were associated with operations that were not fully active participants, and, in several programs, so much latent effort remained that little impact on the excess capacity problem was observed. Buyback program designers should seek ways to reduce fully active and latent effort.

4. Fishing capacity reduction programs free capital, labor, and entrepreneurial talent from fisheries experiencing overcapacity. Because many U.S. fisheries have excess capacity, reduction in one fishery can simply increase the excess capacity in another fishery. Because recent buyback programs have been part of disaster relief programs, they have also included programs for job training and non-fishing economic development in remote fishing communities. Some programs have also purchased fishing vessels and required that they be scrapped or otherwise prohibited from entering other fisheries. Any fishing capacity reduction program, including buyback programs and individual transferable quota programs, must be analyzed for this form of effort shift from fishery to fishery. On the other hand, the problem must be seen as a need to assist displaced workers in seeking other jobs and to identify new economic enterprises in communities that have become dependent on fisheries operated beyond their sustainable production. To avoid capacity reduction in any one fishery simply because problems exist in other fisheries is to try to escape responsibility for making a transition to sustainable fisheries.

Endnotes:

1. The most recent buyback programs in Washington state are analyzed in Ben Muse, "Washington State Commercial Salmon Fishery Buyback Programs, 1995-1998," CFEC 99-1N. Alaska Commercial Fisheries Entry Commission, 8800 Glacier Highway, #109, Juneau, AK 99801. This report is available on the world wide web at http://www.cfec.state.ak.us/research/BUYBACK/WA_BB.PDF. Because the full Task Force was not able to study this document, it was not integrated its recommendations into this report. However, that analysis is very credible due to the past record of the policy analyst and the level of peer review used before the document was released.

2. For a more complete discussion of disaster relief programs in the context of the Task Force's charge, see Chapter I.

3. R. Reichers, personal communication. Economists call this the "with and without" principle. The effect of a policy change is the outcome with the policy change relative to the outcome without it.

4. As Fischel notes, moral hazard is a severe concern of insurance companies. For example, full compensation for fire damages may reduce the level of precaution against fires. Moral hazard is also a key factor in the argument elsewhere in this report that providing natural disaster relief by helping fishermen out after storms acts to keep capacity higher than it would otherwise be. (See ChapterX.)

5. Pacific Fishery Management Council, Council News, Volume 22, Number 3. The business plan for the Pacific Coast Groundfish Limited Entry Permit Buyback Program has been revised several times. Each updated version appears as a supplemental attachment to the briefing book materials for meetings of the Pacific Fishery Management Council. These materials are available at the offices of the Council and at the Northwest Office of the National Marine Fisheries Service.

6. Q. Weninger, "Assessing Efficiency Gains from Individual Transferable Quotas: An Application to the Mid-Atlantic Surf Clam and Ocean Quahog Fishery," American Journal of Agricultural Economics 80 (November 1998): 750-764.

7. North Pacific Fishery Management Council Newsletter, February 13, 1998, page 7. See also C-6(b) "Supplemental: Discussion Paper on Suggested Changes to the License Limitation Plan," NPFMC Staff, February 1998.

8. Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, Division of Safety Research, Alaska Field Station, 4230 University Drive, Grace Hall, Suite 310, Anchorage, Alaska 99508. November 4, 1997.

9. 50 CFR Parts 671, 672, 675, 677. See 60 F.R. 40763-40775, August 10, 1995.

Chapter IX: Wallop-Breaux

Abstract

The most notable fisheries assistance program in the United States that is directed specifically at recreational fisheries is the Wallop-Breaux program. First developed along the lines of a similar program for wildlife, Wallop-Breaux imposes a tax on, inter alia*, fishing tackle and equipment, electric sonar equipment, and imports as well of these products. These funds, and the tax on gasoline attributed to motorboats and small engines, are put into the Aquatic Resources Trust Fund. From there they support many programs û most notably state fisheries restoration projects, including boating access.*

Under the Task Force's approach, the Wallop-Breaux program falls within the definition of a subsidy. However, as with many programs, the evaluation of the subsidy is complicated, involving the positive subsidy of the expenditures against the negative subsidy of the taxes. The role of the federal government is to facilitate this process, rather than fund it out of general revenues. The Task Force does not believe that the Wallop-Breaux program presents a serious matter of concern for fisheries capacity. Still, additional studies of recreational fisheries, including capacity and fishing effort, are necessary.

Introduction

There are few fisheries assistance programs in the United States that are specifically targeted at recreational fisheries. The most notable of these is the Federal Aid in Sport Fish Restoration Act, commonly known as the Wallop-Breaux Program. Under Wallop-Breaux, excise taxes are collected by the federal government and distributed according to specific statutory formulas for various types of programs. The largest use of these funds is to support projects carried out by state fisheries agencies, which receive funding according to a preset formula. The program is prominently considered a "user pay" program, and has over the years enjoyed the strong support of the industries and the recreational fishermen who pay the excise tax. The effect of the program is to allow fishermen to contribute specifically to programs aimed at restoring sport fisheries.

Background

The basic concept of the Wallop-Breaux program was first adopted for wildlife resources with the enactment in 1937 of the Federal Aid in Wildlife Restoration Act, otherwise known as "Pittman-Robertson." This program imposed an excise tax on the sale of hunting equipment, such as firearms and ammunition, which was collected by the manufacturer and paid to the U.S. Treasury. The funds were transferred to the Secretary of the Interior (who acted through the United States Fish and Wildlife Service), and apportioned to the states according to a preset formula. The states then proposed projects to spend their allocated funds; and after approval by USFWS, carried out the projects. Thus, the federal government acted as a go-between to allow hunters to contribute to projects that would help restore wildlife resources. The states had management authority over these wildlife resources, and were closer to them and their particular problems than the federal government could be. Pittman-Robertson is still administered in virtually the same fashion today.

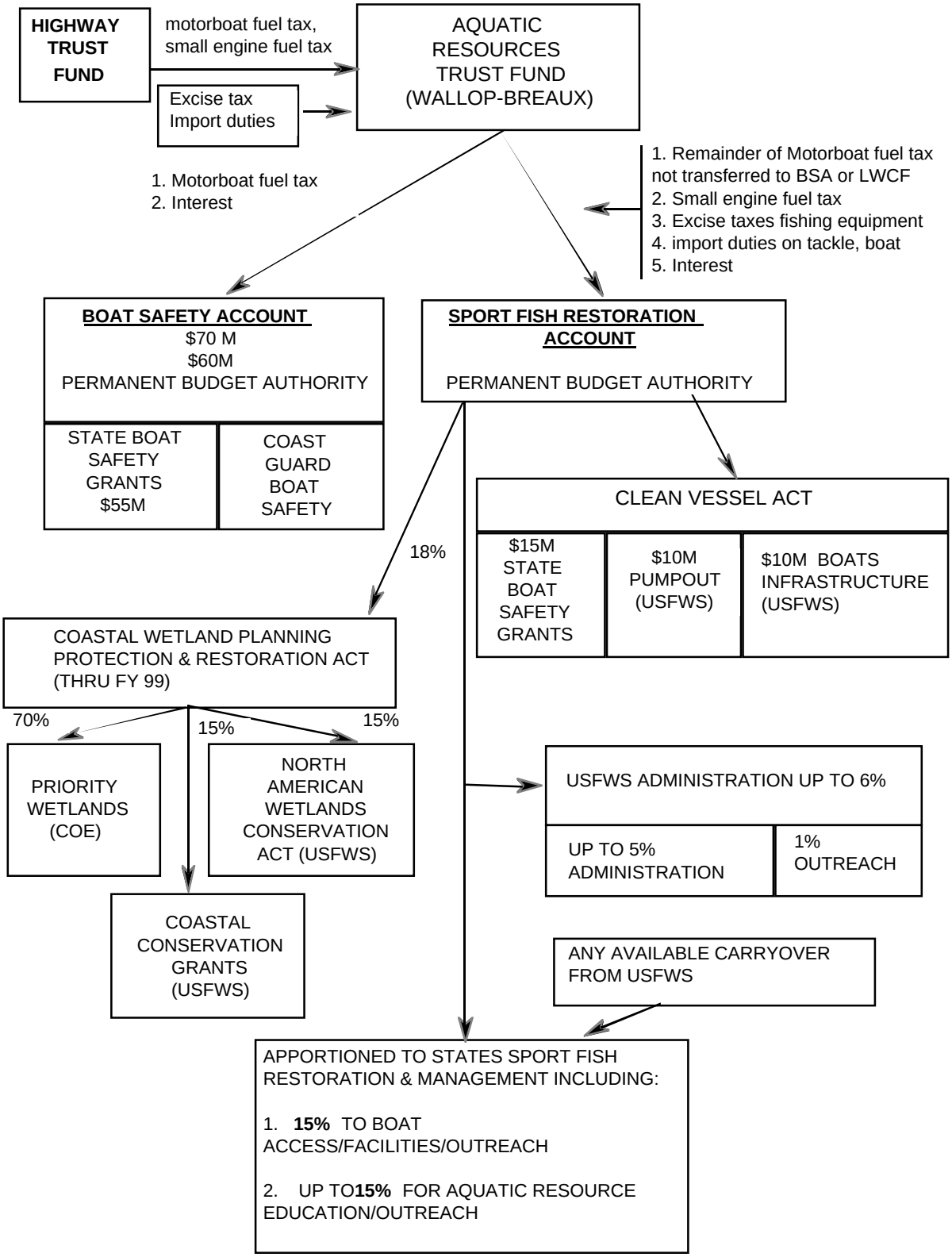
The Pittman-Robertson program was successful enough that anglers and the fishing tackle industry sought to have the same principle applied to fisheries. In 1950, Congress passed the Federal Aid in Sport Fish Restoration Act, at that time known as the "Dingell-Johnson" program. It was a virtual mirror of the Pittman-Robertson legislation, and was administered by USFWS in much the same fashion.

Although the Pittman-Robertson program has been virtually unchanged since its inception, the Dingell-Johnson program has been through a number of substantive revisions. The most significant were the 1984 amendments to the program. These were so significant that the entire program is now commonly referred to by the names of the sponsors of the amendments, and is called the Wallop-Breaux program. The 1984 amendments extended the excise tax to a larger class of fishing-related items, imposed the excise tax on imports of fishing tackle, and transferred funds into the program equal to the gasoline fuel taxes paid by recreational boaters.

The Wallop-Breaux program was expanded in 1991, when the law was amended to assign the fuel tax on small engines to the fund, and some of the new revenues to the program were dedicated to coastal wetlands restoration. These coastal wetlands support nursery areas for sport fish species.

In 1992 the Wallop-Breaux program was amended by the Clean Vessel Act of 1992 to require that each state use a portion of its

FIGURE 4: AQUATIC RESOURCES TRUST FUND FLOW CHART



funding for pumpout facilities in coastal areas.

The Wallop-Breaux program was amended again in 1998. The authority to transfer motorboat fuels and small engine taxes into the program expired on October 1, 1997. The massive highway funding bill that was enacted by the 105th Congress, the Transportation Equity Act for the 21st Century (known as "TEA-21"), continued the authorization for transfers into the Wallop-Breaux program, modified the uses to which funds could be applied, and authorized a new public education and outreach program for sport fisheries.

How the Program Operates

The Funds

The Wallop-Breaux program operates through a series of funds that the monies pass through. The revenues to the Wallop-Breaux program come from: 1.) excise taxes on recreational fishing equipment that are added to the price of the product by the manufacturer, and then paid by the manufacturer to the U.S. Treasury; 2.) excise taxes on gasoline attributed to motorboats and to small engines; 3.) excise taxes on electric sonar equipment; 4.) import duties on fishing equipment; and 5.) interest. No general taxpayer revenues come into the fund; and it is therefore self-sustaining. These receipts are placed into two funds according to a statutory formula: the Boating Safety Account and the Sport Fish Restoration Account.

Distributions from the Funds

Funds that are deposited into the Boat Safety Account are allocated by the United States Coast Guard to the states for boating safety programs in the fiscal year that they are received. These are a fixed amount, determined by Congress in appropriations acts. If more funds are received than are appropriated, the excess spills over into the Sport Fish Restoration Account for allocation in the following fiscal year.

Funds that are deposited into the Sport Fish Restoration Account are allocated for the fiscal year following the one in which they are received, along with any carry-overs of unspent funds from the previous year's Boat Safety Account. By law, the use of the Sport Fish Restoration Account is determined as follows:

1. 18% is allocated for coastal wetlands planning and protection, including funds for the Corps of Engineers, coastal wetlands grants (45% of which must be spent in Louisiana), and the North American plan for wetlands conservation.

2. $35 million is allocated to carry out the Clean Vessel Act, including funds for additional boating safety grants through the U.S. Coast Guard, infrastructure development and grants to construct and maintain pumpout facilities in coastal waters.

3. The remainder is allocated to the states for sport fish restoration projects according to a formula specified by statute. Each state receives at least one percent, but not more than five percent, of the total available, with the specific allocations being based on each states number of licensed anglers and its land and water area. Once a state is allocated its share, it prepares project proposals for spending its share. Each proposal must be approved by the United States Fish and Wildlife Service, and must

TABLE 10: AQUATIC RESOURCES TRUST FUND PROGRAM STATISTICS

Line	Aquatic Resources Trust Fund			
	Receipts by Category	**1996**	**1997**	**1998**
a	Gas/Motorboat	37,605,915	$ 35,000,000	55,000,000
b	Interest on investments	4,063,742	4,000,000	5,000,000
c	***Total Boat Safety Account***	41,669,657	$ 39,000,000	$ 60,000,000
	Sport Fish RestorationAcct.			
d	Gas/motorboat	127,199,085	$ 129,000,000	111,000,000
e	Fishing Equipment	98,253,000	102,000,000	105,000,000
f	Electric Sonar	2,573,000	3,000,000	3,000,000
g	Import Duties	28,103,356	29,000,000	30,000,000
h	Gas/Small engines	53,330,000	55,000,000	56,000,000
I	Interest on Investments	40,813,652	40,000,000	40,000,000
j	***Total Sport Fish Rest. Acct***	$ 350,272,093	$ 358,000,000	$ 345,000,000
k	**Total Artf Receipts (c+j)**	391,941,750	$ 397,000,000	$ 405,000,000
l	Less boating Sefety Receipts	(41,669,657)	$ (39,000,000)	$ (60,000,000)
m	State Boat Safety Grants			
n	Coast Guard			
o	Total Sport Fish Receipts	$ 350,272,093	$ 358,000,000	$ 345,000,000
p	SFRA Distributions (prior yr rcpt)	304,536,708	$ 350,272,093	358,000,000
	less:			
	Coastal Wetlands			
q	Corps of Engineers	(38,371,625)	(44,134,300)	(45,108,000)
r	FWS Coastal Wetlands	(8,222,491)	(9,457,350)	(9,666,000)
s	FWS N. Am. Account	(8,222,491)	(9,457,350)	(9,666,000)
t	***Total Coastal Wetlands***	(54,816,607)	(63,049,000)	(64,440,000)
	Clean Vessel Act			
u	State Boat Safety Grants (thru CG)	(10,000,000)	(10,000,000)	(15,000,000)
v	Boat Infrastructure (thru USFWS)	(20,000,000)		(10,000,000)
w	Pumpout (thru USFWS)	(10,000,000)	(10,000,000)	(10,000,000)
x	***Total Clean Vessel Act***	(40,000,000)	(20,000,000)	(35,000,000)
y	PY Carryover to States		20,000,000	
z	**Subtotal (p-t-x+y)**	209,720,101	287,223,093	258,560,000
aa	SFR Admin. Needs	13,232,706	15,473,218	
bb	PY SFR Admin Carryover	(649,503)	(1,479,052)	
cc	Max New Admin Avail (6% of line z)	12,583,206	17,233,386	(15,513,600)
dd	New SFR Admin Deductions	(12,583,206)	(13,994,166)	(15,513,600)
ee	**SFR Apprortionment to States (z-dd)**			
ff	Boat Access		34,153,616	36,456,960
gg	Aquatic Ed & Sport Fish		239,075,311	206,589,440
hh	**TOTAL**	197,136,893	273,228,927	243,046,400

include 25% non-federal funding. States are prohibited from replacing existing state funding with Wallop-Breaux funding.

Issues

The Wallop-Breaux program applies a tax to recreational fishing gear and motorboat and other fuel taxes, and distributes these funds to a broad array of programs; including funding for coastal wetlands protection and restoration, vessel pumpout stations, and boating safety. The largest share of the distributions, just over half, goes to the states for projects to restore sport fisheries, including providing boating access.

Under the Task Force's approach, the Wallop-Breaux program falls within the definition of a subsidy. Although the program involves no net cost to the federal government, the clear purpose of the program, by improving recreational fisheries, their habitat, and access to them, is to make recreational fishing more attractive. Beyond the Wallop-Breaux program, in fact, it is the policy of the United States to promote recreational fishing. President Clinton issued Executive Order 12962 (June 7, 1995), that declares this policy and requires federal agencies to coordinate their activities to promote recreational fishing. All of this leads both to an expansion of the recreational fishery, and also the profits of the firms that supply recreational equipment and other industries that support recreational fishing. Thus, there is some level of subsidy involved in the program, even though the net costs and expenditures to the government are mostly offsetting.

However, the evaluation of the subsidy is complicated. The parts of the program that benefit coastal wetlands, water quality and boating safety serve many legitimate national goals besides recreational fishing; and how much of this portion of the subsidy ought to be attributed to recreational fishing would be a matter of debate. The nature of recreational fishing as an economic activity also presents analytical problems. The economic activity associated with recreational fishing is spread over a large sector of the economy. Promoting recreational fishing also promotes the tourism industry, for example. Thus, there are important cross-sectoral affects of the program, the analytical problems of which were noted in Chapter IV. Analyzing the positive effects of the Wallop-Breaux program is also complicated by the fact that expenditures influence the background against which investments in recreational fishing are made, rather than transfers directly to the firm making the investment.

One other complicating factor must be noted. In marine waters, many of the fishery resources that benefit from the Wallop-Breaux program are the target of commercial as well as recreational fisheries. On the one hand, the benefits of the program promote recreational fisheries that may be in competition with commercial fisheries, and to that extent may be seen as a negative subsidy to affected commercial fisheries. On the other hand, to the extent that shared fishery resources benefit from the program, *e.g.*, by habitat improvement, commercial fisheries may be healthier and more productive, which may be seen as a positive subsidy to commercial fisheries.

Recommendations

The Wallop-Breaux program is a rare type of government activity in that it operates on a "user-pays" basis. The federal government plays a facilitating role in carrying out the

TABLE 11: FINAL APPORTIONMENTS OF FEDERAL AID IN SPORT FISH RESTORATION FUNDS FOR FISCAL YEARS 1997, 1998, 1999*

STATE	FY 1997	FY 1998	FY1999*	STATE	FY 1997	FY 1998	FY1999*
Alabama	4,252,972	3,958,695	2,657,895	New Hampshire	2,732,289	2,720,284	1,848,737
Alaska	13,661,447	13,601,422	9,243,684	New Jersey	2,732,289	2,720,284	1,848,737
Arizona	5,791,939	5,718,356	3,899,687	New Mexico	4,909,697	5,078,055	3,368,404
Arkansas	4,489,514	4,478,514	3,061,804	New York	6,889,348	6,814,704	4,628,593
California	13,661,447	13,601,422	9,243,684	North Carolina	4,415,670	4,362,967	2,942,645
Colorado	6,769,980	6,951,514	4,717,244	North Dakota	2,732,289	2,720,284	1,923,593
Connecticut	2,732,289	2,720,284	1,848,737	Ohio	6,933,850	6,480,378	4,605,723
Delaware	2,732,289	2,720,284	1,848,737	Oklahoma	4,820,397	5,204,223	3,633,915
Florida	7,086,130	6,814,742	4,690,820	Oregon	6,466,118	6,333,898	4,309,350
Georgia	4,983,680	5,047,096	3,356,002	Pennsylvannia	7,025,969	7,210,860	4,642,081
Hawaii	2,732,289	2,720,284	1,848,737	Rhode Island	2,732,289	2,720,284	1,848,737
Idaho	4,613,478	4,617,060	3,111,063	South Caorlina	3,399,610	3,422,663	2,368,907
Illinios	5,727,984	5,658,102	3,777,038	South Dakota	3,385,725	3,434,336	2,392,971
Indiana	4,256,164	4,083,833	2,782,086	Tennessee	5,891,802	5,748,267	4,121,155
Iowa	3,738,218	3,691,530	2,505,067	Texas	13,661,447	13,601,422	9,243,684
Kansas	4,030,353	4,004,336	2,800,684	Utah	5,110,927	5,038,107	3,327,482
Kentucky	4,049,907	4,072,388	2,747,972	Vermont	2,732,289	2,720,284	1,848,737
Louisiana	4,594,403	4,781,270	3,017,330	Virginia	4,374,353	4,270,210	3,054,832
Maine	2,732,289	2,720,284	1,848,737	Washington	6,157,846	6,071,831	4,395,241
Maryland	3,047,342	2,925,085	2,005,927	West Virginia	2,732,289	2,720,284	1,848,737
Massachusetts	2,732,289	2,720,284	1,848,737	Wisconsin	8,554,155	8,749,943	6,084,118
Michigan	10,035,511	9,590,104	6,416,364	Wyoming	4,369,170	4,443,821	2,939,520
Minnesota	10,055,268	10,199,644	6,862,042	Puerto Rico	2,732,289	2,720,284	1,848,737
Mississippi	3,501,905	3,464,214	2,347,033	Guam	910,763	906,762	616,246
Missouri	7,022,466	7,024,808	4,706,571	Virgin Islands	910,763	906,762	616,246
Montana	6,440,365	6,443,747	4,318,077	American Samoa	910,763	906,762	616,246
Nebraska	3,526,327	3,651,577	2,362,221	N. Mariana Islands	910,763	906,762	616,246
Nevada	4,184,760	4,216,079	2,843,830	District of Columbia	910,763	906,762	616,246
				TOTAL	**153,183,005**	**152,196,958**	**102,717,810**

* preliminary apportionments

program's activities, but the funding is coming from somewhere else (the industry and the fishermen), and the expenditures are being made by someone else (state fish and wildlife agencies and others). The Wallop-Breaux program is a subsidy within the framework laid out in Chapter IV. But the Task Force noted that, as in many other cases, there would be many difficulties in trying to understand and quantify the potential subsidy effects of the program. From the standpoint of investments in fisheries, the Task Force does not believe that the Wallop-Breaux program presents a serious matter of concern.

Nevertheless, from the perspective of current fishery policy analysis, recreational fisheries are extremely important. All over the country, anglers exert significant fishing mortality on some of our most valuable marine fish species; and in many instances the impacts of recreational fisheries on stocks is greater than commercial fisheries. So it is extremely important to understand the dynamics of how recreational fisheries operate, including the capital and fishing effort components.

Unfortunately, the analysis of recreational fisheries is late in coming and still inadequate. As the Task Force found out, even basic concepts of fishing capacity and what it means to recreational fisheries are not very well understood at all. (See discussion in Chapter III.) In particular, the Task Force was again concerned that recreational fisheries data, and program data about Wallop-Breaux, have not been collected and maintained in a manner to facilitate analysis of these fisheries and the programs that relate to them.

The Task Force recommends that NMFS and USFWS place greater emphasis on studies of recreational fisheries, including capital, capacity and fishing effort; and encourages state fish and wildlife agencies to use their Wallop-Breaux funds to study these matters as they are reflected within the states. The Task Force also recommends that the federal agencies emphasize improved statistics on recreational catch and effort, since the present program lacks the resources to provide reliable statistics for many fisheries.

Chapter X: Other Programs

Abstract

The Task Force examined several other programs and federal agencies that may have also played a role in subsidizing or otherwise influencing capital investment in U.S. fisheries. These programs include: disaster relief, loans administered by the Small Business Administration (SBA) and the Farm Credit System (FCS), grants from the Economic Development Administration (EDA) and the Saltonstall-Kennedy program, the Sea Grant program, and other fisheries development, marketing, and promotion programs. Although many of these programs have directly influenced investment in fisheries, it is difficult to quantify this effect because of large gaps in the available data. The Task Force recommends that funding for these various programs be crafted in a manner that is consistent with the overall policy of sustaining the nation's marine fishery resources. Furthermore, these programs should not be used to promote the entry of new capital into the fishing industry.

Disaster Relief

Several federal agencies have the statutory authority to provide funds for fisheries disaster relief programs. In the Department of Commerce, the National Marine Fisheries Service (NMFS) and the Economic Development Administration (EDA) have provided funds for fisheries disaster relief. The Federal Emergency Management Agency (FEMA), the Department of Labor (DOL), and the Small business Administration (SBA) have also been active in fisheries disaster relief programs. The Rural Development Administration (RDA) in the United States Department of Agriculture (USDA) has also played a role in fisheries disaster relief.

History of Fishery Disaster Relief

Since the 1960's, NMFS has helped to offset the impacts of natural disasters on our nation's commercial fisheries. Three important pieces of legislation provide the Secretary of Commerce with the authority to make funds available to states affected by natural resource disasters. These laws are: the Commercial Fisheries Research and Development Act (CFRDA), the Interjurisdictional Fisheries Act (IFA), and the SFA which amended the Magnuson-Stevens Act.

The CFRDA (P.L. 88-309), passed in 1964, authorized the Secretary to cooperate with the states through their respective state agencies to carry out projects designed to research and develop the commercial fisheries resources of the nation. Section 4(b) of the CFRDA required the Secretary to give preference to those states in which there was a "commercial fishery failure due to a resource disaster arising from natural or undetermined causes." This section also stated that funds provided through this Act were to be used for any purpose that the Secretary deemed appropriate to restore the fishery affected by the failure or to prevent a similar failure in the future.

The IFA (P.L.99-659)(16 U.S.C.4101 *et seq.*) was passed in 1986. The IFA repealed the CFRDA, however, section 308(b) of the IFA included some of the disaster relief language found in section 4(b) of the CFRDA. Section 4(b) of the CFRDA and §308(b) of the IFA were intended to provide disaster relief for a commercial fishery failure caused by a fishery resource disaster. In 1992, §308(d) was added to the IFA, providing the Secretary the authority to award grants to persons engaged in commercial fisheries for uninsured losses as a result of a fishery resource disaster caused by Hurricanes Hugo, Andrew, Iniki, or any other natural disaster.

Since 1994, the Secretary has committed $95 million in disaster relief pursuant to authority contained in the IFA. Sixty-five million dollars of this total was appropriated through the 1993 Department of Defense Appropriations Act pursuant to section 308(d) of the IFA while the other $30 million was appropriated through the Emergency Supplemental Appropriations Act of 1994 (ESAA) pursuant to §308(b) of the IFA.

In May, 1994, the President released $12 million of the $65 million to fund the Northwest Emergency Assistance Plan (NEAP). The NEAP provided relief for fishers in Washington, Oregon, and California adversely affected by the emergency closure of the salmon harvest. The NEAP used $4 million for a vessel permit buyout program in the State of Washington, $6 million for a habitat restoration jobs program, and $2 million for a data collection jobs program. (See discussion in Chapter VIII, p. 108.)

In response to disasters declared by the Secretary in August, 1995, the President made available the remaining $53 million of the $65 million to provide relief for fishermen in New England, the Gulf of Mexico, and the Pacific Northwest. Of the $53 million, $25 million was used to fund a vessel permit buyout program in New England with $2 million of the $25 million used to provide health insurance for fishermen in New England. These programs were designed to provide relief from the collapse of the commercial fisheries in the Northeast.

Fishers in the Gulf of Mexico received $15 million while the remaining $13 million was used to continue the programs in the Pacific Northwest. Of the $15 million made available to Gulf states, $5 million was used to provide financial assistance to fishermen who suffered uninsured fishing vessel or gear damage or loss caused by hurricanes, floods, or their aftereffects. The remaining $10 million was allocated to five Gulf states' fisheries agencies for projects designed to alleviate the long term effects of the disasters on the Gulf's fishery resources and associated habitat.

The $30 million appropriated through the Emergency Supplemental Appropriations Act of 1994 was released by the President in March of 1994. The funds were released to provide emergency assistance to fishermen adversely affected by the collapse of commercial fisheries in New England. NOAA received $12 million of this total and used the funds for several purposes. Direct grants in the amount of $9 million were used to support alternative markets and on-shore infrastructure in New England. In addition to $1 million for program administration, another $1 million was used to implement the Fishing Family Assistance Center Program (FFAC) in New England. The FFACs, implemented in conjunction with the Small Business Administration (SBA) and the Department of Labor (DOL), were designed to be one-stop shops where fishermen and their families could receive a variety of services. The remaining $1 million was allocated for the Fishing Vessel Obligation Guarantee program (FOG). The FOG program provides loan guarantees to finance or refinance major fisheries production equipment, including on-shore facilities and retrofitting of vessels.

The EDA received the remaining $18 million of the ESAA funds to implement the Northeast Fisheries Initiative which included a revolving loan fund, strategic planning, technical assistance, and coordination. The initiative, which targets entire communities affected by declining fish stocks and new regulations, focuses on long-term recovery through reinvestment and diversification.

In 1996, Congress passed the SFA which amended the Magnuson-Stevens Act. Under section 312(a) of the Magnuson-Stevens Act, NMFS has received and responded to two disaster requests from affected States. Mississippi requested disaster assistance in 1996 for relief from the effects of red tide on the oyster population. On April 4, 1997, NMFS denied the request on the basis that the incident was of limited duration and had no lasting impact on the Mississippi oyster reserve. Therefore, there was no basis to declare a disaster from natural causes.

In November, 1997, NMFS made a disaster determination in the State of Alaska for the Bristol Bay sockeye and Kuskokwim River chum salmon fisheries. The disaster determination was made based on record low salmon returns in the region due to undetermined causes, resulting in a commercial fishery failure. Congress appropriated $7 million in emergency disaster assistance to the State of Alaska. The funds, administered by Alaska's Department of Community and

Regional Affairs, were used for community grants, a fishermen's loan program, economic planning, fisheries research, and administrative support.

In September, 1998, the Secretary of Commerce again declared a commercial fishery failure in the Bristol Bay and Kuskokwim River salmon fisheries as further declines in the salmon runs in Alaska continued to cause economic hardship. In response to the declaration, Congress appropriated $50 million in disaster assistance to the Department of Agriculture to be distributed through several federal agencies. Of the total, $15 million was transferred to the Economic Development Administration (EDA) to be administered through the Economic Development Assistance Program and another $5 million was transferred to the Trade Adjustment Assistance Program. In addition, $18 million in emergency aid was provided directly to the State of Alaska for distribution to individuals with family incomes below the poverty level. Another $7 million was transferred to the Secretary of Commerce for disaster research and prevention and the remaining $5 million went to the Small Business Administration (SBA) for direct loans to eligible small businesses in the region.

NMFS made disaster determinations in both the Gulf of Mexico brown shrimp fishery and the West coast salmon fishery in August of 1998. The Department of Commerce provided $3.5 million in federal funds to the states of Louisiana and Mississippi to restore the brown shrimp fishery damaged by floods in 1997. The relief is also to be used for research to study and predict red tides in the region. The Department of Commerce also made $3.5 million in federal funds available to Washington state to restore the salmon fishery damaged by floods from 1995-1997. These funds are to be used for a plan to buy back commercial salmon permits which is intended to restore the fishery and help prevent a future commercial fishery failure by reducing current fishing effort.

The Federal Emergency Management Agency (FEMA) has also played a role in mitigating the effects of natural disasters related to fisheries. Since the 1970's, FEMA has declared over 650 federal disasters, including 11 in the fishing industry. FEMA disaster aid usually comes in the form of Disaster Unemployment Assistance (DUA) for displaced workers. DUA program costs are financed by FEMA but administered through the Department of Labor for distribution to the affected states.

FEMA has declared disasters in the fishing industry due to several causes including El Nino, flooding, and losses from cold weather and freezing. In 1980, FEMA provided disaster unemployment assistance under the Stafford Act (42 U.S.C. 5121, *et seq*.) for the effects of red tide in the State of Maine. FEMA also provided disaster unemployment assistance to fishermen in the Northwest in response to salmon closures made by NMFS during the 1994 fishing season. Due to these salmon closures, FEMA provided over $10 million to the Department of Labor for disaster unemployment assistance. The State of Washington received $6.4 million while Oregon received $2.3 million and $1.6 million was allocated to California.

Through two loan programs, the Small Business Administration (SBA) also provided disaster loan assistance due to the 1994 salmon closures on the West coast. SBA implemented the Fishing Industry Loan Restructuring Initiative (FILRI) which allows the applicant to restructure their existing debt that is currently financed without an SBA guarantee. Because reduced landings have resulted in lower income for fishermen, many are unable to service their

entire debt. Under this program, SBA either puts on standby or writes off the portion of the debt that the applicant is unable to service, thereby allowing the small business to survive. In addition to the FILRI program, SBA also authorized funds for the Economic Injury Disaster Loan (EIDL) program which assists businesses suffering economic injury as a result of a disaster declaration.

Pursuant to the 1988 Stafford Act and the 1990 Farm Bill, the U.S. Department of Agriculture (USDA) has provided assistance to farmers for the effects of natural disasters such as drought, fire, flood, storm, earthquake, hurricane, tornado, volcano, and disease or pest infestation. Since 1987, the USDA has spent an annual average of $2 billion for the implementation of assistance programs such as crop insurance, food assistance, low interest loans, restoration of damaged land, and indemnity payments for crop losses. All farm disaster spending since 1990 has been provided through various emergency supplemental appropriations bills.

In response to the 1994 salmon closures on the West coast, USDA's Rural Development Administration allocated $3 million in economic adjustment for fishing communities. This program consisted of grants to public bodies and private, non-profit corporations to finance the development of small businesses in rural areas.

Land based aquaculture operations that are privately owned are eligible for disaster assistance programs provided by the USDA. However, aquaculture operations conducted in water on leased public lands are not eligible for disaster assistance from USDA. Those aquaculture operations not eligible for disaster assistance from USDA may be eligible for assistance under section 312(a) of the Magnuson-Stevens Act.

Capacity Issues Relative to Disaster Relief

Although disaster relief is usually not intended as a mechanism for capacity reduction, many of these programs do affect the levels of capacity in our nation's fishing fleet. Clearly, the $23 million in disaster relief used for the New England buyback program has had a direct effect on fleet capacity. Although anecdotal information suggests that available latent permits prevented a true reduction in fleet capacity, the program had the potential to remove about 20% of the boats in the New England groundfish fishery. Similar buyback programs have been implemented using disaster relief funds for salmon fishermen in the Pacific Northwest.

With many fish stocks already near depletion, using disaster relief funds for a well-managed buyback program could have a profound impact on the future viability of fishery resources. These funds can be used to mitigate the effects of a natural disaster by providing fishermen with an incentive to exit the fishery which will, in turn, reduce the economic impacts of any future disasters.

Other disaster relief programs have indirectly affected fleet capacity. Jobs that employ fishermen for data collection and habitat restoration can serve as a transitional step towards improving the economic diversification of these impacted fishing communities. These types of programs provide fishermen with skills training which can ultimately reduce their dependence on fishing for their livelihood, especially during poor fishing seasons. In addition, the data collected and habitat restored will have a long-term benefit to the fishery. Better data will allow managers to better estimate stocks abundances and set catch limits while improved habitat will

increase the reproductive ability of the stock as a whole.

In addition to these positive effects on capacity, some of these disaster relief programs could arguably exacerbate an already overcapitalized situation. Direct loan payments and loan restructuring may have the effect of keeping otherwise marginal operations functioning well above normal. This can provide an incentive for fishermen to remain in a fishery when all other factors would indicate that they should not continue fishing operations.

Policy Options

The United States could approach the future use of fisheries disaster relief funds in a number of ways.

Use disaster relief funds for buyback programs

A buyback program can provide an economic incentive for fishermen to leave the industry which has the potential to reduce the levels of capacity the our nation's fisheries. These programs should be crafted with an understanding of latent capacity and include methods to prevent its influx back into fisheries once permits are retired, and shifting to other fisheries which themselves exhibit overcapacity.

Use disaster funds for economic diversification through job retraining

Job retraining can enhance the economic diversity of a fishing community by providing fishermen with other options to support themselves during poor fishing seasons. This is especially important in an uncertain and often cyclical industry like the fishing business.

Limit direct loan payments to fishermen

Direct loan payments can compound the problems facing the fishing industry by providing economic incentives for otherwise marginal businesses to stay active in the fishery.

These three policy options, if implemented, could greatly improve the status of the nation's commercial fisheries. Disaster relief funds can be allocated in a manner that provides fishermen with incentives to exit the fishery while at the same time not providing incentives to stay. This, coupled with a job retraining program, can vastly improve the sustainability of our fishery resources through a reduction in fishing effort.

Small Business Administration

Introduction

By generating over half of the U.S. gross national product (GDP) and employing 50% of the nation's private workforce, small business is essential to the American economy. Created by Congress in 1953, the Small Business Administration (SBA) was established to provide financing, training, and advocacy to small businesses otherwise unable to secure financial assistance through normal private lending channels.

Although the agency has no direct lending and gives no grants, SBA guarantees loans which are distributed through the private sector to small businesses. Currently, the SBA has a portfolio guaranteeing over $27 billion in loans to more than 185,000 small businesses. In the

fisheries sector, the SBA operates both the Sec. 7A Loan Guaranty Program and the Sec. 504 Certified Development Company (CDC) Program. Also available to the fishing industry, the SBA operates the Economic Injury Disaster Loan Program (EIDL) and the Fishing Industry Loan Restructuring Initiative (FILRI). (See Disaster Relief Section)

Program Operation

SBA operates the Sec. 7A Loan Guaranty Program and the Sec. 504 (CDC) Program to participants in the fishing industry. These programs both function through private lenders but differ slightly from each other in their scope, use restrictions, eligibility requirements, and repayment terms.

Loan activity in the fishing industry falls under the general category of agriculture and is further broken down into four Standard Industrial Classification (SIC) codes. These four SIC codes are: finfish, shellfish, miscellaneous marine products, and fish hatcheries and preserves.

The Sec. 7A Loan Guaranty Loan Program provides loan guarantees to participants in the fishing industry who would otherwise not be able to secure a reasonable loan from the private sector. Although there is no regulatory limit to the amount allowed to be requested, loans are generally guaranteed to a maximum amount of $750,000. Because the program requires a 25% cost share from the applicant, the total loan amount that is available is limited to $1 million.

Although eligibility is reviewed on a case by case basis, most small businesses are eligible for assistance under the Sec. 7A program. The business must be independently owned and operated and not dominant in their field. In addition, the business must operate for profit; do business in the United Sates or its possessions; have adequate equity for investment; and use its own financial resources first before turning to SBA for assistance. For fishing industry participants, these businesses also must have annual receipts between $0.5 million and $3.5 million.

Loan funds from the Sec. 7A program can be used for most business purposes. These uses include: constructing or reconditioning vessels and processing facilities; purchasing and/or repairing engines, purchasing gear and supplies, and facility site acquisition. Loan proceeds may also be used for working capital to carry out fishing related business. Fishing vessels are eligible for Sec. 7A funds, however, those wanting to construct or refurbish a vessel with a cargo capacity of five tons or more must first request financing from NMFS.

The Sec. 7A loan funds cannot be used to finance floor plans or purchase real estate that is primarily held for investment purposes. In addition, these proceeds may not be used to make payments to owners or pay delinquent taxes. Also, these funds cannot be used to pay existing debt unless it is shown that the need to refinance debt is not due to poor business management.

The loan maturity for the Sec. 7A program varies according to the borrower's ability to repay, the purpose of the loan, and the useful life of the financed assets. However, the maximum loan maturities are 25 years for real estate and equipment and 7 years for working capital. Interest rates are tied to the prime rate and vary according to the length and amount of the loan. They may be fixed or variable and are negotiated between the borrower and the lender. In addition, SBA charges a guaranty and servicing fee for each loan approved in

order to offset the costs to the taxpayer.

The Sec. 504 Certified Development Company (CDC) Loan Program provides long term, fixed rate loans to small businesses for major fixed assets. Established to assist communities with economic development, a CDC is a non-profit corporation that works cooperatively with the SBA and private lenders to help finance small businesses.

Half of the cost of a Sec. 504 CDC loan is secured with a lien from the private lender while 40% is secured through a lien from the CDC with the entire 40% guaranteed by the SBA. The remaining 10% is an equity contribution provided by the small business requesting assistance. Both the Sec. 7A and Sec. 504 programs have a maximum loan amount of $750,000. The Sec. 504 program has a unique characteristic, in that, the CDC portfolio must create or retain one job for every $35,000 provided by the SBA. In addition, the size eligibility requirements differ from the Sec.7A program. Under the Sec. 504 program, a business qualifies if it does not have neither a net worth in excess of $6 million nor an average income in excess of $2 million after taxes for the previous two years.

Sec. 504 CDC loan funds can be used for purposes similar to the Sec. 7A program. Proceeds can be used to buy land and construct a fish processing plant as well as to purchase and equip fishing vessels. However, unlike the Sec. 7A program, Sec. 504 CDC funds cannot be used for working capital, purchasing inventory, or refinancing debt.

Interest rates for the Sec. 504 program are fixed at an increment above the market rate for 5- and 10-year U.S. treasury loans. The Sec. 504 program does have 10- and 20-year repayment terms. Fees are assessed at 3% of the debt and may be financed with the loan.

Program Statistics

Since 1977, the SBA has made over 700 loans to the fishing industry for a total of over $110 million. The average total annual loan amount is in excess of $5 million. Over $54 million of this total has been allocated for finfish projects and almost $49 million used for shellfish programs. The remaining $6.5 million has been used for fish hatcheries and other miscellaneous projects. Proceeds to the fishing industry have increased greatly since 1994 because SBA relaxed their documentation requirements for loan requests under $150,000.

Since 1988, SBA has guaranteed over $56 million through the Sec.7A program and almost $2 million through the Sec.504 CDC program. For the last ten years, the Sec.7A program has 280 outstanding loans for a total of almost $29 million. During this same period, the Sec.504 program has 4 outstanding loans for a total of $1.5 million.

Capacity Issues

Because SBA allows loan funds to be used for processing facilities and vessel purchases, it is not difficult to conclude that these programs have contributed capacity to the fishing industry. In addition, SBA loan proceeds can also be used to recondition older vessels, purchase gear, and buy equipment. With few restrictions on the use of these loan funds to the fishing industry, these programs have allowed capacity to enter our fisheries and have probably stimulated capital investment.

Although it is not difficult to make these broad conclusions, it is, however, quite difficult to accurately quantify the overall effect of these programs on the level of capacity in U.S. fisheries. Because of gaps in the SBA database

and the generality of the SIC codes, it is impossible to precisely determine what has been the effect of these programs on the capacity of a particular fishery or the industry as a whole. There is no way to ascertain from the SBA database the amount of money used for direct capital expenditures, how much went to processing, or how much was used to buy new boats. One can assume that most of this money probably was used for projects that increased fishing capacity. However, it is not known whether or not the availability of SBA loans influenced an individual's decision to invest in fisheries.

Policy Options

Several policy options have been considered by the Federal Investment Task Force regarding SBA loan activity.

Do nothing

Allow the program to continue functioning in its current capacity.

Redirect the SBA loan activity that is provided to the fishing industry

Place restrictions on the use of SBA funds by not allowing loan proceeds to be used for new vessel purchase or for the acquisition of land for a processing site or for processing operations in general. Allow the funds to be used for only safety upgrades.

Eliminate the fishing sector as an SBA recipient

Economic Development Administration

Introduction

The Economic Development Administration (EDA) was created by the Public Works and Development Act of 1965 (42 U.S.C. 3121) to create new jobs and retain existing jobs in economically stressed communities. Through a series of grant programs, EDA helps distressed communities develop strategies to improve their own economic situation through a multi-faceted cooperative effort. To accomplish this, EDA works in close partnership with local and state governments, regional development districts, Native American tribes, and public and private non-profit organizations.

With several grant programs, EDA assists economically distressed communities adversely affected by long term economic deterioration or sudden and severe economic dislocation. These situations can result from commercial restructuring, new federal regulations, closure of military bases, or natural disasters. EDA programs include: the Public Works Program, Economic Adjustment Program, Planning Programs, Technical Assistance Programs, University Center Programs, Research and Evaluation Programs, and Trade Adjustment Programs.

Program Operation

Most of the EDA activity affecting the fishing industry has been funded through the Public Works Program and the Economic Adjustment Program. These two programs have funded port and harbor development projects and disaster relief projects. (See also Disaster Relief)

The Public Works and Development Facilities Program is designed to expand business opportunities, diversify local economies, and create jobs. Although this program typically funds water and sewer projects and access roads to industrial facilities, it also has funded port and harbor improvements which aid the fishing industry. Priority is given to projects that establish or expand facilities, create new long-term employment opportunities, benefit low income families, and have adequate local funding to show a commitment of support.

The Economic Adjustment Program helps communities adjust to serious changes in their economic situation. Proceeds from this program are generally used for organization, business development, revolving loan funds, infrastructure, and market research.

Program Statistics

During Fiscal years 1995 through 1997, EDA awarded an annual average of over $170 million for its Public Works Program and over $32 million for its Economic Adjustment Program. Historically, only a small percentage of these annual totals go to the fishing industry. Between 1966 and 1993, EDA granted over $4.5 billion for its Public Works Program with roughly $274 million of this total used for port and harbor projects. From 1975 to 1993, EDA spent over $500 million for its Economic Adjustment Program using almost $17 million for port and harbor development. Therefore, roughly 7% of the Public Works Program budget and 3.5% of the Economic Adjustment Program budget has been spent on port and harbor development projects.

Capacity Issues

For the purposes of this Task Force, it is rather difficult to estimate the effect that these programs have had on the level of capacity in the fishing industry. Most of the proceeds from EDA projects affecting the fishing industry have been used for port and harbor development. While these projects may affect the fishing sector, benefits to the fishing industry from port development may only be ancillary and not necessarily intended for that purpose. Because of this, it is impossible to determine the effect that these expenditures have had on the overall expansion or contraction of fishing capacity.

Port and harbor development probably contributes little to a fishermen's decision to enter a particular fishery, but may influence the decision of where to land one's fish. The capacity of a particular area may change as a result of harbor improvement but the effect on the total capacity of the industry as a whole may not be as noticeable.

EDA grant proceeds may also be used to replace capacity that may have been lost due to the changing economic situation. In these cases, the total capacity may remain relatively constant because new capacity is not necessarily being created but rather replaced.

While some EDA projects may have an indirect effect on the level of capacity in the fishing industry, the contribution to capacity is probably negligible and not largely responsible for the industry's problem of overcapacity.

Policy Options

Do Nothing

These programs do not significantly contribute capacity to the fishing industry.

DO NOT FUND PROJECTS THAT DO NOT DECREASE CAPACITY

In the event that EDA funds are used for programs related to the fishing industry, these proceeds should fund projects that do not increase the capacity of the fishing sector. (See "Disaster Relief," *supra*, at p. 138.)

Farm Credit System

Introduction

The Farm Credit System (FCS) was created in 1916 when Congress established the authority for the formation of the federal land banks. Now the oldest of the government sponsored enterprises, the FCS is a network of borrower-owned institutions whose goal is to provide the agricultural sector with a sound source of credit at competitive interest rates.

As of January 1, 1997, the FCS was comprised of 225 banks and associations which include the following: Six Farm Credit Banks (FCB), which make direct, long-term loans through 60 Federal Land Bank Associations (FLBA), and provide loan funds to 65 Production Credit Associations (PCA); 56 Agricultural Credit Associations (ACA), and 31 Federal Land Credit Associations (FLCA). These associations are differentiated by the term lengths of their loans. PCAs provide short and intermediate term loans, the FLCAs make primarily long-term loans, and the ACAs have a variety of term lengths. The FCS also has one Bank for Cooperatives (BC) which makes loans to agricultural, aquatic, and public utility cooperatives. In addition, the FCS has one Agricultural Credit Bank (ACB) which has the combined authorities of an FCB and a BC and provides funds to five ACAs.

Established in 1933, the Farm Credit Administration (FCA) is an independent federal agency responsible for regulating the banks and associations of the FCS. The Farm Credit Act of 1971, as amended, authorizes the FCA to regulate the FCS to ensure compliance with applicable law and to maintain sound banking practices.

Program Operation

FCS banks obtain their loan funds through the sale of debt securities which are neither obligations of, nor guaranteed by, the United States. The debt securities are the obligations of the FCS and backed by its resources and insured by the Farm Credit System Insurance Corporation. To participate in the issuance of debt securities, each FCS bank is required by FCA regulations to maintain assets at least equal to the amount of debt securities for which it is liable.

Although FCS loans are not guaranteed by the federal government, Congress had to bail out the FCS in the 1980s due to the financial crisis facing the agricultural sector. Low prices, high production costs, high interest rates, a declining export market, and falling land values all contributed to the crisis, unseen since the dustbowl days of the 1930s. With the passage of the Agricultural Credit Act of 1987, Congress created the FCS Assistance Board and the FCS Financial Assistance Corporation (FAC). At the direction of the Assistance Board, the FAC was authorized to issue up to $4 billion in 15-year bonds which were guaranteed by the federal government. The FAC's authority to issue these bonds expired in 1992 at which time outstanding debt

securities totaled $1.26 billion. The Farm Credit Banks (FCB) assisted by this program had to repay the principal debt that was issued to fund the assistance. As of 1994, all four FCBs aided by the program had made arrangements to repay the assistance ahead of schedule. All interest, except that related to the Capital Preservation Agreement (CPA) accruals, was paid for the first five years by the U.S. Treasury. The interest was shared between the Treasury and the FCS for the next five years while the FCS has responsibility for the interest in the final five years. Once the debt securities have matured, FCS must reimburse the Treasury for any interest paid.

Most FCS loans that enter our nation's fisheries originate from one of the six FCBs. FCBs may provide fishermen with long-term loans either directly or through a FLBA. The FCBs also provide short and intermediate-term loan funds to PCAs or ACAs which, in turn, have direct lending authority to the fisherman.

Long-term loans to the fishing industry are made for a variety of purposes, including: real estate for aquaculture operations, processing and marketing facilities, and capital equipment. Short-term loans are made for production or operating purposes and usually mature in one year, while intermediate-term loans are made for acquiring production assets having a useful life greater than one year.

Variable term lengths and few use restrictions allow virtually every phase of a fishing operation to be eligible for loan assistance through the FCS. FCS loan funds can be used to buy the land needed to construct a fish processing facility or start an aquaculture operation. In addition, short-term FCS loans can be used to buy production equipment such as fuel or bait while longer term loans may be used for gear expenditures, the purchase of new vessels, and the reconditioning of older vessels.

Program Statistics

The fishing industry receives a very small portion of the overall FCS loan funds. Unfortunately, very little FCS data exists that is specific to the fishing industry. Some information on "aquatic loans" was available. From 1980s to 1983, the FCS made loans to the aquatic sector totaling almost $550 million. Although the dollar amount of these loans decreased during each year of this 4-year period, this total still represents a significant amount of money when compared to other loan sources serving the fishing industry.

Anecdotal information suggests that FCS loans to the fishing industry have steadily declined since the early 1980s. However, recent data shows that the FCS still loans the aquatic sector millions of dollars every year. FCS loaned the aquatic sector $92 million in 1997 and increased this to over $100 million in 1998.

Capacity Issues

Although the lack of data does not allow the Task Force to determine the exact impact of FCS loan activity on fishing capacity, it is obvious that these loans have contributed capacity to our nation's fisheries. Data deficiencies do not allow for the Task Force to determine how much FCS loan money was used for new vessel construction, vessel repairs, or processing operations. It is also unknown if the availability of FCS loan funds influenced a person's decision to invest in fisheries. Recent data suggests that the FCS is still contributing a significant amount of money to the aquatic sector, most of which will ultimately increase the capacity of our nation's fishing fleet.

Policy Options

The Task Force recommends that FCS loan activity be limited to those projects that do not increase the capacity of the fishing fleet. This would restrict the loan funds for uses such as: debt refinancing, vessel safety upgrades, and aquaculture operations. Under no circumstances should FCS loan funds be used to construct new fishing vessels.

Fisheries Development, Marketing, and Promotion Programs

The United States has a long standing record of providing marketing, promotion, and development assistance to the nation's fisheries. This record stretches at least as far back as the 1930s and 1940s when the Bureau of Fisheries (one of the precursors to the National Marine Fisheries Service (NMFS)) perfected methods for quick-freezing fish and discovered natural sources of vitamins A and D in some species of shark. Throughout this century the federal fisheries agency has played a key role in fisheries development, fishing gear technology development, seafood processing technology, seafood product marketing, and seafood consumption promotion.

Currently, the Departments of Commerce and Agriculture (DOC and USDA) are the principal federal departments dealing with fisheries development, marketing and promotion activities. Within the DOC, the National Oceanic and Atmospheric Administration's (NOAA) NMFS is responsible for various programs related to the development of the domestic seafood industry. NMFS coordinates with another DOC agency, the U.S. and Foreign Commercial Service (USFCS) to expand exports of U.S. seafood products by funding the posting of two seafood trade specialists in Brussels and Tokyo. The USDA is the primary agency responsible for aquaculture products and its Foreign Agriculture Service (FAS) is responsible for developing foreign markets for U.S. seafood products. These government supported programs whose costs are not charged back to the fishing industry are therefore positive subsidies. To the extent that these programs have promoted development of underutilized species and expanded demand for U.S. fishery products while reducing research, development, marketing, and other costs to the seafood industry, some of these programs have contributed to increased investment and capacity in the U.S. fishing industry. This effect, however, is extremely difficult to quantify. The following is a discussion of some of the more prominent of these government programs.

Saltonstall-Kennedy Act

Perhaps the most direct flow of federal monies towards fisheries development, marketing and promotion stems from the Saltonstall-Kennedy (S-K) Act of 1954 which authorized a grants program to develop and promote fisheries products and to conduct technological, biological, and other research pertaining to American fisheries. Administered by the National Marine Fisheries Service, the S-K fund is capitalized through annual transfers from the USDA to the DOC in amounts equal to 30 percent of the duties levied on imported fish and fish products. Most of the S-K funds are allocated to a competitive grants program, although some of the funds go towards NOAA's national research program as well as to offset NOAA's costs related to operations,

research and facilities. The S-K Act, as amended in 1980 by the American Fisheries Promotion Act, requires that at least 60 percent of S-K Act funds be allocated to industry-sponsored research projects instead of projects sponsored by the federal government or universities. During the period 1980-1998, total S-K grants awarded averaged $6.7 million annually with a high of $12.1 million in 1980 and a low of zero funds allocated in 1997 (Table 12).

During the time that the S-K fisheries grant program has been in effect there have been substantial shifts in the program emphasis. Specific information on S-K research activities funded before 1980 is sketchy, but a look at the shift in funding priorities between 1980 and 1998 is illustrative of the change in federal fisheries policy emphasis from that of fisheries development to fisheries conservation. Between 1980 and 1987 when national fisheries policy emphasized the Americanization of the nation's fisheries resources, the S-K grant awards focused on new fishery development and expansion, harvesting/processing technology development, improvement of domestic and export markets, seafood product quality standards, and consumer education. During the period 1988 through 1998 when many U.S. fisheries resources showed signs of depletion, research priorities shifted to address resource conservation and management, including bycatch reduction and access controls, and aquaculture, while eliminating all marketing. With the passage of the Sustainable Fisheries Act, NOAA's Fisheries Strategic Plan refocused the S-K program toward rebuilding overfished fisheries, maintaining healthy fish stocks and conserving essential fish habitat. These shifts are apparent in examining the funding amounts to the various priority areas over the years. For example, in 1980, 25% of the $12.1 million allocated to the S-K program was expended in the area of harvesting and other related activities including exploratory fishing to expand the geographic and seasonal productivity of selected fisheries, fishing gear development, fishing techniques and on-board handling procedures. Another 25% of S-K funds were dedicated to domestic market development and to export marketing. Nearly 16% of the monies focused on at-sea and onshore processing of fisheries products. In contrast, in 1996, the bulk of the $8.4 million in S-K grant monies were dedicated to work on fisheries management and user conflict (26%), aquaculture (20%), and bycatch reduction (19%).

TABLE 12:
TOTAL SALTONSTALL-KENNEDY GRANTS ALLOCATED, 1980 - 1998.

Year	Millions of Dollars
1980	12.1
1981	9.0
1982	8.1
1983	8.0
1984	10.0
1985	9.0
1986	7.7
1987	6.5
1988	8.1
1989	6.4
1990	5.2
1991	6.7
1992	0.5
1993	6.2
1994	6.1
1995	7.3
1996	8.4
1997	0.0
1998	2.0

One of the clearer examples of the federal role in subsidizing fisheries development can be documented by examining annual S-K funding for underutilized fisheries development in various regions of the U.S.. Over nearly two decades, 1980-1998, S-K grants funded research on the development of fisheries for a variety of species including squid, spiny dogfish, ray, skate, octopus, Korean hair crab, pollock, Atlantic mackerel,

Atlantic herring, blue shark, Pacific whiting, Pacific pollock, Atlantic butterfish, arrowtooth flounder, grenadier, wreckfish, Atlantic hagfish, red hake, deepwater shrimp, sea cucumber, sablefish, and albacore tuna. S-K grants also funded generic research projects such as pelagic resource assessments, recreational fisheries development, deepwater fisheries potential, western Pacific fisheries development, Alaskan bottomfish development, Pacific whitefish development, Pacific flatfish utilization, and underutilized species development. Estimated total S-K grant funding for fisheries development during 1980-1998 ranged from a high of $3.5 million in 1983 to a low of $0 in 1992. During the 1980s, when the federal government was more actively promoting fisheries development, fisheries development grants accounted for an average of 23% of the annual S-K grant awards. During the 1990s, when funding priorities shifted towards conservation, fisheries development research accounted for an average of only 6% of the annual S-K grant awards.

The development of many once underutilized species, notably squid and spiny dogfish in the Northeast and Pacific whiting and Pacific pollock on the West Coast can be partially attributed to technology development and market research and promotion funded through the S-K program. Interestingly, between 1984-1993, S-K grants totaling $600,000 were awarded for spiny dogfish development projects in the Northeast. In 1997, spiny dogfish were determined to be overfished, and a new fishery management plan now calls for restrictions on the directed spiny dogfish fishery.

United States Department of Agriculture Programs

The USDA sponsors several programs that promote both domestic and foreign consumption of U.S. fisheries products. Some of these programs involve direct USDA purchases of U.S. seafood products while other programs provide international trade assistance in the U.S. and abroad. Direct purchases of seafood by the government constitute an attempt to prop up markets when supply exceeds demand, while marketing and trade broaden the market for seafood products. All of these programs can be considered positive subsidies.

USDA Seafood Purchases

The USDA purchases significant quantities of seafood for its school lunch program, public food assistance programs, and overseas food aid program. Direct purchases of seafood by the USDA fluctuate significantly from year to year and have focused on canned tuna, canned salmon, salmon nuggets, salmon packed in pouches, frozen catfish, and frozen Alaskan pollock nuggets. For example, USDA seafood purchases during the school year 1981-1982 amounted to $1.6 million of canned tuna. But in the 1991-1992 school year the USDA bought $32.6 million of seafood including $13 million of canned tuna, $14.2 of canned salmon and $5.4 million of frozen catfish. To date, the USDA has bought $14.3 million of canned tuna, canned salmon, salmon nuggets and salmon pouches during the 1998-1999 school year.

While the school lunch program and public food assistance programs consume the bulk of USDA seafood purchases, a small amount goes through the Food for Peace Program, better known as the P.L . 480 Food Aid Program. This program provides for government to government sales of agricultural and seafood commodities to developing countries. The U.S. government purchases large quantities of

agricultural and seafood products and then sells them on favorable credit terms or donates the food to countries experiencing food shortages. To be eligible, a particular food commodity must be classified as a surplus commodity. One hundred tons of canned pink salmon at a total value of $258,000 were sold and/or donated through this program in 1997.

Foreign Agriculture Service

The U.S. Foreign Agriculture Service (FAS) oversees several programs which support international trade in fisheries products. The FAS Market Access Program finances promotional activities for U.S. agricultural and fisheries products, including consumer promotions, market research, technical assistance and trade services. In 1997, the program gave nearly $4 million in funding to the Alaskan Seafood Marketing Institute, the American Seafood Institute, and the Catfish Institute to promote exports.

The FAS Foreign Market Development Program focuses on the development, maintenance, and expansion of long-term export markets for U.S. agriculture and seafood programs. In 1998, the American Seafood Institute received $117,000 for export trade promotion and assistance.

The FAS Emerging Market Program aims to develop, maintain, and expand markets for U.S. agricultural and fisheries products in emerging markets. The Rhode Island Economic Development corporation recently received $150,000 for developing U.S. herring and mackerel markets with China and the Philippines. Aqua Matrix International received $100,000 for developing export markets for Pacific Threadfin in China and the Philippines.

The FAS also posts foreign trade attaches in various countries to provide export assistance to U.S. companies selling agricultural and seafood products overseas and to report on relevant activities within these various countries.

National Fish and Seafood Promotional Council

The Fish and Seafood Promotion Act (FSPA) of 1986 (P.L. 99-659) authorized the establishment of a National Fish and Seafood Promotional Council to carry out generic seafood marketing programs including consumer education and research. The FSPA was intended to provide funding for a limited time period as seed money that would grow into an industry-funded national marketing council similar to those in place for the beef and dairy industries. This fund was capitalized through monies transferred from the S-K fund. During the life of the program, 1987-1991, $10.4 million was appropriated. Most of these funds were dedicated to the development and implementation of the "Eat Fish Twice a Week" national seafood advertising campaign to increase seafood consumption. After 1991, funding to the Seafood Promotion Council ceased and the Council disbanded. No industry funded national seafood marketing council has arisen from this effort.

Recommendations and Conclusions

Federal investment in fisheries development, marketing and promotion programs have had a direct role in the build up of capital and capacity in U.S. fisheries. This impact, however, is impossible to quantify in any exact way. The Task Force recommends that the federal government limit the funding of such programs to be consistent with the

conservation oriented national policy goals. In particular, priorities for S-K grant funding and other federal marketing, research, and development programs should be set to avoid exacerbating the current overcapacity problem now facing the nation's fisheries.

Sea Grant

Introduction

To develop and conserve the nation's marine and Great Lakes resources, Congress established the Sea Grant Program in 1966 with the passage of the National Sea Grant College and Program Act. The program resulted from the realization that our marine resources were largely underutilized and a source of great potential benefit for the United States. The marine environment could provide economic and employment opportunities, reliable sources of food, and recreational and aesthetic uses.

The program was designed to award grants and contracts to "suitable public and private institutions of higher education, institutes, laboratories, and public or private agencies, which are engaged in, or concerned with, activities in the various fields related to the development of marine resources." (P.L. 89-688 Sec. 204(c)) The legislative charge is also to "increase the understanding, assessment, development, utilization, and conservation of the nation's ocean and coastal resources by providing assistance to promote a strong education base, responsive research and training activities, and broad and prompt dissemination of knowledge and techniques." (P.L. 94 461, Sec. 202(b))

Program Issues

The Sea Grant Program currently focuses on three major themes: economic leadership; coastal ecosystem health and public safety; and education and human resources.

One major goal of the Sea Grant program is to provide economic leadership in marine related industries and improve the social and economic situation of our coastal communities. To accomplish this, Sea Grant focuses on advanced technology for commercial products, seafood production, and economic development.

The second major goal of the Sea Grant program is coastal ecosystem health and public safety. To enhance coastal ecosystem health, the Sea Grant program focuses its research on toxics, contaminants, sedimentation, algal blooms, and oil spills. Sea Grant also focuses on coastal hazards and safety at sea in order to ensure public safety.

The final theme of the Sea Grant program is education and human resources. This can be accomplished through a technically trained workforce which can be provided by better educating our scientists, engineers, and resource managers. In addition, Sea Grant hopes to increase awareness by improving pre-college curriculums while also providing more informal education programs to the general public.

Program Statistics

Since 1966, 29 Sea Grant programs have been established in the United States. With 300 participating institutions and over 3,000 scientists, engineers, and academics, the Sea Grant Program has made a large contribution

to our understanding of the marine environment.

In 1997, the Sea Grant budget was just over $ 54 million with about $ 43 million going to the core program. The core program consists of 29 Sea Grant colleges and institutions which are responsible for solving problems through an integrated approach involving research, education, and outreach. These figures were somewhat similar to the 1996 Sea Grant appropriations when $36 million of the $53 million total went to the core program. The difference in the core allocations resulted from $7 million being used for marine biotechnology in 1996.

Over the years, Sea Grant appropriations have steadily increased. In 1986, just over $36 million was allocated to the Sea Grant program while $37.3 was appropriated for fiscal year 1987. In 1988, the Sea Grant budget fell slightly but had rebounded to over $ 44 million by 1993. The 1994 Sea Grant budget was increased to $47 million and subsequently followed by another increase to over $54 million in 1995.

Effect on Capacity

Because the majority of Sea Grant funds are used for research, education and outreach activities, this program has not significantly contributed to the level of capacity in our nation's fishing fleets. The Sea Grant program has not financed new vessel construction, nor has it been used to recondition existing vessels. Although the Sea Grant program does fund some marketing and product development programs, these projects represent a small fraction of the total annual Sea Grant budget and have little influence on fisheries investment.

Policy Recommendations

The Task Force recommends that the Sea Grant program continue in its current form. Because the program has not significantly contributed to fishing capacity, there is no basis for the Task Force to advocate changes to the Sea Grant program at this time.