United States General Accounting Office

GAO

Report to House Committee on Resources

June 2000

COMMERCIAL FISHERIES

Entry of Fishermen Limits Benefits of Buyback Programs

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Accountability * Integrity * Reliability

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Abbreviations

NMFS National Marine Fisheries Service

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Washington, D.C. 20548

Resources, Community, and
Economic Development Division

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June 14, 2000

The Honorable Don Young
Chairman
The Honorable George Miller
Ranking Minority Member
Committee on Resources
House of Representatives

The nation's coastal waters are home to many commercial fisheries that provide a wide variety of fish for the domestic market.[1] Coastal states issue permits and develop and enforce regulations for fishing in waters that are near their shores. In areas outside state jurisdiction, the National Marine Fisheries Service (NMFS), within the Department of Commerce, is responsible for issuing permits and developing and enforcing regulations for harvesting fish. As you are aware, fish populations in many commercial fisheries are declining, resulting in a growing imbalance between the number of vessels in fishing fleets and the number of fish available for harvest. In response to this growing imbalance, the federal government has provided $140 million since 1995 to purchase fishing permits, fishing vessels, and related gear from fishermen, thereby reducing the capacity of fishermen to harvest fish. Generally, the government designed these purchases, called buybacks, to achieve multiple goals, such as reducing the capacity to harvest fish, providing economic assistance to fishermen, and improving the conservation of fish. Because excessive fishing capacity has been a continuing problem in many fisheries, several additional buybacks have been proposed that, if implemented, would be in excess of $250 million.

This report evaluates the impact of recently completed buyback programs in three diverse fisheries—New England groundfish, Bering Sea pollock, and Washington State salmon. Buybacks in these fisheries account for about $130 million of the $140 million in federal funds authorized since 1995. As agreed with your offices, we are assessing (1) the extent to which the buyback programs have affected fishing capacity, (2) potential ways the

[1]A fishery is one or more stock (defined as one species or several species in a geographical area) of fish managed as a group.

buyback programs can be made more effective, and (3) NMFS' efforts to evaluate the effectiveness of buyback programs.

Results in Brief

Buyback programs in New England, the Bering Sea, and Washington State initially removed from 10 to 24 percent of their respective fishing capacities. However, the experiences of these three cases demonstrate that the long-term effectiveness of buyback programs depends upon whether fishermen return to the fishery. For example, the $24.4 million New England buyback removed 79 vessels that accounted for 19 percent of the groundfish catch in that fishery. However, 62 additional vessels have become active since the buyback because no steps were taken during the program to prevent previously inactive vessels from engaging in fishing. These vessels have begun to erode the capacity reductions made by the buyback because they have replaced fishing capacity by as much as two-thirds of that purchased through the buyback. Experience also shows that, while buyback programs reduce capacity in one fishery, the recipients of the buyback may simply shift that capacity to another fishery not subject to the buyback. For example, according to our survey of fishermen who participated in the New England buyback, nine recipients who formerly fished for groundfish are now primarily lobster fishermen—a fishery that is also classified as overfished throughout much of its area.

The effectiveness of buyback programs in reducing fishing capacity depends upon whether fishermen return to the fishery and also whether remaining fishermen have an incentive to invest in larger or better-equipped fishing vessels. In most fisheries, fishermen have an incentive to increase their fishing capacity in order to catch fish before someone else does, which is called the "race to fish." However, when buyback programs are accompanied by other measures that reduce incentives for larger or better-equipped fishing vessels, capacity reductions from a buyback need not erode. For example, the American Fisheries Act authorized the purchase of 9 of the 30 vessels that catch and process fish onboard in the Bering Sea and encouraged the owners of the remaining 21 vessels to form a fishing cooperative that guaranteed each of its members an allocation of fish, thereby ending the "race to fish." Because of this guarantee, the need for increased fishing capacity was eliminated. As a result, the Bering Sea cooperative voluntarily withdrew 4 of the remaining 21 vessels from that fishery.

NMFS has made limited efforts to evaluate buyback programs, assessing only the fishing capacity reductions in the New England groundfish

buyback because it was required to do so. Because evaluations can identify ways to improve future programs, prudent management suggests that buyback programs should be evaluated. This report recommends that the Secretary of Commerce require NMFS to take certain actions in designing future buyback programs that would improve their effectiveness and to evaluate these programs. The Department of Commerce generally agreed with the information presented in the draft report and with its recommendations.

Background

In 1998, commercial fishing vessels in U.S. marine waters landed 9.2 billion pounds of commercial fish in domestic ports, with an estimated value of $3.1 billion. To manage the harvest of fish in these fisheries, NMFS works with eight federally established regional councils consisting generally of federal, state, and private-sector representatives to develop plans and propose measures that attempt to balance the economic benefits of fishing with the need to protect the environment.

The basic features, costs, and objectives of the three fisheries involved in the buyback programs that we reviewed varied.[2] The New England and the Bering Sea buyback programs purchased fishing vessels and all federal permits associated with them. The Washington State program purchased state fishing permits but did not purchase vessels. Of the $130 million spent on the buybacks in these fisheries, $90 million was spent to reduce fishing capacity in the Bering Sea. About $40 million was spent in the New England groundfish and Washington State salmon fisheries to reduce fishing capacity while providing economic assistance and relief to fishermen adversely affected by the closures of fishing areas or natural disasters that had reduced fish stocks.

- The New England groundfish fishery is the predominant fishery in the northeastern United States in terms of the amount of fish caught and the number of vessels. The fishery includes fishing grounds in the Gulf of Maine, the Georges Bank off Cape Cod, and the waters of southern New England. New England groundfish are a mixture of species, such as Atlantic cod and haddock, that live on the ocean floor. A buyback program in this fishery authorized under the Emergency Supplemental

[2]See *Commercial Fisheries: Information on Federally Funded Buyback Programs* (GAO/RCED-00-8R, Oct. 20, 1999) for additional information on the costs, the source of funds, and the results of the 10 programs funded by the federal government since 1976.

Appropriations Act of 1994 and the Interjurisdictional Fisheries Act took place in two phases between June 1995 and May 1998. NMFS spent $24.4 million to remove 79 fishing vessels, the fishing permits that allowed these vessels to catch groundfish, and all other federal fishing permits for other types of fish in other fisheries.

- The Bering Sea pollock fishery off Alaska is the largest U.S. fishery in terms of the pounds of fish caught. In 1998, the American Fisheries Act required NMFS to purchase 9 of 30 factory trawlers and their associated fishing permits in the fishery.[3] The total cost of the buyback was $90.2 million, with $15.2 million from federally appropriated funds and the remaining $75 million from a federal loan to Alaskan pollock fishermen.
- The Washington State salmon fishery is part of a larger regional salmon industry that includes salmon originating in the waters of California, Oregon, Washington, British Columbia, and Alaska. The fishery involves two fleets of fishing vessels—one large fleet within the Puget Sound and a smaller fleet, based on the number of permits issued, that fishes off the state's coast and in the Columbia River, where fishing rights are shared with Oregon and tribal fishermen. In 1995 and 1996, the state of Washington spent about $9.3 million in federal funds authorized under the Interjurisdictional Fisheries Act to purchase 436 state fishing permits for its coastal and Columbia River fleet. Two years later in 1998, the state spent an additional $3.5 million in federal funds authorized under the Magnuson-Stevens Fishery Conservation and Management Act and $1.2 million in state funds to purchase 391 state fishing permits from commercial fishermen in both of its salmon fishing fleets. The state did not purchase vessels with buyback funds but prevented some participants from fishing in the state salmon fishery for 10 years.

While one goal of buyback programs was to reduce overall fishing capacity, a Department of Commerce task force recently reported that this goal can be measured in numerous ways.[4] In this report, we present the following measures used by NMFS to estimate fishing capacity: (1) the amount of fish caught by commercial fishing vessels in a fishery, which measures active fishing capacity; (2) the number of permits attached to commercial vessels

[3]A factory trawler catches fish by dragging a large net through the water and then processes the fish onboard.

[4]*Federal Fisheries Investment Task Force: Report to Congress* (Department of Commerce, July 1999). The Congress mandated this report, which we refer to as the *Investment Task Force Report*, to examine how various federal programs, including buyback programs, have generally influenced the industry's investments in fishing capacity.

in a fishery that caught little or no fish, which measures seldom used or unused fishing capacity; and (3) a weighted index of the length, the tonnage, and the engine horsepower of commercial fishing vessels, which measures potential fishing capacity. NMFS is also developing more sophisticated statistical measures to estimate capacity for U.S. fisheries.

Preventing New Fishing Is Essential to Maintaining Capacity Reductions

Recent buyback programs in the New England groundfish, Bering Sea pollock, and Washington State salmon fisheries removed commercial fishing vessels and/or permits that accounted for 10 to 24 percent of the total catch. However, the experiences of these three programs demonstrate that the long-term effectiveness of buybacks depends upon whether fishermen return to the fishery. For example, the New England groundfish fishery includes a large number of fishermen who hold permits but have historically caught little or no fish. No steps were taken during the buyback program to prevent either these fishermen or buyback participants from entering the fishery after the buyback. As a result, capacity reductions achieved through the buyback have already begun to erode because previously inactive fishermen have begun fishing there and buyback beneficiaries have returned. In contrast, capacity removed through the Bering Sea pollock program has not returned, in part, because the buyback legislation prevented the entry of additional fishing vessels. With respect to the Washington State programs, while no steps were incorporated to prevent additional fishing vessels from entering the fishery after the buyback, significant declines in salmon stocks have made this impractical and fishing capacity has declined. In some cases, however, this capacity has been shifted to fisheries in other states.

Fishing Capacity Is Returning Quickly to New England Fishery

The 79 boats sold in the New England buyback caught a combined total of about 15 million pounds of groundfish in the 1996 fishing year. This total represented about 19 percent of all groundfish caught in that fishery. However, because of the number of unused fishing permits in the fishery, 62 previously inactive vessels have begun catching groundfish since 1996. During the 1998 fishing year, newly active vessels caught about 1.5 million pounds of groundfish, or about 10 percent of the active fishing capacity that had been removed in the buyback. NMFS economists estimate that the 62 vessels collectively have over two-thirds of the potential fishing capacity—as measured by vessel length, gross registered tonnage, and major engine horsepower—of the 79 vessels purchased in the buyback.

The program's reduction in fishing capacity has also been offset by vessel owners who participated in the buyback program and then purchased a vessel with buyback funds and reentered the fishery. Our survey of vessel owners that participated in the buyback indicated that nine of them purchased a vessel with buyback funds and reentered the fishery.[5] According to vessel catch data from NMFS, eight of these vessels were catching groundfish as of 1998. These eight vessels had landed 0.8 million pounds of groundfish in 1996 under previous owners. In 1998, these eight vessels, under the ownership of buyback participants, increased their catch of groundfish to 1.5 million pounds. In total, reductions in active fishing capacity have eroded by about 15 percent—10 percent because of fishing from previously inactive fishermen and an additional 5 percent because of the increase in catch from buyback participants returning to the fishery.

At the same time that these fishermen have been adding capacity to the fleet, the New England Fishery Management Council has been considering additional measures to further restrict groundfishing. A committee of the Council has reported that two of five key fish stocks, Georges Bank cod and Gulf of Maine cod, continue to exhibit fishing mortality rates that are higher than those needed to address stock rebuilding. The Council is considering additional reductions in allowed days to fish for commercial groundfishermen and continuing the closure of certain fishing grounds in the Georges Bank and the Gulf of Maine.

Although no new fishing permits have been being issued, vessels have entered the New England fishery because of the substantial pool of previously issued, but unused, commercial fishing permits. The buyback program removed only 79 of the 1,763 commercial groundfish permits that were available in 1996, or less than 5 percent of all the permits for that fishery. Table 1 shows that while total commercial fishing permits have declined since the buyback, active fishing capacity can increase because of the large number of seldom used and unused fishing permits. In 1999, there were 796 commercial permits that landed zero up to 1,000 pounds of groundfish—these permits are ten times the number of permits removed during the program.

[5]We surveyed all 73 fishermen NMFS identified as participants in the New England groundfish buyback program. We completed structured telephone interviews with 54 fishermen, or 74 percent of all participants. See app. I for results of the survey.

Table 1: Commercial Fishing Permits by Annual Catch in the New England Groundfish Fishery, 1996 Through 1999

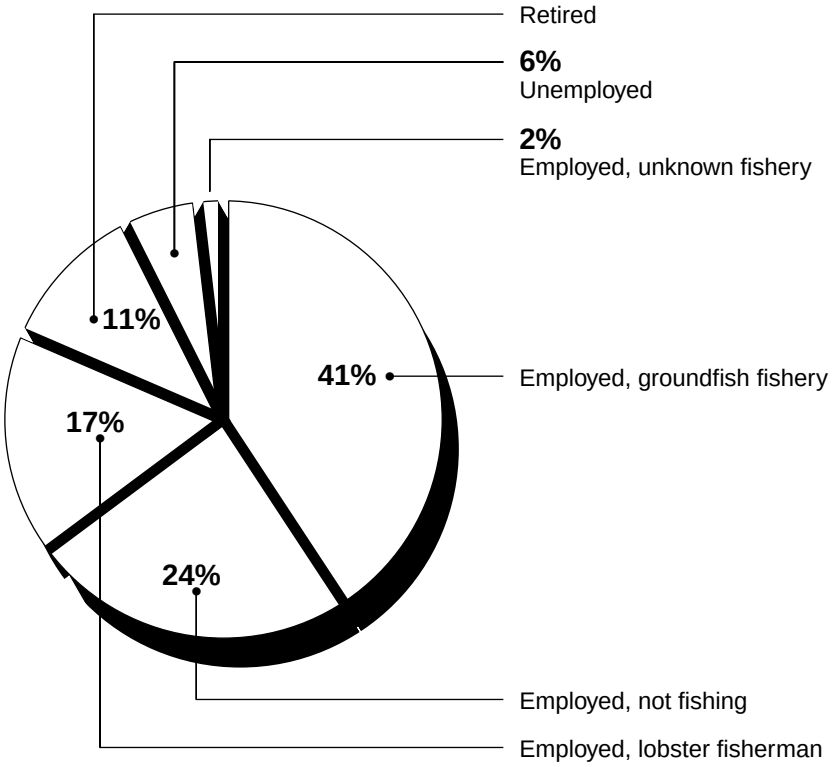
Groundfish catch	1996	1997	1998	1999
Permits with more than 1,000 pounds of catch	871	894	865	849
Permits with 1 to 1,000 pounds of catch	201	180	155	166
Permits with zero pounds of catch[a]	691	702	629	630
Total commercial permits	**1,763**	**1,776**	**1,649**	**1,645**

[a]Fishermen do not have to catch fish to maintain their permit.

Source: NMFS.

Because the buyback program did not intend to restrict buyback recipients from continuing to fish in the fishery, many participants never left. Twenty-six of the 54 respondents to our survey of New England buyback participants, or 48 percent, told us they are currently active in the groundfish fishery. As shown in Figure 1, 41 percent of the buyback participants we surveyed are primarily groundfish fishermen, either as a boat owner, boat owner and captain, or crewmember on a groundfish boat. Only six respondents told us they had retired, while 13 told us they are now employed in a nonfishing occupation. See appendix I for information concerning the survey's results.

Figure 1: Primary Occupations of New England Buyback Participants



Note: Total based on 54 responses. Percentages do not total 100 because of rounding.

Source: GAO's survey of buyback participants.

Buyback programs can adversely affect other fisheries. Nine of the 54 New England buyback respondents now consider their primary occupation to be a lobster fisherman. However, any transfer of groundfish fishermen into the Atlantic lobster fishery could aggravate existing problems in that fishery. According to a 1999 NMFS report on the status of U.S. fisheries,[6] lobster fishing grounds in the Gulf of Maine and inshore areas from Cape Cod through Long Island Sound are already substantially overfished.

[6] *Our Living Oceans: Report on the Status of U.S. Living Marine Resources, 1999* (U.S. Department of Commerce, NOAA Tech. Memo. NMFS-F/SPO-41).

The Interjurisdictional Fisheries Act, which authorized the second phase of the New England buyback, does not require that buyback programs address the problems that may arise from unused or seldom used fishing permits or the return of buyback participants to the buyback fishery. In addition to this act, buyback programs have been authorized under separate legislation, such as the American Fisheries Act, and would be available under two provisions of the Magnuson-Stevens Fishery Conservation and Management Act. NMFS has proposed a rule to implement one of the provisions of this act that allows for funding buyback programs intended primarily to reduce fishing capacity. The rule would require that regional fishery management councils take steps to restrict new entrants to a buyback fishery and to prevent the upgrade of existing vessels that would increase their capacity to catch fish. As of May 2000, this rule has not been finalized. The other provision of the act would allow the funding of buyback programs as part of disaster relief efforts. According to NMFS officials, they do not plan to develop a rule that would restrict participants of buybacks funded under this disaster relief provision from returning to the buyback fishery or would restrict fishermen in the fishery with unused or seldom used fishing permits.

Bering Sea Pollock Buyback Legislation Prevented New Entrants

In contrast to the New England buyback, the Bering Sea buyback legislation removed 9 of 30 factory trawlers that had been actively involved in the fishery and restricted entrants. No other factory trawlers will be issued fishing permits unless the vessels are replacing existing factory trawlers. The restriction on new entrants, in part, ensured that the capacity removed through the buyback will not return. The nine purchased vessels caught about 113,000 metric tons of pollock, or about 10 percent of the fleet's active fishing capacity for the 1998 fishing season. As required by the 1998 American Fisheries Act, eight of the purchased vessels were scrapped while the ninth vessel was prohibited from ever fishing in U.S. commercial fishing waters. The act also limited the use of the remaining factory trawlers in other fisheries.

Deteriorating Salmon Conditions Have Kept Buyback Fishermen From Returning to Washington State

In 1995 and 1996, the Washington State salmon permit buyback program targeted the state's coastal and Columbia River fleet and purchased state permits from fishermen whose vessels accounted for about 24 percent of that fleet's catch. A 1998 buyback targeted both of the state's fleets—coastal/Columbia River and Puget Sound—and resulted in the purchase of state permits from fishermen whose vessels' catch accounted for about 14 percent of the combined catch of the two fleets.[7]

Reductions in the number of salmon permits from the 1995/1996 and 1998 buyback programs have not eroded during the 1997 and 1998 fishing seasons.[8] Table 2 shows the departure of fishermen from the state's salmon industry. From 1994 through 1998, about 950 fishermen have not renewed their coastal or Puget Sound salmon permits. About 770 fishermen did not renew their permits because they were involved in one of the buybacks; about 180 voluntarily decided to leave the industry. As a result, the total number of commercial salmon fishing permits has dropped from 2,476 in 1994 to about 1,530 in 1998.

Table 2: Commercial Fishing Permits by Annual Catch in the Washington State Salmon Fishery, 1994 Through 1998

Salmon catch	1994	1995	1996	1997	1998
Permits with more than 1,000 pounds of catch	966	766	531	701	501
Permits with between 1 to 1,000 pounds of catch	1,025	331	294	535	137
Permits with zero pounds of catch[a]	485	999	1,100	665	892
Total commercial permits	**2,476**	**2,096**	**1,925**	**1,901**	**1,530**

[a]Fishermen do not have to catch fish to maintain their permit.

Source: Washington State Department of Fish and Wildlife.

This exodus from the industry was caused, in part, by a 40-percent decline in salmon caught from 1994 through 1998 and a weakening international demand for salmon, which decreased the value of the fish caught. However, because the number of unused permits remains high, a reversal of these conditions would encourage these fishermen to use their permits. This scenario would reverse the reductions in capacity that the state has made through its buybacks.

Fishermen who participated in the two Washington buybacks were not restricted from fishing for salmon or other types of fish in waters managed by other states. As a result, Washington fishermen who participated in the buybacks have continued to fish elsewhere. Our review of 1998 catch data

[7]If considered as separate fleets, the 1998 buyback removed permits from fishermen associated with vessels that accounted for about 28 percent of the coastal/Columbia River fleet's 1998 catch and about 13 percent of the Puget Sound's 1998 catch.

[8]Fishing statistics for the 1999 salmon fishing seasons are not available to determine the number of permits and the amount of catch in each fleet. However, the licensing manager for Washington State believes that fishermen are continuing to leave the salmon industry.

from Oregon and Alaska showed that 229 of the buyback participants continued to catch fish in these states—49 buyback participants caught salmon in Oregon and 180 caught salmon in Alaska. In Oregon, from 1994 through 1998, participants increased their catch of salmon by more than 70 percent. In Alaska, although Washington State buyback participants decreased their salmon catch from 1994 through 1998, they more than tripled their catch of other fish.

A January 2000 Washington State survey of commercial fishermen with salmon permits indicated that almost one-third of the 693 fishermen who responded also owned permits issued by Alaska, Oregon, or California. These fishermen could continue to fish in these other states' fisheries if Washington State bought back one of its permits.

Buyback Programs Could Be Made More Effective

Buyback programs could be more effective if they addressed the problems of new fishermen entering the buyback fishery and existing fishermen expanding their capacity to fish. In our view, these programs also need to address the movement of buyback participants to other fisheries and fishermen's incentives to catch as many fish as quickly as possible, called the "race to fish." This "race to fish" leads fishermen to invest in more fishing capacity, such as adding fishing gear, increasing their time at sea and number of crew, and replacing older vessels with bigger and more productive ones in order to catch as many fish as quickly as possible in an attempt to maximize their individual incomes. Economists conclude that left unchecked, this "race to fish" will lead to overall higher costs and lower profits, economic hardship for fishermen, and harm to fish populations and habitat.

Therefore, buyback programs could be enhanced if they were undertaken in conjunction with additional measures to address the "race to fish," such as establishing fishing cooperatives where fishermen have incentives to catch their individual fish allocations at their own pace at lowest cost. In only one of the fisheries in which a buyback program took place, the Bering Sea pollock fishery, was this "race to fish" issue addressed by legislation that facilitated creation of a fishing cooperative.

Buyback programs could be made more effective if they included measures, such as forming a fishing cooperative in which fishermen have incentives to catch fish at their own pace. For example, the Bering Sea pollock fishery has addressed the "race to fish" that had previously existed among factory trawlers. The buyback program's legislation removed nine

trawlers and facilitated creation of a fishing cooperative by the owners of the remaining 21 factory trawlers. This cooperative was designed to eliminate the race to fish by assigning a specific amount of fish, or allocation, to the cooperative, which divides the allocation among its members. Because of this allocation, members of the cooperative had no incentive to expand fishing capacity to catch the available fish before someone else did, as they would in another fishery. Members were able to catch their individual fish allocations at their own pace, at lower capital and operating costs, while increasing product quality. These changes resulted in higher profits and longer fishing seasons for the remaining factory trawlers.

We found that since members of the pollock cooperative knew at the beginning of the 1999 fishing season how much fish each could harvest, they caught the fish with fewer vessels with the intent to minimize costs and increase profits. Cooperative members decided not to use four factory trawlers previously used in the fishery when they were competing for the most catch. Even without these four vessels and the nine removed through the buyback, the cooperative members caught their 1999 allocation of pollock. This shows that the fishery had excess fishing capacity even after the buyback and the cooperative reduced this excess capacity.

The Department of Commerce also reported that buyback programs could be made more effective if they were linked with other measures that address the "race to fish," such as fish allocations made directly to individual fishermen. In its 1999 *Investment Task Force Report*, the Department concluded that a buyback program could be used as a precursor to these measures. For instance, NMFS officials told us the buyback program in the Bering Sea pollock fishery made the transition to a fishery cooperative easier because the buyback reduced the number of vessels that participated in the fishery.

NMFS' Evaluations of Buyback Programs' Effectiveness Have Been Limited

NMFS has made limited efforts to evaluate whether buyback programs have achieved their intended benefits. As required by the Interjurisdictional Fisheries Act, NMFS has evaluated the effects of the New England buyback program on fishing capacity. Aside from this congressionally mandated effort, NMFS has not evaluated how other buyback programs have affected fishing capacity. The Magnuson-Stevens Fishery Conservation and Management Act requires that NMFS manage federal fisheries in a way that protects the environment and maximizes the benefits of fishing to the nation, while minimizing the costs and the duplications of regulatory

programs. Considering the goals of this act, prudent management suggests that buyback programs should be evaluated to identify lessons learned that might help design future programs.

NMFS has completed a series of four annual reports on the New England groundfish buyback program that are the most detailed of any evaluation of such programs completed by the agency.[9] A 1996 amendment to the Interjurisdictional Fisheries Act mandated that NMFS report annually to the Congress on the impact of the groundfish buyback on fishing capacity and estimate the conservation benefits attributable to that program. The reports provide estimates and updates to several analytical measures of the capacity of vessels removed by the buyback. In its evaluation of conservation benefits, the reports said that because many regulatory changes were occurring in the fishery at the same time as that buyback program, it was difficult to distinguish changes in fish stocks due to the buyback program and other management measures.

Because the Congress required NMFS to evaluate the New England buyback, NMFS' Northeast Fisheries Science Center developed fishing capacity measures from existing data that estimated changes in fishing capacity. However, other NMFS offices that have similar data have not developed measures to evaluate buyback programs. For example, NMFS has information on the size, the horsepower, and other characteristics of fishing vessels. NMFS also collects information on the type and the amount of fish caught by these vessels and is developing more sophisticated statistical measures for all fisheries that would measure changes in fishing capacity. NMFS officials believe that such statistical measures could be used to estimate changes in capacity if they were applied to a fishery before and after a buyback.

NMFS has also broadly examined whether various federal programs, including buybacks for New England groundfish, Washington State salmon, and Bering Sea pollock, have influenced the industry's investment decisions in fisheries. The 1999 report by the Department's Investment Task Force, which was also congressionally mandated, included general

[9]During 1996, the Department of Commerce's Office of Inspector General evaluated NMFS' pilot program for the New England groundfish buyback and the 1995/1996 Washington State salmon buybacks. The Inspector General concluded that the buybacks were not the most effective way to achieve the programs' objectives. See *Expanded Vessel Buyout Program Is Not Needed* (Audit Report No. ENT-8657-7-0001, Jan. 1997) and *Northwest Emergency Assistance Plan Needs Focus* (Audit Report No. STL-8518-7-0001, Mar. 1997).

information on (1) the events preceding each federally funded buyback program; (2) the direct effects of each program on the number of permits and/or vessels bought; and (3) the concerns and the observations on the programs discussed in the economic literature, such as concerns with unused capacity and the indirect effects of fishing capacity moving from one fishery to another. The report does not discuss each program's impact on improving the conservation of fish stocks.

Other than reviewing progress reports from the state that detail how it spent buyback funds, NMFS did not evaluate the Washington State salmon buyback programs because NMFS officials considered them to be ad hoc disaster relief efforts, rather than part of a national effort to reduce fishing capacity. They believe that the primary objective of disaster relief programs is to provide economic relief to fishermen. Therefore, they believe that it is inappropriate to evaluate how well such programs have reduced fishing capacity.

Evaluations of buyback programs can identify lessons learned that might help in the design of future programs. For example, NMFS' evaluations of the New England buyback have highlighted that substantial fishing capacity remains unused in that fishery even after the buyback program. These evaluations point to the need to control the rate at which unused capacity returns to the fishery so efforts to conserve fish stocks are not jeopardized. Such evaluations can also provide lessons learned in the design of future buyback programs in other fisheries that have substantial unused capacity or unused fishing permits.

Conclusions

The problems of past buyback programs should be addressed as part of the design of any future programs. In particular, experience has shown that initial reductions in fishing capacity achieved by buyback programs can be quickly eroded if buyback participants, or if previously inactive fishermen, return to the buyback fishery. To make future programs more effective, NMFS needs to design these programs to restrict buyback participants from entering a fishery that has excess fishing capacity and to restrict the use of unused fishing permits. In addition, NMFS needs to identify mechanisms as part of this program's design to minimize "race to fish" incentives that can further erode reductions in fishing capacity. In designing future programs, NMFS should also establish performance measures that relate to program and legislative goals.

NMFS' evaluations of the New England buyback program demonstrate that such evaluations can identify lessons that can improve the design of future programs.

As future buyback programs are authorized, it would seem reasonable that there be a good understanding of how well the programs work. Evaluating the programs' results against performance measures would improve the effectiveness of future buyback programs.

Recommendations

Before new buyback programs are used to reduce fishing capacity, they should be made more effective. To do this, we recommend that the Secretary of Commerce direct NMFS to

- Design future buyback programs to (1) restrict buyback participants from entering a fishery that has excess fishing capacity; (2) restrict the use of unused fishing permits in a buyback fishery with excess fishing capacity; (3) identify mechanisms to minimize the incentives to increase fishing capacity in a buyback fishery; and (4) develop performance measures that relate to program goals and broader legislative goals, such as the need to better manage fishing capacity and conserve fish stocks.
- Evaluate the results of future buyback programs against the performance measures.

Agency Comments

We provided the Department of Commerce with a draft of this report for review and comment. The Department generally agreed with the information presented in the draft report and with its recommendations. The Department stated that the New England groundfish and Washington State salmon buybacks were a combination of disaster assistance and capacity reduction. While the Department stated it attempted to make both efforts achieve as much of both objectives as possible, it said it could have achieved its disaster assistance objective without also achieving its capacity reduction objective. We believe that unless disaster relief programs address long-term capacity issues in a fishery, fishermen will continue to expand their capacity to fish and will race against each other for a declining number of fish. The Department also stated that disaster assistance was not the purpose of the Bering Sea pollock buyback, and that the Magnuson-Stevens Act is the only legislative authority with the specific objective of achieving capacity reduction. We agree. However, we believe

that, regardless of legislative authority, when funds are spent to reduce fishing capacity they should be spent in a way to achieve the most long-term benefits. The Department's complete comments and our detailed responses are in appendix II.

Scope and Methodology

To determine how buyback programs have affected fishing capacity, we interviewed officials from NMFS' headquarters who are responsible for defining and measuring fishing capacity. We also met with NMFS officials in its Northeast and Alaska Science Centers and with state officials from the Washington State Department of Fish and Wildlife who were involved in the buyback programs. These officials provided us with several definitions of fishing capacity and statistics they had developed on the buyback programs. We also collected additional information from them on the amount of fish caught, the permits issued, and the vessels involved in their fisheries before and after the programs were implemented. From this information, we identified changes in fishing activities in the buyback and other fisheries and the factors that contributed to these trends. We conducted telephone interviews with 54 of the 73 participants in the New England buyback and contacted the company involved in the Bering Sea buyback to discuss the buybacks' impact on them. We submitted the names of Washington State buyback participants to state officials in Oregon and Alaska to determine how many of the participants in Washington's buyback continued fishing elsewhere.

To determine the factors that could make buyback programs more effective, we reviewed previous evaluations of buyback programs and met with officials from NMFS, the Department of Commerce's Inspector General, and the Congressional Research Service. We also met with state regulators and nongovernmental organizations, such as the H. John Heinz III Center for Science, Economics, and the Environment. We met with these officials in their offices in the Washington, D.C., area; Woods Hole, Massachusetts; and Seattle and Olympia, Washington.

To determine the efforts NMFS has undertaken to evaluate the effectiveness of buyback programs, such as how these programs affected the fishermen's profitability and fish stocks in the buyback fisheries, we reviewed previous evaluations of buyback programs conducted by the NMFS Northeast Science Center. We also discussed these reports and the data NMFS collects on fishing capacity, fishermen's profitability, and the conservation of fish with agency officials in the Washington, D.C., area; Woods Hole, Massachusetts; and Seattle, Washington.

We conducted our review from October 1999 through May 2000 in accordance with generally accepted government auditing standards.

As agreed with your offices, unless you publicly announce its contents earlier, we plan no further distribution of this report until seven days after the date of this letter. At that time, we will send copies of this report to appropriate House and Senate Committees and Subcommittees; the Honorable William M. Daley, Secretary of Commerce; Dr. James Bake, Director, the National Oceanic and Atmospheric Administration; Penelope Dalton, Director, NMFS; and other interested parties. We will also make copies available to others upon request. If you have any questions about this report, please contact me at (206) 287-4800. Major contributors to the report were Peg Reese, Robert Lilly, Timothy Minelli, Lynn Musser, Charles Bausell, and Dan Williams.

James K. Meissner

James K. Meissner
Associate Director, Energy,
Resources and Science Issues

Results of the Telephone Survey of Participants in the New England Groundfish Vessel and Permit Buyback Program

We conducted a structured telephone interview with 54 of the 73 individuals NMFS identified as participants in the buyback program for New England groundfish.[1] We obtained a list of buyback participants from NMFS and checked this list with information obtained from the New England Fishery Management Council and local fishermen in the New England area. We made telephone calls to buyback participants from January 2000 through March 2000. We completed interviews with 54 participants, or 74 percent of all participants. These 54 participants accounted for 60 vessels purchased, or 76 percent of all vessels purchased, in the buyback. The structured telephone interview is reproduced at the end of this appendix.

Principal survey results are discussed below.

Restrictive Fishing Regulations Prompted Most Participants to Sell Vessels

Participants cited a number of reasons for participating in the buyback program. The most common response, cited by 40 of the participants we reached, or 74 percent, was increasingly restrictive fishery regulations, such as reductions in the time allowed to fish and closures of fishing grounds. Thirteen participants, or 24 percent, said that the buyback program allowed them to sell an old vessel or to sell the vessel at a price not available on the open market. Ten participants, or 19 percent, said that rising insurance and maintenance costs prompted them to sell. Only two participants told us they sold their vessel because they decided to retire from commercial fishing.

Many Buyback Participants Still in Groundfish Fishery

Thirty-one of the 54 participants we reached, or 57 percent, told us they currently own a fishing vessel. Twenty-seven of the 54 participants, or 50 percent, said they currently hold a groundfish permit. All but 1 of the 27 participants currently holding a groundfish permit told us they are currently landing groundfish. However, only four participants said they were fishing more with this permit than before the buyback. Another 4 participants said they were fishing about the same, while 17 said they were fishing less. One participant currently landing groundfish did not answer this question.

[1]While 79 vessels were purchased in the buyback program, six participants sold two vessels each, resulting in a total of 73 participants. In some instances, the vessel sold was owned by more than one individual. In these cases, we tried to contact the owner that NMFS listed as the primary applicant for the buyback program.

Of the 27 participants without a current groundfish permit, 7 told us they plan or would like to reenter the groundfish fishery; 17 said they do not plan to reenter that fishery; and 4 had no response.

Several Bought Vessels With Buyback Funds

Sixteen participants we reached, or 30 percent, told us they have purchased at least one fishing vessel since the buyback. Two fishermen said they have purchased two vessels each since the buyback. Of the 18 vessels purchased, we were told that 12 were bought with buyback funds and 6 were bought with other funds. We were told that 10 of the vessels purchased since the buyback were smaller in size than the vessels sold in the buyback, 4 were larger, and 4 were about the same size.

Many Say Their Primary Occupation Is in Groundfish Fishery

Twenty-two of 54 participants we reached, or 41 percent, indicated they still fish in the groundfish fishery either as a boat owner, boat owner and captain, or crewmember. Nine of the participants, or 17 percent, indicated they are still fishing, but fishing for lobster. Six participants indicated they are retired, while three indicated they were unemployed. Thirteen participants, or 24 percent, indicated they were employed in occupations other than commercial fisherman.

Most Buyback Funds Spent on Taxes, Debts, Other Fishing Vessels

Twenty-four of the participants we reached, or 44 percent, told us they used buyback money to pay taxes, either in the form of capital gains, income, or sales taxes, on the sale of their vessel. Twenty-three participants, or 43 percent, indicated they paid mortgages or debts on the vessels sold in the buyback. Twelve participants, or 22 percent, told us they bought another commercial fishing vessel with buyback funds. Of the 12 vessels bought with buyback funds, 9 vessels are being used primarily for groundfishing, while 3 are being used primarily for lobster fishing. Seven participants, or 13 percent, told us they bought gear to upgrade a previously owned commercial fishing vessel.

GAO Interview of Participants in the New England Groundfish Fishery Vessel and Permit Buyback Program

1. I'm going to begin by asking you the name of the boat that you sold in the buyback program.

   [54 respondents identified 60 boats sold in the buyback program. Six respondents sold two boats each in the buyback program.]

2. Now, I'd like to ask you why you decided to participate in the buyback program. Could you tell me why you decided to participate? *(Listen to response, prompt as needed, then provide feedback.)*[a]

   - ☐ Fishery regulations (e.g., days at sea limitations, area closures) **[N = 40]**
   - ☐ Decided to retire **[N = 2]**
   - ☐ Partner wanted out **[N = 5]**
   - ☐ Opportunity to sell old boat or sell at a price not available on open market **[N = 13]**
   - ☐ Expensive to operate boat (e.g., insurance, maintenance) **[N = 10]**
   - ☐ Other **[N = 11]**

3. Did you own more than one fishing boat at the time of the buyback?

   - ☐ No **[N = 34]**
   - ☐ Yes **[N = 20]**

4. Do you currently own any fishing boats?

   - ☐ Yes **[N = 31]**
     How many? **[39 boats were owned. 24 respondents owned one boat, 6 respondents owned two boats, 1 respondent owned three boats.]**
     Names?
   - ☐ No **[N = 23]**
     (Skip to Question 6.)

5. What is the *(Name of Boat)* being used for? *(Repeat and get information for all boats listed in Question 4.)*[a]

   - ☐ Groundfishing **[N = 30]**
   - ☐ Lobster Fishing **[N = 10]**
   - ☐ Other fishing **[N = 6]**
   - ☐ Unknown **[N = 0]**
   - ☐ Not being used **[N = 3]**

Now I have a few questions about the multispecies fishery.

6. Do you still have fishing permits in the federal multispecies groundfish fishery?

   ☐ Yes *(Go to Question 7.)* **[N = 27]**
   ☐ No *(Skip to Question 9.)* **[N = 27]**

7. Are these permits currently being used?

   ☐ Yes *(Go to Question 8.)* **[N = 26]**
   ☐ No *(Skip to Question 9.)* **[N = 1]**

8. Would you say that you are fishing more, less, or about the same as before the buyback?

   ☐ More **[N = 4]**
   ☐ Less **[N = 17]**
   ☐ About the same **[N = 4]**
   [One respondent did not answer the question.]
   (Go to question 10 following this question.)

9. Do you have any plans to reenter the federal multispecies groundfish fishery?

   ☐ No **[N = 17]**
   ☐ Yes **[N = 7]**
   [Four respondents did not answer the question.]
   What type of conditions would have to exist before you would reenter?
   [We did not summarize the responses to this question.]

10. Are you doing any other type of commercial fishing? This could include working on someone else's fishing boat or some other type of fishing, other than for groundfish, for example, for lobster.

   ☐ Yes **[N = 23]**
   ☐ No **[N = 30]**
   [One respondent did not answer this question.]

11. We're aware that there were no restrictions on the ways that you could spend the money you received in the buyback program. Did you purchase any other fishing boats after participating in the buyback program, either with buyback or other funds?

☐ Yes **[N = 16]**
How Many? **[18 boats were purchased. 14 respondents purchased one boat, 2 purchased two boats since the buyback.]**
☐ No **[N = 35]**
[Three respondents did not answer the question.]
(Skip to Question 18.)

Now, I have some questions about the fishing boats(s) that you purchased after the buyback.

12. What is/are the name(s) of the boat(s) you purchased?

[Names of 17 of the 18 purchased boats were obtained.]

(Ask questions 13 through 17 for each of the new boats that were purchased.)

13. Was the *(Name of Boat)* purchased using buyback funds?

Boat #1
☐ Yes **[N = 12]**
☐ No **[N = 4]**

Boat #2
☐ Yes **[N = 0]**
☐ No **[N = 2]**

14. Is the (*Name of Boat*) larger, smaller, or about the same size as the one you sold to the buyback program?

Boat #1
☐ Larger **[N = 4]**
☐ Smaller **[N = 8]**
☐ About the same size **[N = 4]**

Boat #2
☐ Larger **[N = 0]**
☐ Smaller **[N = 2]**
☐ About the same size **[N = 0]**

15. Are you using the same type of gear that you were using on your old boat?

Boat #1
- ☐ No **[N = 5]**
- ☐ Yes **[N = 11]**

What type of gear are you using? **[We did not summarize these responses.]**

Boat #2
- ☐ No **[N = 1]**
- ☐ Yes **[N = 1]**

What type of gear are you using? **[We did not summarize these responses.]**

16. Is this boat being used in the federal multispecies (groundfish) fishery?

Boat #1
- ☐ Yes **[N = 12]**
- ☐ No **[N = 4]**

Boat #2
- ☐ Yes **[N = 1]**
- ☐ No **[N = 1]**

17. Are you fishing with a state (in-shore) permit or a federal (off shore) permit or both?

- ☐ State permit **[N = 2]**
- ☐ Federal permit **[N = 5]**
- ☐ Both **[N = 9]**

18. What do you consider your primary occupation? *(Probe if it appears that respondent is doing more than one thing to earn a living.)*[a]

- ☐ Retired **[N = 6]**
- ☐ Unemployed **[N = 3]**
- ☐ Employed, non-fishing occupation **[N = 5]**
- ☐ Employed, fishing related occupation **[N = 8]**
- ☐ Employed, commercial fisherman, unknown fishery **[N = 1]**
- ☐ Employed, commercial fisherman, lobster fisherman **[N = 9]**
- ☐ Employed, commercial fisherman, multispecies fishery, fisherman on boat he/she does not own **[N = 2]**
- ☐ Employed, commercial fisherman, multispecies fishery, boat owner or captain of boat he/she owns **[N = 20]**

19. Again, we're aware that there were no restrictions on the ways that you could spend the money you received in the buyback program. However, we're interested in the different ways this money was spent. Could you tell me briefly how you spent your buyback money?[a]
Alternate wording if new boat was purchased with buyback funds: Again, we're aware that there were no restrictions on the ways that you could spend the money you received in the buyback program. However, we're interested in the different ways this money was spent. You said that you used some of the buyback money to purchase *(Name of Boat)*. Were there any other things that you used the money for?[a]

- ☐ Paid taxes (e.g., capital gains, state sales taxes, income taxes) **[N = 24]**
- ☐ Paid mortgage or debts on boat sold in buyback **[N = 23]**
- ☐ Provided funds for another business **[N = 6]**
- ☐ Bought a new boat **[N = 12]**
- ☐ Bought gear or made changes to existing boat **[N = 7]**
- ☐ Living expenses **[N = 4]**
- ☐ Paid off other debts **[N = 19]**
- ☐ Invested money **[N = 18]**
- ☐ Other **[N = 9]**

20. Have you moved since you sold your fishing boat to the buyback program?

- ☐ No **[N = 48]**
  (*Skip to Question 22.*)
- ☐ Yes **[N = 6]**

21. Would you tell me where you lived before you moved and a little bit about why you decided to move?[a]

- ☐ Move related to selling boat/change in fishery employment **[N = 2]**
- ☐ Move not related to selling boat/change in fishery employment **[N = 4]**

22. We'd like to know a little bit about your crew members and what happened to them after you sold your boat? Can you begin just by telling me their first names and about how old they are, and then tell me what you know about what they are doing now?[a]

[Crewmember data were reported by 45 of the 54 respondents. Respondents identified a total of 131 crewmembers affected by the vessel buyback. In total, respondents said that 81 of the crewmembers were still employed as fishermen, 38 were identified as not fishing, two were identified as unemployed, while the current occupations of 10 crewmembers were unknown. Crewmember ages ranged from 19 to 65, with an average age of 41.]

Finally, I'd like to ask you a couple of questions about yourself.

23. First, what year were you born? **[Present ages ranged from 36 to 73. Average current age of buyback participant is 51.]**

24. And what is the highest grade you completed in school?

☐ Grade School	**[N = 16]**
☐ Some High School	**[N = 5]**
☐ High School Graduate	**[N = 14]**
☐ Some College	**[N = 4]**
☐ College Graduate	**[N = 13]**
☐ Trade school/technical school	**[N = 1]**
☐ Advanced degree (e.g., M.D., Master's, etc.)	**[N = 1]**

Do you have any other comments you'd like to make concerning the buyback program? *(Prompts to use if respondent asks "What do you mean?": Do you think it reduced the number of boats that are fishing in the multispecies fishery? Were there any problems with the buyback? What were its successes?)*

[We did not summarize these responses.]

[a]These questions were open-ended questions. Responses were coded into categories by two independent coders. Discrepancies were resolved through discussion so that agreement between coders was 100 percent. Answers to questions 2, 5, and 19 could be coded into more than one category.

Comments From the Department of Commerce

THE SECRETARY OF COMMERCE
Washington, D.C. 20230

MAY 23 2000

Mr. Jim Wells
Director, Energy, Resources
and Science Issues
Resources, Community and Economic
Development Division
United States General Accounting Office
Washington, D.C. 20548

Dear Mr. Wells:

Thank you for the opportunity to review the General Accounting Office draft report entitled, "Commercial Fisheries: Entry of Fishermen Limits Benefits of Buyback," "GAO/RCED-00-120." I am pleased to enclose the National Oceanic and Atmospheric Administration's comments on the draft report.

These comments were prepared in accordance with Office of Management and Budget Circular A-50.

Sincerely,

William M. Daley

Enclosure

U.S. DEPARTMENT OF COMMERCE

COMMENTS ON DRAFT/FINAL GAO REPORT ENTITLED

"COMMERCIAL FISHERIES: Entry of Fishermen Limits Benefits of Buyback Programs"

GAO/RCED-00-120

May 2000

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION COMMENTS ON THE DRAFT GAO REPORT ENTITLED "COMMERCIAL FISHERIES: Entry of Fishermen Limits Benefits of Buyback Programs" (GAO/RCED-00-120)

See comment 1.

GENERAL COMMENTS: The reasons behind different types of buyback programs requires deeper analysis. For instance, the purpose of the fisheries efforts that included the New England groundfish and Washington State salmon buybacks was a combination of disaster assistance and capacity reduction. The objective of disaster assistance is helping those whom disaster has harmed. The objective of capacity reduction is decreasing the capacity to harvest limited fisheries resources. Both the groundfish and salmon efforts could have achieved their disaster assistance objective without also achieving any capacity reduction objective, but we attempted to make both efforts achieve as much of both objectives as possible. This may have compromised some capacity reduction aspects, particularly those that would have delayed assistance too far beyond disaster.

Disaster assistance was not, however, the purpose of the Bering Sea pollock buyback. Congress specified this involuntary capacity reduction in legislation that comprehensively reorganized harvesting and processing effort in the entire Bering Sea pollock fishery. Uncompromising fishing capacity reduction was an essential component.

Section 312(b)-(e) of the Magnuson-Stevens Act is the only legislative authority specifically intended to achieve the objective of fishing capacity reduction. No buyback has yet occurred under this authority, although the pollock buyback under section 207 of the American Fisheries Act came closest. All of the groundfish buyback and part of the salmon buyback preceded the section 312(b)-(e) authority, and occurred mostly under the Interjurisdictional Fisheries Act.

See comment 2.

Latent groundfish permits could not have been resolved within the context of a groundfish disaster that required immediate assistance. Disastrously decreased groundfish stocks required a 5-10 year rebuilding regime involving severe groundfish catch reductions. The active groundfish fleet faced financial ruin. We, and groundfish harvesters themselves, believed that buying back active fishing capacity was one of the best ways to mitigate this. This buyback removed active fishing effort responsible for about 20 percent of average groundfish production during several years preceding the buyback year. All other things being equal, this allowed the active fishing vessels remaining after buyback to increase their groundfish catch to approximately 125 percent of their average pre-buyback level, significantly mitigating the adverse financial effects of the necessary fisheries conservation restrictions. Some latent groundfish

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permits did become active after the groundfish buyback, but, as GAO notes, this has reduced the buyback's effort reduction benefit by only about 10 percent.

Latent groundfish permits remain a serious problem. As groundfish stocks slowly rebuild, the activation of latent groundfish permits could erase the buyback's benefits. We have been unsuccessful in motivating the New England Fishery Management Council to become interested in an effort to reduce latent groundfish permits. The Council needs to address this problem before groundfish stocks rebuild.

See comment 3.

The groundfish buyback revoked all Federal fishing permits associated with the vessels bought back. If, consequently, 9 of the 73 groundfish buyback participants are now full time lobster fishermen in Federal waters, they either already had lobster permits in association with non-buyback vessels or bought existing lobster vessels and their lobster fishing permits from other post-buyback vessel/permit owners. In either case, this creates no additional lobster fishing capacity.

Similarly, if another 9 of the 73 buyback participants purchased existing groundfish vessels and their groundfish fishing permits from other post-buyback vessel/permit owners, this creates no additional groundfish fishing capacity. Those who are bought out are no longer in the fishery.

Moreover, if 17 more of the 73 buyback participants remained in the post-buyback groundfish fishery as vessel/permit owners, vessel captains, or crewmen, this also creates no additional groundfish fishing capacity. Those among these 17 who remained as vessel/permit owners could only have done so because they also owned groundfish vessels/permits other than the ones we bought back. Those who remained as captains and crewmen do not increase fishing capacity. Capacity neutral buyback consequences are not significant, and we have no statutory authority to prevent vessel/permit owners whose vessels/permits we buy back from either (1) seeking post-buyback employment as fishing vessel captains or crewmen or (2) remaining in the buyback fishery as the owners of vessels/permits other than the bought back vessels/permits.

We also note the following:

See comment 4.

(1) The State of Washington had, before the salmon buyback, closed its salmon fishery to new salmon fishing permits;

(2) The State of Washington, which contributed to the salmon buyback's cost, manages this fishery and designed this buyback form of disaster assistance to meet its own fisheries management objectives;

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See comment 5.

(3) Federal taxpayers paid only about 40 percent of the $130 million cost of these three buybacks. Private post-buyback beneficiaries paid the great majority of the remaining 60 percent of buyback cost, with a smaller contribution from state taxpayers; and

See comment 2.

(4) The 62 vessels associated with previously inactive groundfish permits that became active in the groundfish fishery after the buyback may in fact have two-thirds of the potential fishing capacity removed by the groundfish buyback. Nevertheless, their groundfish production has been only about 10 percent of the previous groundfish production of the bought back vessels and permits. This indicates that these 62 vessels participate full time in fisheries other than groundfish, and may only episodically fish groundfish during the off-season for their target species.

Before new buyback programs are used to reduce fishing capacity, they should be made more effective. To do this, the GAO recommends that the Secretary of Commerce direct the NMFS to design future buyback programs to:

See comment 6.

RECOMMENDATION 1: Restrict buyback participants from entering a fishery that has excess fishing capacity.

NOAA RESPONSE: For federally funded buybacks, we generally agree with this recommendation. There are, however, several exceptions, and buybacks funded by loans to post-buyback fishermen may most often involve buying back only permits in the buyback fishery.

This recommendation has several possible aspects.

One aspect could involve buyback participants buying existing vessels/permits from post-buyback vessel/permit owners in non-buyback fisheries. The second aspect could involve buyback participants entering non-buyback fisheries as fishing vessel captains or crewmen. In either case, this does not create additional capacity in the non-buyback fishery, and we do not believe we have the authority to effectively prevent it anyway.

A third aspect could be to involve participants in permit buybacks entering (or increasing their effort in) non-buyback fisheries for which they had pre-buyback permits that we did not buy back. Fishery management plans have over the years resulted in many vessels having multiple fishing permits in different fisheries. This is sometimes consistent with the cyclical nature of fishing, and the need to transfer operations from fishery to fishery as market, resource, and other condition dictate. Some of these permits are, however, latent or largely latent--as in the case of New England groundfish permits held by vessels that have traditionally operated in other fisheries (e.g., lobster).

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Some vessels with multiple permits might fish mainly or entirely in buyback fisheries until after permit buybacks in those fisheries cause them to transfer into non-buyback fisheries for which they also have permits. This does not create additional capacity in the non-buyback fisheries because these vessels always had permits to operate in the non-buyback fisheries, under which they could have actively fished at any time. This does, however, activate capacity in the non-buyback fisheries that was previously latent in those fisheries.

Section 312(b)-(e) authorizes two types of buybacks. The first is the buyback of fishing permits in a buyback fishery, but not the vessels associated with the permits. The second is the buyback of vessels in a buyback fishery and all permits in any fishery associated with those vessels. Section 312(b)-(e) also authorizes paying buyback costs from: (1) Federal appropriations, (2) private contributions, or (3) the proceeds of buyback loans to post-buyback harvesters.

The parties who directly benefit from a buyback are the harvesters who remain in the buyback fishery after buyback occurs. A buyback loan means that these buyback beneficiaries, rather than Federal taxpayers, pay the buyback's costs. Post-buyback harvesters in the buyback fishery repay the loan, within 20 years, by fees of up to 5 percent of the ex-vessel value of buyback species landed after buyback occurs. These fees (and the buyback loan they repay) require a referendum in which at least two-thirds of pre-buyback harvesters in a prospective buyback fishery authorize the fees.

We do not believe that harvesters in a buyback fishery will vote to approve buyback loan repayment fees for purposes that directly benefit only harvesters in non-buyback fisheries. This would require post-buyback harvesters in a buyback fishery to pay for benefits that they do not receive, while allowing post-buyback harvesters in non-buyback fisheries to receive benefits for which they do not pay.

Consequently, we believe that most buybacks financed wholly by buyback loans under the section 312(b)-(e) authority will involve buying back only permits in the buyback fishery. This is the most cost effective way for post-buyback harvesters to achieve their capacity reduction result (whose cost they alone must pay) in their fishery. While this may result in vessels that also have permits for non-buyback fisheries transferring their effort into those fisheries, it will, at no cost to Federal taxpayers, result in reducing capacity in the buyback fishery. There are, however, several alternative ways of addressing the vessel effort transfer potentially involved in some permit buybacks.

First, Federal taxpayers can pay all of a buyback's cost. This would allow the Federal Government to dictate that a buyback include both the vessels in a buyback fishery and all permits in all non-buyback fisheries associated with those vessels.

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Second, harvesters in non-buyback fisheries affected by a buyback in another fishery could conduct their own buybacks financed by their own buyback loans. This way, no post-buyback harvesters pay for benefits they did not receive and no non-buyback harvesters receive benefits for which they did not pay.

Third, Fishery Management Councils could revoke latent or largely latent permits that their holders have not meaningfully used in the past.

Finally, Federal taxpayers and buyback borrowers could share buyback costs. Under this alternative, post buyback harvesters would finance only the portion of buyback costs that would have been reasonably necessary to achieve their capacity reduction objective in their buyback fishery. Federal taxpayers would pay any additional buyback costs necessary to keep vessels associated with bought back permits in the buyback fishery from transferring their effort into non-buyback fisheries for which those vessels are also permitted.

See comment 7.

RECOMMENDATION 2: Restrict the use of unused fishing permits in a buyback fishery with excess fishing capacity.

NOAA RESPONSE: For buybacks under the section 312(b)-(e) capacity reduction authority, we agree with this recommendation. This recommendation may, however, be inconsistent with buyback components of disaster assistance.

The legislative authority for capacity reduction requires the fishery management plan in each buyback fishery to consider the buyback fishery's full potential fishing capacity in preventing the replacement of bought back capacity in that fishery. Consequently, no buyback will occur under the section 312(b)-(e) authority unless latent fishing permits in the buyback fishery are first prevented from resulting in the replacement of the capacity that a buyback reduces in that fishery.

Buybacks conducted under disaster assistance authorities are not legislatively subject to this section 312(b)(1)(B)(i) requirement. Imposing the requirement could severely limit the use of buybacks as a disaster assistance tool. Overcoming the frequent socio-political difficulties in amending fishery management plans, and processing the amendments themselves, might not generally be accomplished quickly enough to accommodate most disaster assistance needs.

See comment 8.

RECOMMENDATION 3: Identify mechanisms to minimize the incentives to increase fishing capacity in a buyback fishery.

NOAA RESPONSE: We agree with this recommendation. As in the case of unused permits, section 312(b)(1)(B)(i) also requires sufficient

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fishery management plan restrictions on post-buyback vessel upgrading to prevent replacement of the capacity that buyback reduces. Consequently, this mechanism already exists for section 312(b)-(e) buybacks.

We agree that allocating portions of total allowable catch to individual harvesters can rationalize post-buyback fisheries management. Individually transferrable quotas are one way of doing this, but new quotas of this type are under statutory moratorium. Fisheries harvesting cooperatives are another way. The American Fisheries Act demonstrated the potency of combining financed buybacks, user group allocations, harvesting cooperatives, and total allowable catches. Nevertheless, because fisheries harvesting cooperatives are voluntary associations of fish harvesters (which must also pass Department of Justice review), we cannot compel harvesters to adopt this form of cooperative behavior.

See comment 9.

RECOMMENDATION 4: Develop performance measures that relate to program goals and broader legislative goals, such as the need to better manage fishing capacity and conserve fish stocks.

NOAA RESPONSE: We agree with this recommendation. We believe our interim final rule implementing the section 312(b)-(e) authority requires sufficient pre-buyback planning and analysis for us to develop performance measures of this type.

See comment 10.

RECOMMENDATION 5: Evaluate the results of future buyback programs against the performance measures.

NOAA RESPONSE: We agree with this recommendation. We will better evaluate future buybacks in this manner. As our interim final rule implementing the section 312(b)-(e) fishing capacity reduction provisions indicates, we intend to include post-buyback evaluation in the SAFE reports required by 50 CFR 600.315(e).

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GAO's Comments

1. We agree that the New England groundfish and Washington State salmon buybacks were a combination of disaster assistance and capacity reduction. However, we disagree that capacity reduction objectives need be compromised in order to provide disaster relief. In the long term, the best use of disaster relief funds would be to address the factors that contribute to the disaster. We believe that unless disaster relief programs address long-term capacity issues in a fishery, such as inactive permits, disasters may continue to occur because fishermen can easily expand their capacity to fish. Capacity reductions achieved through buyback programs, regardless of funding sources, should not be allowed to erode. Such erosion can lead to the conditions that led to the need for disaster relief in the first place. The Department of Commerce stated that activation of previously inactive groundfish permits could erase buyback benefits. This shows that unless these programs are carefully designed, capacity reductions achieved through a disaster relief program may not be long lasting. Commerce also stated that disaster assistance was not the purpose of the Bering Sea pollock buyback and that the Magnuson-Stevens Act is the only legislative authority with the specific objective of achieving capacity reduction. We agree. However, we believe that, regardless of legislative authority, when funds are spent to reduce fishing capacity they should be spent in a way to achieve the most long-term benefits.

2. We agree that the New England buyback addressed active fishing capacity. However, we believe that inactive fishing capacity should also have been addressed at the time of the New England buyback, because, as Commerce states, the activation of latent groundfish permits could erase the buyback's benefits. As we noted in the draft report, 62 previously inactive vessels have begun catching groundfish since 1996 and these newly active vessels caught about 1.5 million pounds of groundfish during the 1998 fishing year, or about 10 percent of the active fishing capacity that had been removed in the buyback. We also noted that these 62 vessels collectively have about two-thirds of the potential fishing capacity as the 79 vessels purchased in the buyback. This increase in active fishing capacity, along with the active fishing capacity added from buyback participants' returning to the fishery, is significant because the New England Fishery Management Council is currently considering additional measures to further restrict groundfishing, such as reductions in allowed days to fish for commercial groundfishermen. The potential fishing capacity of these 62 newly active vessels is also significant because they are likely to

increase their active fishing capacity as groundfish stocks recover. Commerce agrees this is a problem and notes that they have been unsuccessful in motivating the New England Fishery Management Council to address previously inactive groundfish permits. We agree with Commerce that the Council needs to address this problem before groundfish stocks rebuild. However, because NMFS, an agency within the Department of Commerce, is responsible for oversight of the Council's activities and for approving its plans to manage the groundfish fishery, we believe that NMFS can take more concrete steps in working with the Council to address the problems of previously inactive permits.

3. Commerce states that no additional fishing capacity was created when buyback participants purchased existing lobster or groundfish fishing boats. We disagree and believe that Commerce uses a very narrow definition of fishing capacity when making its point. While Commerce defines fishing capacity as the number of boats in a fishery, this report measures fishing capacity in terms of the number of fish a boat is catching (active fishing capacity), and the capability of the boat to catch fish (potential fishing capacity). For example, we show that buyback participants who purchased existing groundfish vessels are catching more groundfish than the previous owners. In practical terms, the active groundfish fishing capacity of these vessels has increased. In addition, the potential fishing capacity of the recently purchased groundfish and lobster boats increased when buyback participants, for example, used funds to add gear to the vessel. Several buyback survey participants said that they used buyback funds to upgrade either a boat they previously owned or purchased with buyback funds.

4. We agree that Washington State designed its buyback programs to meet its fishery management objectives. We believe that Commerce can adopt this practice of designing disaster relief programs within the context of overall plans for managing fisheries and, therefore, reduce fishing capacity.

5. We agree that a portion of the costs of the three buyback programs we reviewed comes from private and state funding. Of the $140 million that the federal government has provided since 1995 for all buyback programs, $75 million, or about 54 percent, is a federal loan to the owners of factory trawlers fishing in the Bering Sea. The loan is repayable over 30 years. Until the loan is repaid, federal taxpayers assume the risk of nonrepayment of any federal loans. Regardless of

the financing method used, NMFS is the federal agency implementing the buyback and is responsible for ensuring that the program effectively achieves its buyback objectives.

6. Commerce generally agrees with this recommendation and offered three possible issues related to this recommendation that should be considered. Regarding Commerce's first issue, we believe buyback participants' buying existing vessels and/or permits from other owners can create additional fishing capacity. Regarding Commerce's second issue, we agree that there are conditions in which owners of buyback vessels returning as captains and crews would not create additional fishing capacity. Commerce believes it has no authority to prevent buyback participants from becoming vessel owners in another fishery or effectively returning to the buyback fishery as a captain or crewmember. Buyback authorities do not specifically address these circumstances. Regardless of whether Commerce has the authority to restrict buyback participants from entering another fishery, we believe that Commerce could work with regional fishery management councils to better manage fisheries that have excess fishing capacity so new entrants cannot cause additional capacity problems. As for Commerce's third issue, we agree that buyback programs financed through federal loans are likely to buy permits in just the buyback fishery, rather than the vessel and all of its permits. We believe that Commerce's suggestion of financing buybacks through a combination of federally appropriated funds and loans to the fishing industry is a viable alternative for addressing this problem.

7. Although Commerce agrees with our recommendation, it states that it may be inconsistent with buyback components of disaster assistance. We disagree. We believe that, in the case of fishing disasters, unless disaster relief programs address long-term solutions to fishing capacity issues, the response to one disaster may itself be creating the foundation for the next disaster. Therefore, we believe that, except in the most extreme cases of financial distress in which some form of immediate relief is needed, sufficient time exists to develop disaster relief programs for the fishing industry that restrict the use of unused fishing permits in a fishery after a buyback.

8. Although Commerce agrees with our recommendation, it states that section 312(b)(1)(B)(i) of the Magnuson-Stevens Act provides a mechanism for preventing the replacement of fishing capacity from buybacks funded under sections 312(b)-(e) of the Act. This mechanism

would not apply to buybacks funded under other authorities. Also, this mechanism does not require Commerce to identify alternatives that address the incentives to increase fishing capacity in a buyback fishery. Concerning alternatives that Commerce discusses in its comments, we agree that Commerce cannot compel fishermen to form a cooperative for harvesting fish. However, in the Bering Sea pollock industry, the American Fisheries Act facilitated creation of a cooperative by addressing such issues as the allocation of fish to different sectors of the industry. We believe that, when designing a buyback program, Commerce should identify ways to reduce the incentives to race to fish in the buyback fishery.

9. Although Commerce agrees with our recommendation, it states that its interim final rule implementing section 312(b)-(e) of the Magnuson-Stevens Act provides for information needed to develop performance measures for evaluating buyback programs. However, our recommendation applies to all buyback programs regardless of legislative authority. This would include section 312(b)-(e) of the Magnuson-Stevens Act; as well as the disaster relief section of the Magnuson-Stevens Act; other legislation that allows for disaster relief funding; or separate legislation, such as the American Fisheries Act.

10. Although Commerce agrees with our recommendation, it states that it could evaluate buyback programs implemented under section 312(b)-(e) of the Magnuson-Stevens Act in its Stock Assessment and Fishery Evaluation reports. However, we believe that all buyback programs should be evaluated regardless of the legislative authority for funding them. As previously discussed, this would include instances where buyback programs are funded under the disaster relief section of the Magnuson-Stevens Act, other legislation that allows for disaster relief funding, or separate legislation, such as the American Fisheries Act.

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