United States General Accounting Office

GAO

Report to the Chairman and Ranking Minority Member, Subcommittee on Oceans, Atmosphere, and Fisheries, Committee on Commerce, Science, and Transportation, U.S. Senate

December 2002

INDIVIDUAL FISHING QUOTAS

Better Information Could Improve Program Management

GAO-03-159

December 2002

INDIVIDUAL FISHING QUOTAS

Better Information Could Improve Program Management

GAO Accountability • Integrity • Reliability

Highlights

Highlights of GAO-03-159, a report to the Chairman and Ranking Minority Member, Subcommittee on Oceans, Atmosphere, and Fisheries, Committee on Commerce, Science, and Transportation, U.S. Senate

Why GAO Did This Study

To assist in deliberations on individual fishing quota (IFQ) programs, GAO determined (1) the extent of consolidation of quota holdings in three IFQ programs (Alaskan halibut and sablefish, wreckfish, and surfclam/ocean quahog); (2) the extent of foreign holdings of quota in these programs; and (3) the economic effect of the IFQ program on Alaskan halibut and sablefish processors.

What GAO Recommends

GAO recommends that the Secretary of Commerce require

- the National Marine Fisheries Service to collect and analyze information on quota holders, including who actually controls the use of the quota;
- the regional fishery management councils to define what constitutes an excessive share for a particular fishery in future IFQ programs; and
- the National Marine Fisheries Service to provide guidance to the regional councils on the factors to consider when determining what constitutes an excessive share.

www.gao.gov/cgi-bin/getrpt?GAO-03-159.

To view the full report, including the scope and methodology, click on the link above. For more information, contact Barry Hill at (202) 512-3841 or hillb@gao.gov or Keith Oleson at (415) 904-2218 or olesonk @gao.gov.

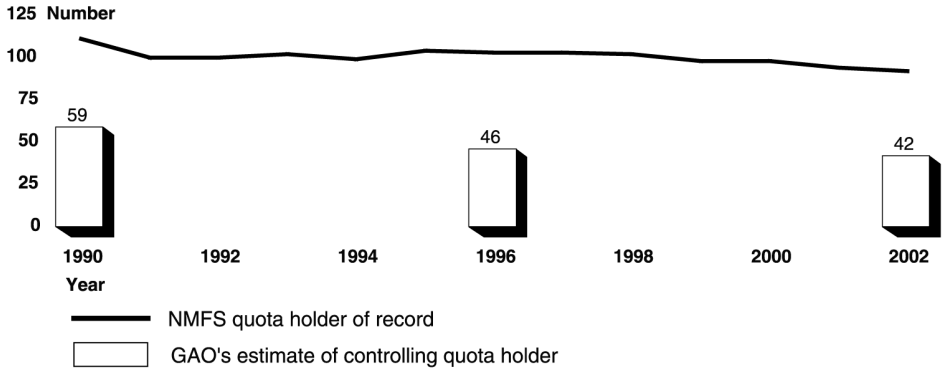
What GAO Found

All three IFQ programs have experienced some consolidation of quota holdings. Further, consolidation of surfclam and ocean quahog quota is greater than National Marine Fisheries Service (NMFS) data indicate, because different quota holders of record are often part of a single corporation or family business that, in effect, controls many holdings. Program rules may affect the extent of consolidation in each IFQ program. While the Alaskan halibut and sablefish program set specific and measurable quota limits, the surfclam/ocean quahog and wreckfish programs did not, relying instead on federal antitrust laws to determine whether any quota holdings are excessive. Without defined limits on the amount of quota an individual or entity can hold, it is difficult to determine if any holdings would be viewed as excessive.

GAO did not identify any instances where foreign entities currently hold or control quota. While NMFS requires transfer applicants in the halibut and sablefish program to declare themselves to be U.S. citizens or U.S. entities, there is no similar requirement for the surfclam/ocean quahog and wreckfish programs. As a result, in these programs, the potential exists for the transfer of quota to foreign entities.

The economic effects of the halibut and sablefish IFQ program are not uniform. Some processors were adversely affected by the IFQ program, while others benefited; however, it is difficult to quantify the actual effects. The only estimate of the program's economic effect on processors is a 2002 study commissioned by the state of Alaska. This study estimated that halibut processors experienced a 56 percent loss in gross operating margins. While GAO could not validate or replicate the study's results, its analysis of public data and the study's methodology raised several concerns about the reliability of the study's estimates. Also, the study did not take into account other factors that may affect profits, such as the diversity and value of other species processed.

Fewer Surfclam Quota Holders Than NMFS Data Indicate



Source: GAO's analysis of NMFS data.

Contents

Figures

Abbreviations

IFQ	individual fishing quota
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration

GAO
Accountability * Integrity * Reliability

United States General Accounting Office
Washington, D.C. 20548

December 11, 2002

The Honorable John F. Kerry
Chairman
The Honorable Olympia J. Snowe
Ranking Minority Member
Subcommittee on Oceans, Atmosphere, and Fisheries
Committee on Commerce, Science, and Transportation
United States Senate

Overfishing is a problem with far-reaching ecological and economic consequences. When a fishery—one or more stocks of fish within a geographic area—is unable to sustain itself, it transforms the marine ecosystem and threatens the livelihood of many U.S. fishermen. About 35 percent of the U.S. fish stocks assessed by the Department of Commerce's National Marine Fisheries Service (NMFS) are overfished or will be overfished if conditions do not change. Furthermore, while the domestic commercial fish catch in the United States remained relatively the same in 2001 as it was in 1990, U.S. consumption of domestic and imported fish increased by 13 percent.

Fishery management practices in U.S. waters are developed primarily by regional fishery management councils established under the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act).[1] Fishery management councils, under the direction of NMFS, have used several types of controls to maintain the health of a fishery. One set of controls focuses on the way fishing is conducted, such as placing restrictions on gear (e.g., type and amount), vessels (e.g., size), areas fished, times when fishing can occur, or the number of people allowed to fish. Another set of controls is designed to directly limit the amount of fish caught by setting catch limits for the entire fishery or for specific vessels, owners, or operators. In some instances, councils may use both types of controls. These efforts have sometimes had unintended consequences: fishermen used larger vessels and more gear to catch the same amount of fish, and fishing conditions became unsafe when fishermen raced to catch as much fish as they could within the time period allowed. Such outcomes have led to the search for innovative fishery management tools that balance the competing interests of those who depend on fishing for their livelihoods and the health of the fish stock.

[1] P.L. 94-265, as amended (16 U.S.C. 1801 et seq.).

In 1990, NMFS started using individual fishing quotas (IFQ), a conservation and management tool that sets catch limits for individual vessel owners or operators. Under an IFQ program, a regional fishery management council sets a maximum, or total allowable catch, in a particular fishery—typically for a year—based on stock assessments and other indicators of biological productivity, and it allocates the privilege to harvest a certain portion of the catch in the form of quota to eligible vessels, fishermen, or other recipients. These quota holders may then fish their quota or lease, sell, or otherwise transfer their quota according to program rules. These rules must be consistent with U.S. law and regulations. For example, among other things, the Magnuson-Stevens Act prohibits any entity from holding an excessive share of quota in any particular fishery. In addition, the implementing regulations of each program, in effect, generally preclude foreign individuals or entities from holding quota.

At the time of our review, NMFS had implemented three IFQ programs: (1) the Alaskan halibut and sablefish (black cod) program in 1995, (2) the South Atlantic wreckfish (snapper-grouper complex) program in 1992, and (3) the Mid-Atlantic surfclam/ocean quahog program in 1990. In addition, IFQ programs are being considered for several fisheries, such as the Bering Sea crab, the Gulf of Alaska groundfish (e.g., pollock, cod, and sole), and the Gulf of Mexico red snapper.

IFQ programs have achieved many of the desired conservation and management benefits, such as helping to stabilize fisheries, reducing excessive investment in fishing capacity, and improving safety. However, they have also raised concerns about the fairness of quota allocations, the potential for quota consolidation among a few holders, and the economic effects of IFQ programs on the fishing industry and fishing communities. Responding to these concerns, Congress, through the Sustainable Fisheries Act of 1996, placed a moratorium on new IFQ programs. Congress later extended the moratorium through September 30, 2002, and then allowed it to expire.

To assist in deliberations on IFQ programs, you asked us to determine (1) the extent of consolidation of quota holdings, (2) the extent of foreign holdings of quota, and (3) the economic effect of IFQ programs on seafood processors. Regarding the economic effect on processors, we limited our review to the Alaskan halibut and sablefish processors because few of these processors were eligible to hold quota under the provisions of the Alaskan IFQ program. In contrast, processors could hold quota under the surfclam/ocean quahog program, and most of the wreckfish quota was not

being fished. See appendix I for additional details on our scope and methodology.

Results in Brief

All three IFQ programs have experienced some consolidation of quota holdings, and the extent of this consolidation may be affected by each program's governing rules. According to NMFS data, from 1995 through 2001, the number of halibut and sablefish quota holders decreased by about 27 and 15 percent, respectively. From 1992 to 2002, the number of wreckfish quota holders decreased by 49 percent. From 1990 to 2002, the number of surfclam and ocean quahog quota holders decreased by about 17 and 34 percent, respectively. According to our analysis, however, consolidation of surfclam and ocean quahog quota is greater than NMFS data indicate, because different quota holders of record are often part of a single corporation or family business that, in effect, controls many holdings. For example, for 2002, we determined that consolidation of quota in the surfclam program was about twice that indicated by NMFS data and that one entity alone controlled at least 27 percent of the quota. Program rules may affect the extent of consolidation and the information collected in each IFQ program. In particular, the Alaskan halibut and sablefish program has specific and measurable limits on how much quota any one individual or entity can hold. Limits on individual halibut quota holdings, for example, range from 0.5 percent to 1.5 percent, depending on the fishing area, and sablefish holdings are limited to 1 percent. In contrast, the surfclam/ocean quahog and wreckfish programs have no specific and measurable limits on quota holdings, relying instead on federal antitrust laws to determine whether any quota holdings are excessive. As a result, NMFS does not routinely gather and assess information on who controls the use of the surfclam/ocean quahog and wreckfish quota. Furthermore, without defined limits set by the councils on the amount of quota an individual or entity can hold, it is difficult to determine whether any quota holdings in a particular fishery would be viewed as excessive, as prohibited by the Magnuson-Stevens Act.

We did not identify any instances where foreign entities currently hold or control quota. In the surfclam/ocean quahog program, however, a U.S. member firm of a foreign business that provides financial services recently held quota while acting as a transfer agent in the sale of the quota, but it did not control the use of the quota. In addition, two surfclam/ocean quahog processors owned by foreign companies controlled the use of quota. In one case, a subsidiary of one foreign-owned company received quota; however, foreign control of the quota ended when a group of

Americans bought out the foreign owners. In the other case, a foreign-owned company sold its fishing vessels with qualifying catch histories to an individual qualified to receive quota in exchange for control over the quota use; control of the quota remained with the foreign-owned processing company until the processing company was sold to a U.S.-owned firm. The implementing regulations of each program, in effect, generally preclude foreign entities from holding quota. The Alaskan halibut and sablefish program explicitly prohibits foreign citizens and businesses from holding quota and requires all quota transfer applicants to declare themselves to be U.S. citizens or U.S. entities. In contrast, the surfclam/ocean quahog and wreckfish programs tie eligibility for holding quota to the requirements for owning a U.S.-documented vessel engaged in the fisheries of the United States, that is, being a U.S. citizen or an entity 75 percent owned and controlled by U.S. citizens. However, these two programs do not require quota holders or transfer applicants to declare that they are U.S. citizens or U.S. entities. As a result, the potential exists for the transfer of surfclam, ocean quahog, and wreckfish quota to foreign entities.

The economic effects of the halibut and sablefish IFQ program are not uniform. Some processors were adversely affected by the implementation of the program, while others benefited. It is difficult, however, to quantify the actual effects. With respect to halibut, in particular, the IFQ program extended the fishing season from a "race for fish" of a few days to a season of 8 months. This resulted in a significant increase in the fresh halibut market for some processors and a corresponding decrease in the frozen halibut market for others. Sablefish did not undergo a similar market change and remained primarily a frozen product sold in the Asian market. While we can determine some general effects on processors, information is not available to precisely quantify these effects. The only estimate of the IFQ program's economic effect on processors is a 2002 study commissioned by the state of Alaska. The study concluded that processors were hurt significantly by the IFQ program and estimated that halibut processors, for example, experienced a 56 percent ($8.7 million) loss in gross operating margins. However, we could not validate or replicate the study's results, because we did not have access to the proprietary data used. Nonetheless, our analysis of available public data and the methodology used in the study, as well as the analyses of others, raised several concerns about the reliability of the study's estimates. For example, the study used pre-IFQ processor margins for 1992-1993—a time period where, coincidentally, there was a dip in halibut prices—and, therefore, a comparison with post-IFQ margins may indicate greater economic losses to processors than would be indicated if different base years were used. Also,

the study did not take into account other factors that may affect profits, such as the diversity and value of other species processed.

We are making several recommendations to the Secretary of Commerce to collect and analyze information on quota holders, require regional fishery management councils to define what constitutes an excessive share for the fishery in future IFQ programs, and provide guidance to the councils on the factors to consider when determining what constitutes an excessive share. In commenting on a draft of this report, the department agreed in principle with our recommendations to collect and analyze information on quota holders and to provide guidance for setting limits on quota holdings in future programs. The department, however, disagreed with our recommendation to set limits on the amount of quota an individual or entity may hold in future IFQ programs, stating that such limits might be warranted and necessary in certain cases, but not in all IFQ programs. The Magnuson-Stevens Act clearly mandates that new IFQ programs prevent any person from acquiring an excessive share of quota. We agree that market performance and other issues should be considered and did not mean to imply otherwise. We continue to believe that without a specific and measurable definition, it would be difficult for the councils and NMFS to know whether any quota holding could be viewed as excessive. We have revised our recommendations to reflect the full range of considerations that need to be taken into account when defining what constitutes an excessive share and to focus on the need to provide guidance for making this determination in future programs.

Background

The Magnuson-Stevens Act granted responsibility for managing marine resources to the Secretary of Commerce. The Secretary delegated this responsibility to NMFS, which is part of Commerce's National Oceanic and Atmospheric Administration (NOAA). The act established eight regional fishery management councils, each with responsibility for making recommendations to the Secretary of Commerce about management plans for fisheries in federal waters. The eight councils—consisting of fishing industry participants, state and federal fishery managers, and other interested parties—and their areas of responsibility are New England covering waters off Maine, New Hampshire, Massachusetts, Rhode Island, and Connecticut; Mid-Atlantic covering waters off New York, New Jersey, Delaware, Maryland, Virginia, and North Carolina; South Atlantic covering waters off North Carolina, South Carolina, Georgia, and the east coast of Florida; Gulf of Mexico covering waters off Texas, Louisiana, Mississippi, Alabama, and the west coast of Florida; Caribbean covering waters off the

U.S. Virgin Islands and the Commonwealth of Puerto Rico; Pacific covering waters off California, Oregon, and Washington; North Pacific covering waters off Alaska; and Western Pacific covering waters off Hawaii, American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, and uninhabited U.S. territories in the Western Pacific.

The Magnuson-Stevens Act also established national standards for fishery conservation and management. These standards deal with preventing overfishing, using scientific information, ensuring the equitable allocation of fishing privileges, preventing excessive accumulation of quota, using fishery resources efficiently, minimizing bycatch,[2] minimizing administrative costs, promoting safety at sea, and considering the importance of fishery resources to fishing communities. The regional councils use these standards to guide their development of plans that are appropriate to the conservation and management of a fishery, including measures to prevent overfishing and rebuild overfished stocks and to protect, restore, and promote the long-term health and stability of the fishery. These measures may include, for example, requiring permits for fishery participants, designating fishing zones, establishing catch limits, prohibiting or limiting the use of fishing gear and fishing vessels, and establishing a limited access system.

Under the Magnuson-Stevens Act, three regional councils (North Pacific, South Atlantic, and Mid-Atlantic) have developed IFQ programs to manage the halibut and sablefish, wreckfish, and surfclam/ocean quahog fisheries, respectively. Each IFQ program is designed individually, because the characteristics of each fishery differ.

Pacific halibut (see fig. 1) and sablefish (see fig. 2) are bottom-dwelling species found off the coast of Alaska, among other areas. Halibut weigh about 40 pounds, on average, and are found at depths of about 50 to 650 feet. Sablefish weigh less than 11 pounds, on average, and are found at depths of about 325 to 4,925 feet. The halibut and sablefish fishing fleets are primarily owner-operated vessels of various lengths that use hook-and-line gear to fish for halibut and hook-and-line and pot gear for sablefish. Some vessels catch both halibut and sablefish, and, given the location of both species, they are often caught as bycatch of the other. Halibut are

[2] Under the Magnuson-Stevens Act, "bycatch" means fish that are harvested in a fishery, but which are not sold or kept for personal use. Bycatch includes fish discarded for regulatory or economic reasons.

primarily sold domestically as a fresh or frozen product, and sablefish are primarily sold to the Asian market as a frozen product. In 2001, the total halibut and sablefish catch was 45.2 million pounds and 21.7 million pounds, respectively.

Figure 1: Halibut Being Displayed

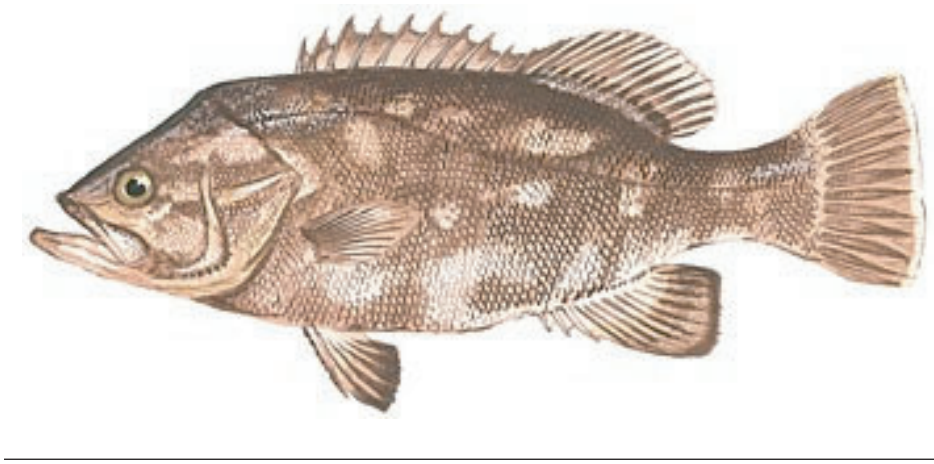
Source: International Pacific Halibut Commission.

Figure 2: Photograph of a Sablefish

Source: Commander John Bortniak, National Oceanic and Atmospheric Administration Corps/Department of Commerce.

Wreckfish (see fig. 3) are found in the deep waters far off the South Atlantic coast, primarily from Florida to South Carolina. They were first discovered in the southern Atlantic in the early 1980s by a fisherman recovering lost gear. Wreckfish are fished using specialized gear by vessels over 50 feet in length that are used primarily in other fisheries. The fishing fleet is small, with only three vessels reporting wreckfish landings totaling about 168,000 pounds—or about 8 percent of the total allowable catch—in 2000. Wreckfish are sold fresh or frozen as a market substitute for snapper and grouper.

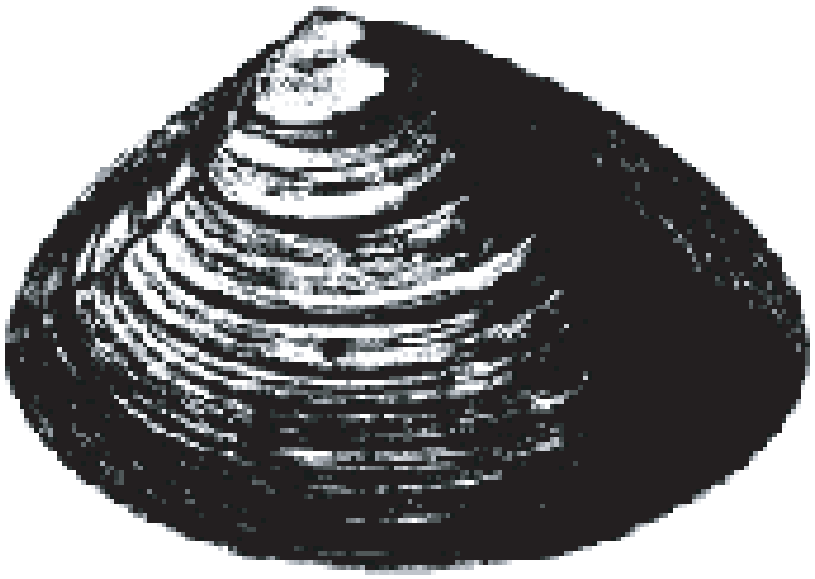
Figure 3: Drawing of a Wreckfish



Source: South Atlantic Fishery Management Council.

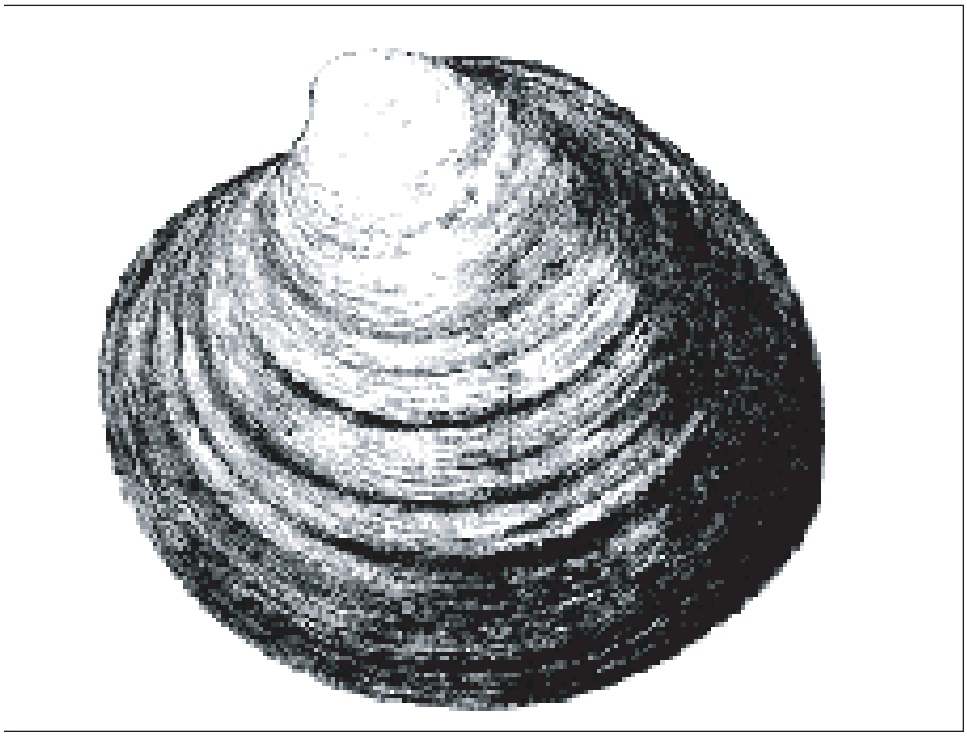
Surfclams (see fig. 4) and ocean quahogs (see fig. 5) are mollusks found along the East Coast, primarily from Maine to Virginia, with commercial concentrations found off the Mid-Atlantic states. While ocean quahogs are found farther offshore than surfclams, the same vessels are largely used in each fishery. These vessels pump water down to the ocean floor to raise the mollusks and then catch them in a dredge that runs over the bottom. Surfclams and ocean quahogs are processed into strips, juice, soup, chowder, and sauce. They must be processed generally within 24 hours of harvest or they will spoil. In 2000, the surfclam/ocean quahog fishery harvested 2.6 million bushels of surfclams and 3.2 million bushels of ocean quahogs.

Figure 4: Drawing of a Surfclam



Source: National Marine Fisheries Service, Northeast Fisheries Center Image Archive, Woods Hole, Massachusetts.

Figure 5: Drawing of an Ocean Quahog



Source: National Marine Fisheries Service, Northeast Fisheries Center Image Archive, Woods Hole, Massachusetts.

When designing the IFQ programs, each regional council set out specific objectives for improving conservation and management in their respective fisheries. These objectives differed for each program, as shown in table 1, depending on the desired biological, social, and economic outcomes for the fishery.

Table 1: Examples of IFQ Program Objectives

Objective	Halibut/ sablefish	Wreckfish	Surfclam/ ocean quahog
Reduce overcapitalization	X	X	[a]
Maximize efficiencies			X
Stabilize fishery	X	X	
Conserve resource	[a]	X	X
Improve safety	X		[a]
Simplify regulation			X
Protect fishing participants	X		

[a]While not specified as an official objective, this outcome is important to the program.

Source: NMFS and the National Research Council.

When designing the IFQ programs, each of the respective regional councils also set out who was eligible to receive quota under the initial allocation (see table 2). The regional councils based eligibility and amount of quota to be received on, among other things, ownership and catch history of the vessels that participated during a portion of a set of qualifying years. Some halibut, sablefish, surfclam, and ocean quahog processors owned fishing vessels with a catch history during the IFQ programs' qualifying years, and therefore received quota under the initial allocation.

Table 2: Summary of Quota Allocation and Accumulation Rules, by IFQ Program

Rule	Halibut/ sablefish	Wreckfish	Surfclam/ ocean quahog
Initial allocation based on historical catch	X	X	X
Initial allocation based on vessel size			X
Quota divided by geographic areas	X		
Specific caps on initial allocation		X	
Specific caps on quota accumulation	X		

Source: NMFS and the National Research Council.

Consolidation of Quota Holdings Occurred in All Three IFQ Programs

Consolidation of quota holdings occurred in all three IFQ programs, with much of it occurring in the early years of each program. In addition, consolidation of surfclam and ocean quahog quota is greater than NMFS data indicate. The governing rules of each program may have affected the extent of consolidation and the information collected. However, without clear and accurate data on quota holders and fishery-specific limits on quota holdings, it is difficult to determine whether any quota holdings in a particular fishery would be viewed as excessive, as prohibited by the Magnuson-Stevens Act.

Much of the Consolidation Occurred in Early Program Years

According to our analysis of NMFS data, from 1995 through 2001, the number of halibut and sablefish quota holders decreased by about 27 and 15 percent, respectively. Over 46 percent of the halibut consolidation and 35 percent of the sablefish consolidation occurred by the end of the second year of the program. From 1992 to 2002, the number of wreckfish quota holders decreased by 49 percent, with all of the consolidation occurring by the end of the program's third year.[3] Finally, from 1990 to 2002, the number of surfclam and ocean quahog quota holders decreased by about 17 and 34 percent, respectively. About 58 percent of the surfclam quota consolidation and 36 percent of the ocean quahog quota consolidation occurred by the start of the second year of the program. (See app. II for additional data on changes in quota holdings.)

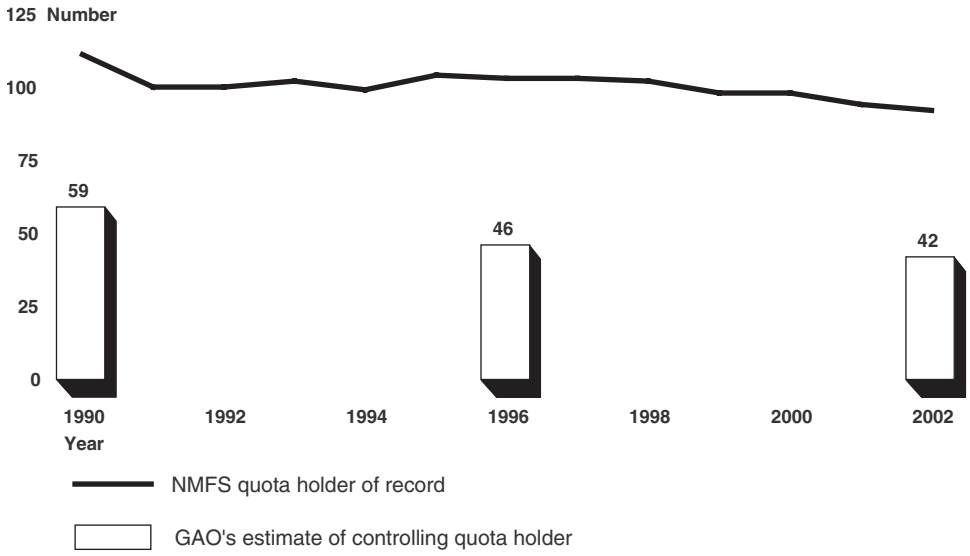
Consolidation of Surfclam and Ocean Quahog Quota Is Greater Than NMFS Data Indicate

Surfclam and ocean quahog quota consolidation is greater than NMFS data indicate. According to NMFS officials and others knowledgeable about the fishery, the quota holder of record (i.e., the individual or entity under whose name the quota is listed) is often not the entity that controls the use of the quota. Some families hold quota under the names of more than one family member; some parent corporations hold quota under the names of one or more subsidiaries; some entities hold quota under the name of one or more incorporated vessels; and some financial institutions serve as transfer agents and hold quota on behalf of others or in lieu of collateral for loans.

[3] According to NMFS officials, there had been very little activity in the wreckfish program since 1995. A National Research Council study of IFQs attributed this lack of activity to low market prices of wreckfish compared to other species for which the same vessels can fish.

After aggregating quota controlled by the same individual or entities, we determined that consolidation of surfclam quota holders was about twice that indicated by NMFS data. As shown in figure 6, no more than 59 and 42 individuals or entities controlled surfclam quota in 1990 and 2002, respectively. One entity controlled quota held in 12 different names, accounting for 27 percent of the 2002 total surfclam quota allocated.

Figure 6: Fewer Surfclam Quota Holders Than NMFS Data Indicate

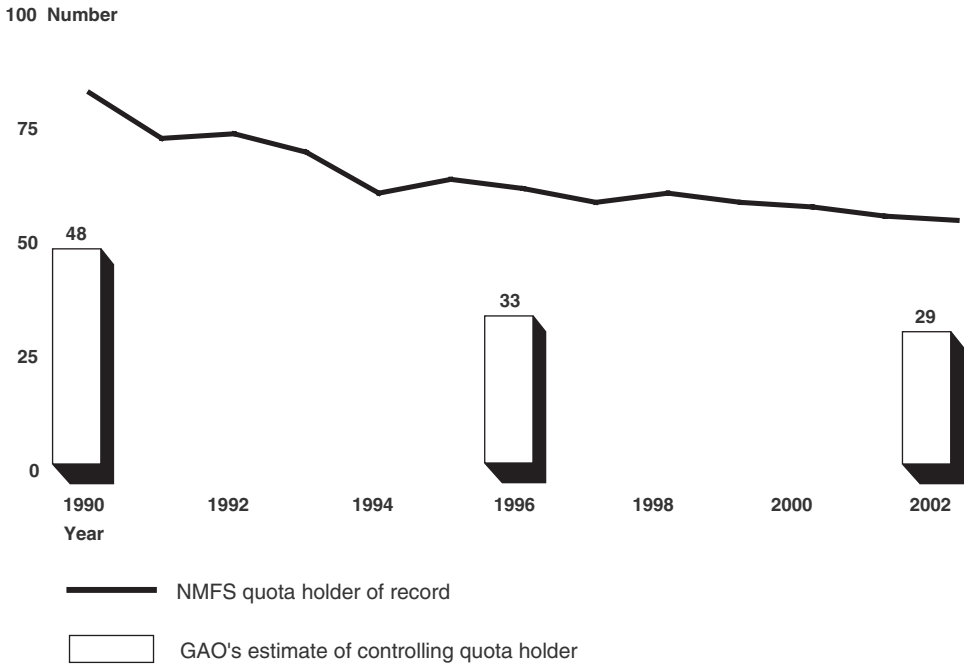


Source: GAO's analysis of NMFS data.

Note: Controlling quota holder of record refers to the entity that controls the use of the quota.

Similarly, consolidation of ocean quahog quota holders was about twice that indicated by NMFS data. As shown in figure 7, no more than 48 and 29 individuals or entities controlled ocean quahog quota in 1990 and 2002, respectively. One entity controlled quota held in 2 different names, representing 22 percent of the 2002 total ocean quahog quota allocated. (See app. III for information on consolidation in the surfclam and ocean quahog processing sector.)

Figure 7: Fewer Ocean Quahog Quota Holders Than NMFS Data Indicate



Source: GAO's analysis of NMFS data.

Note: Controlling quota holder refers to the entity that controls the use of the quota.

The consolidation of surfclam and ocean quahog quota may be even greater than our analysis indicates because we could not determine the individuals or entities for whom banks hold quota.[4] According to NMFS data, banks hold about 21 percent of the 2002 surfclam quota and 27 percent of the 2002 ocean quahog quota. However, we could not determine for whom the banks hold the quota and thus who controls the use of the quota. NMFS officials stated that, in theory, they had the ability to identify the individuals or entities for whom the banks hold quota. They explained, however, that such an analysis would be extremely difficult and labor-intensive because their record system is not designed for this purpose. As such, NMFS did not provide us with this information.

Program Rules May Affect the Extent of Consolidation and Information Collected

Each program's governing rules may have affected the extent of consolidation and the information NMFS collects and monitors on quota holders. To help meet the Magnuson-Stevens Act's prohibition of any individual or entity acquiring an excessive share of the fishery, the regional fishery management councils may establish limits on the amount of quota any individual or entity can hold. In the Alaskan halibut and sablefish program, for example, the council set specific limits on individual holdings by, among others, species and area.[5] Limits on individual halibut quota holdings, for example, range from 0.5 percent to 1.5 percent, depending on the fishing area, and sablefish holdings are limited to 1 percent. NMFS collects the information needed to monitor and ensure adherence to these requirements. NMFS requires halibut and sablefish transfer applicants to identify whether they are individuals or business entities. Business entities must also report their ownership interests at least annually. NMFS uses this information to ensure that all potential transfers and all current quota holdings comply with program rules. NMFS conducts computer checks on each transfer request to ensure that the transfer will not result in any entity, whether individually or collectively, exceeding the limits for quota holdings.

[4] To facilitate financial transactions such as the purchase of quota, a bank or other financial institution may serve as a transfer agent. In this situation, an individual sells or permanently transfers the quota to the financial institution, which, under separate agreement, transfers the quota to the "rightful" owner when the loan is fully paid or in installments as loan payments are made. In addition, these agreements establish to whom the bank leases the use of the quota each year.

[5] Program rules specify these limits as quota share use caps.

In contrast, the regional fishery councils for the surfclam/ocean quahog and wreckfish programs did not set specific and measurable limits on the individual accumulation of quota. Instead, the councils let federal antitrust laws determine whether any quota holdings are excessive. However, NMFS officials explained that the Department of Justice would most likely base a decision for taking an antitrust action on whether or not an individual or entity could fix the price of fish, rather than the amount of quota an individual or entity held. Further, NMFS officials said that they have never referred such a case to the Department of Justice.

The National Research Council pointed out in its 1999 study that "[a] lack of accumulation limits may unduly strengthen the market power of some quota holders and adversely affect wages and working conditions of labor in the fishing industry..."[6] Establishing limits, however, is not an easy task. Program objectives and the political, economic, and social characteristics of each fishery may influence each council's definition of what limits should be placed on an individual's or entity's quota holdings. In addition, fishery participants have different opinions on what these limits should be.

Because the surfclam/ocean quahog and wreckfish programs have no specific limits on the amount of quota any one individual or entity can hold, NMFS does not routinely gather and assess information on the ownership interest of each quota holder. For example, NMFS requires transfer applicants in the surfclam/ocean quahog program to submit identifying information, including the name of the quota holder, the name of the related vessel, and the contact information for the quota holder. However, NMFS does not verify this information or require transfer applicants or quota holders to submit any information detailing ownership interest or eligibility. Further, NMFS does not conduct any assessment of the amount of quota held or controlled by an individual or entity, and NMFS records are not kept in a manner that would readily allow such an assessment. As such, it is difficult to determine how much quota any one individual or entity controls. Moreover, lacking specific limits on quota holdings, we could not determine if any individual's or entity's holdings in either the surfclam/ocean quahog or the wreckfish programs would be viewed as excessive for the fishery, as prohibited by the Magnuson-Stevens Act.

[6] National Research Council, *Sharing the Fish: Toward a National Policy on Individual Fishing Quotas* (Washington, D.C.: National Academy Press, 1999), 209.

No Foreign-Owned Entities Currently Hold Quota

We found no evidence that foreign entities currently hold or control quota in the three IFQ programs. Furthermore, industry participants and NMFS officials said that they did not know of any cases in which a foreign entity has been able to acquire quota in either the halibut and sablefish or the wreckfish IFQ programs. However, some foreign-owned entities have held or controlled quota in the surfclam/ocean quahog program, as the following examples show.

- A U.S. member firm of a foreign business that provides financial services held about 6 percent of the surfclam quota in 2002 while acting as a transfer agent in the sale of the quota. According to a representative of the firm, only the buyer and the seller controlled the quota and the fishing of the quota. When the sale was finalized in the spring of 2002, the quota was released to the buyer. The firm no longer holds quota in the fishery.

- A foreign-owned processing company once controlled about 7 percent of the surfclam and ocean quahog quota through its U.S. subsidiary. Foreign control of the quota ended when a group of fishery participants bought out the foreign interest in the processing company.

- On the eve of the implementation of the IFQ program, a foreign-owned processing company sold its fishing vessels with qualifying catch histories to a U.S. citizen eligible to hold quota. This individual then received the quota for these vessels—nearly one-fourth of the quota allocated under the initial allocation.[7] However, control of the quota remained with the foreign-owned processing company until the processing company was sold to a U.S.-owned firm.

The implementing regulations of each IFQ program, in effect, generally preclude foreign entities from holding quota. The Alaskan halibut and sablefish program explicitly prohibits foreign citizens and businesses from holding quota and requires all quota transfer applicants to declare themselves to be U.S. citizens or U.S. entities. In contrast, the surfclam/ocean quahog and wreckfish programs allocate quota to qualified "persons," defined as U.S. citizens, and tie eligibility for holding quota to

[7] In the initial allocation, quota shares could only be distributed to owners of fishing vessels that landed surfclams or ocean quahogs during certain years. Once the initial allocation was made, quota shares could be transferred to entities whether they owned a fishing vessel or not.

the requirements for owning a U.S.-documented vessel engaged in the fisheries of the United States, that is, being a U.S. citizen or in the case of a corporate owner being 75 percent owned and controlled by U.S. citizens. However, these two programs do not require quota holders or transfer applicants to declare that they are U.S. citizens or U.S. entities. In addition, NMFS officials overseeing the wreckfish program told us that they consider the U.S. Coast Guard's approval of fishing vessel permits to be sufficient for determining eligibility to hold quota, because only vessels owned by U.S. citizens and U.S. companies are eligible for documentation as a U.S. fishing vessel. This procedure may be sufficient when a transfer applicant owns a permitted fishing vessel and applies for quota under the name used to document the vessel. However, an applicant who does not own such a vessel will never go through the Coast Guard verification process, because after the initial allocation, quota can be transferred to, and held by, nonvessel owners. Without information on the nationality or ownership of the quota holder, the potential exists for the transfer of surfclam, ocean quahog, and wreckfish quota to foreign entities.

Economic Effects on Halibut and Sablefish Processors Varied and Are Difficult to Quantify

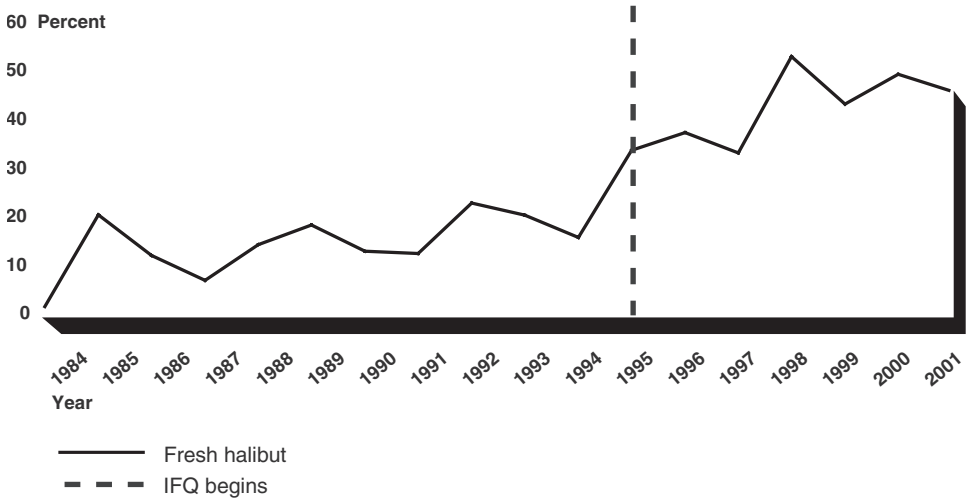
Some processors were adversely affected by the implementation of the halibut and sablefish IFQ program while others benefited. However, quantifying the economic effects of the IFQ program on processors is difficult because much of the data needed to measure changes in profitability are proprietary. Furthermore, other factors besides the IFQ program may lead to changes in processors' economic situation.

IFQ Program Resulted in Changes That Harmed Some Processors and Benefited Others

The IFQ program changed the environment in which traditional shore-based processors operated by extending the halibut and sablefish fishing seasons in some areas from several days to 8 months. Before the IFQ program was implemented, fishermen had just a few days to fish the total allowable catch for the year. Consequently, fishermen provided processors with large amounts of fish in a very short period of time, and processors organized their operations to process under these conditions. With the implementation of the IFQ program, the "race for fish" was eliminated because fishermen had more flexibility in choosing when to fish, and, as a result, processors received halibut and sablefish in smaller quantities over a longer period of time. This extended fishing season enabled more halibut to be processed and sold as a fresh product. Consequently, the fresh halibut market, as shown in figure 8, increased

from 15 percent of the total halibut market in 1994 to 46 percent in 2001. Sablefish was not similarly affected, remaining primarily a frozen product that is shipped to and sold in the Asian market.

Figure 8: Fresh Halibut as a Percentage of Total Halibut Production, 1984 through 2001



Source: GAO's analysis of Alaska Department of Fish and Game, Commercial Operators Annual Report data.

To take advantage of the fresh market and its potential for higher wholesale prices, processors need ready access to highways and air transportation. As such, processors with access to transportation systems may have been competitively advantaged while those who were in more remote locations may have been competitively disadvantaged because transportation costs were higher. For example, one processor estimated that the cost to transport fresh product from Kodiak Island, Alaska, to Seattle, Washington, was about 20 cents a pound higher than from Seward or Homer, Alaska, which has ready access to a major road system. (See app. IV for more information on Alaskan ports and major transportation networks.) Also, processors located near services, such as fuel, ice, stores, and entertainment, said that fishermen were more willing to deliver fish to them than if these services were not available.

The shift toward fresh product in the halibut market resulting from the IFQ program led to the emergence of the buyer-broker, a middleman who buys fish at a port and ships it fresh to market. Processors told us that the emergence of buyer-brokers, generally one-person operations with lower overhead costs, resulted in increased competition for fish and contributed to the increase in ex-vessel halibut prices (prices paid to fishermen for raw product). As shown in table 3, the percentage of halibut purchased by buyer-brokers increased from 3.7 in 1995 to 17.4 in 1999.

Table 3: Halibut Buyers, by Category, 1995 and 1999

	Percent of halibut purchased	
Category	**1995[a]**	**1999[b]**
Buyer-broker	3.7	17.4
Shore-based processors	84.9	73.8
Other	11.4	8.8
Total	100.0	100.0

[a]1995 was the earliest year for which NMFS data were available.

[b]1999 was the latest year we could analyze because, starting in 2000, buyers could identify themselves in multiple categories.

Source: NMFS.

Along with an increase in buyer-broker halibut purchases, there was a decrease in the number of individual shore-based plants that processed halibut and sablefish. While some plants stopped processing halibut and sablefish, others decided it was beneficial to start. Between 1995 and 2001, as shown in table 4, 68 plants stopped processing halibut and 56 started, resulting in a net decrease of 12 plants. Similarly, 54 plants stopped processing sablefish and 40 started, resulting in a net decline of 14 plants.

Table 4: Changes in the Number of Plants Processing Halibut and Sablefish, 1995 through 2001

Plant status	Halibut	Sablefish
Processing in 1995[a]	84	57
Stopped processing between 1995 and 2001	(68)	(54)
Started processing between 1995 and 2001	56	40
Processing in 2001	72	43

[a]1995 was the earliest year for which NMFS data were available.

Source: GAO's analysis of NMFS data.

Most of the shore-based plants that stopped or started processing were relatively small in comparison to other processors in that they purchased less than 100,000 pounds of halibut or sablefish annually. About 80 percent of the shore-based plants that stopped processing halibut and 75 percent of those that started purchased less than 100,000 pounds of fish. Similarly, about 81 percent of the plants that stopped processing sablefish and 70 percent of those that started were also small plants.

The IFQ program, however, did not necessarily cause a plant to stop processing halibut or sablefish. According to industry and government officials, some plants stopped processing halibut or sablefish because the plant was sold to another processor, the plant closed for personal reasons, plant management made poor business decisions that were unrelated to the IFQ program, or the plant burned down. For example:

- One processor with a freezing operation bought halibut and sablefish, but it primarily bought and sold salmon off trollers. When the supply of farmed salmon increased, contributing to price decreases, the owners decided to sell the plant.

- One company that owned several plants consolidated its halibut production under fewer plants.

- One plant went out of business because its owner paid too much for fish—10 to 15 cents a pound more than others—and then resold it for less than he paid.

- One plant burned down and the processor now uses the site to offload fish from vessels and then transport it to another site for processing.

In addition to changes in the number of plants processing halibut and sablefish, companies experienced some change in their market share.[8] Some processing companies lost market share, while others gained market share. Comparing market shares for 1995 and 2001, we found that of 28 companies that processed halibut in 1995, 15 experienced a decrease in market share and 13 experienced an increase. Similarly, of the 17 companies that processed sablefish in 1995, 7 experienced a decrease in market share while 10 experienced an increase.

State of Alaska Study Found Processors Hurt by IFQ Program, but Results Cannot Be Validated

To determine the IFQ program's effect on processors, Alaska's Department of Fish and Game commissioned a study to examine how halibut and sablefish processors were affected economically.[9] This was the only study we could find that attempted to quantify the economic effect the IFQ program had on halibut and sablefish processors. Using a sample of halibut and sablefish processors, the study assessed the change in processors' gross operating margins (revenues minus variable costs of processing). The study used the periods 1992-1993 for pre-IFQ margins and 1999-2000 for post-IFQ margins. According to the study's principal author, these years were chosen because they provided the longest possible length of time between the pre- and post-IFQ years for which data were available. The study estimated that halibut processors suffered a 56 percent, or $8.7 million, loss in gross operating margins because the IFQ program

[8] The market share of a company is the amount of fish purchased by that processing company as a percentage of total fish purchased by all processing companies. Processing companies, in this context, are those companies that own one or more of the individual shore-based plants that are processing halibut or sablefish.

[9] Matulich, Scott C., and Michael Clark, *Efficiency and Equity Choices in Fishery Rationalization Policy Design: An Examination of the North Pacific Halibut and Sablefish IFQ Policy Impacts on Processors*, Washington State University, January 2002.

caused halibut prices to increase and processors' market shares to change.[10]

While we could not validate or replicate the study's results because the proprietary data used in the study were confidential, we identified a number of problems with the study's methodology and scope that brings into question the reliability of the study's estimates. These problems include (1) the pre- and post-IFQ time periods do not provide an accurate measure of processors' economic welfare, (2) the study's results may not be representative of the industry as a whole, and (3) the document requesting economic information from processors may have biased participant responses. Further, the study's authors acknowledged that examining the pre- and post-IFQ impacts on the processing sector does not necessarily imply that the IFQ program alone caused these effects.

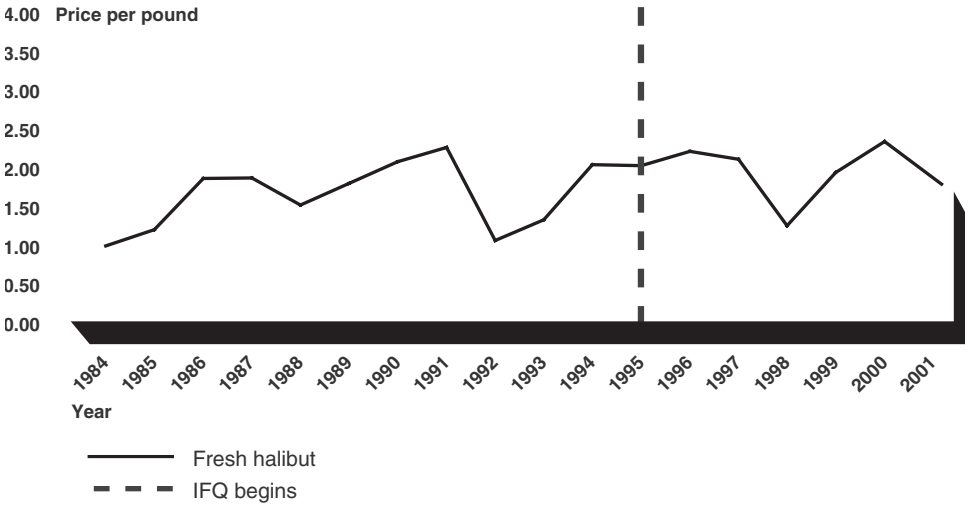
The pre- and post-IFQ time periods used to assess changes in processors' gross operating margins do not provide an accurate measure of changes in processors' economic welfare over time. First, the study's methodology makes the assumption that all costs, except labor and material inputs, remain fixed from 1992 through 2000. However, as pointed out in a critique of the study, assuming that all of these other costs remain the same would not be adequate for a period as short as a year, and is clearly unjustified for the 7 year period evaluated, because the longer the time period assessed, the more likely costs will change.[11]

Even if the study's assumption about costs were valid, the pre- and post-IFQ periods examined identify a greater negative change in gross operating margins than may be identified if different or longer periods were used. The changes in gross operating margins and the estimated economic effects are influenced by the fact that ex-vessel halibut prices dipped in the period 1992-1993 and were near their peak in 1999-2000 (see fig. 9). Real ex-vessel halibut prices in 1999-2000 were 44.5 percent higher than they were in 1992-1993. However, when different base years, such as 1991-1992, are compared with 1999-2000, the price increase is 22.7 percent.

[10] The study also estimated that gross operating margins for sablefish processors decreased by 75 percent, on average. However, we did not review the sablefish estimates because the methodology and adjustments used in the study were not clear to NMFS economists or us.

[11] Halvorsen, Robert, Comments on the Matulich and Clark Report, "Efficiency and Equity Choices in Fishery Rationalization Policy Design," University of Washington, April 2002.

Figure 9: Ex-Vessel Halibut Prices, 1984 through 2001



Source: GAO's analysis of Alaska Department of Fish and Game, Commercial Operators Annual Report data.

Note: Ex-vessel halibut prices were adjusted to 1996 dollars using the Bureau of Economic Analysis's Gross Domestic Product implicit price deflator.

The influence of the choice of base years and the corresponding ex-vessel prices also can be demonstrated by looking at the difference between the price a processor pays for raw fish and the price a processor receives for the processed fish—the processor's price margin. We calculated a simplified version of the price margin to demonstrate the sensitivity of the margin to the choice of the time period examined. As shown in table 5, comparing the study's pre- and post-IFQ price margins of 47.3 percent and 24.1 percent, respectively, shows a 23.2 percentage point decrease in margins. However, comparing the price margins for 1991-1992 with 1999-2000 shows a 13.0 percentage point decrease and comparing 1993-1994 with 1998-1999 shows a 1.1 percentage point increase.

Table 5: Price Margins in Selected Pre- and Post-IFQ Years

Pre-IFQ		Post-IFQ	
Years	**Price margin[a]**	**Years**	**Price margin[a]**
1991-1992	37.1	1998-1999	31.4
1992-1993[b]	47.3	1999-2000[b]	24.1
1993-1994	30.3	2000-2001	23.3

[a]Price margin is the percentage by which real wholesale price exceeds real ex-vessel price, excluding other variable costs. We did not incorporate recovery rates (the amount of raw product required to produce the finished product) or product mix in price margin calculations.

[b]Years used in the state of Alaska study.

Source: GAO's analysis of Alaska Department of Fish and Game, Commercial Operators Annual Report data.

Moreover, the study's results may not be representative of the industry as a whole. In total, 53 halibut processors and 46 sablefish processors, representing 88 percent of all halibut purchased and 96 percent of all sablefish purchased in the study years, were asked to participate in the survey. Responses were used from processors representing only 52 percent of all halibut and 54 percent of all sablefish purchased in the pre-IFQ years and 61 percent of all halibut and 59 percent of all sablefish purchased in the post-IFQ years. The study does not provide the actual number of participants whose data were used. Without knowing the number of participants or the characteristics of the respondents whose data were used, we cannot determine whether the study's estimates are representative of the industry as a whole.

Finally, the document requesting economic information from processors may have biased participant responses. In the preamble to the survey document, participants were told, among other things, that the purpose of the study was to test the theory that a harvester-only quota allocation transfers wealth from processors to harvesters and that the survey's results would be used to assist in designing future IFQ or other fishery rationalization programs. Such statements leave little doubt as to how responses could benefit or harm processors with economic interests in other fisheries. According to standard economic research practice, these types of statements are to be avoided when designing a survey as they can influence the results.

Factors Other Than the Implementation of the IFQ Program Could Affect Processors Economically

Factors other than the IFQ program's implementation could contribute to changes in the economic well-being of processors, such as changes in the market of other species processed and changes in the total allowable catch. According to NMFS officials and industry experts, most processors handled other species of fish in addition to halibut and sablefish, and the relative proportion and value of these species will affect the economic condition of processors. According to our analysis of data from the Alaska Commercial Operators Annual Report, halibut and sablefish were relatively small portions of the fish processed by shore-based plants that processed halibut and/or sablefish. Specifically, from 1994 to 2001, halibut production ranged, on average, from 2.0 percent to 4.1 percent of all fish processed at a plant, while average sablefish production ranged from 1.4 percent to 2.3 percent. In terms of value, as shown in table 6, halibut was 4.4 percent of total plant product value in 1994 and 7.9 percent in 2001. Sablefish was 4.7 percent of total plant product value in 1994 and 5.3 percent in 2001. (These ranges are averages for all plants processing halibut and/or sablefish and a particular plant may process a higher percentage of these fish.)

Table 6: Average Product Value Percentage, by Species, for Plants Processing Halibut and Sablefish, 1994 and 2001

	Percent of product value	
Species	**1994**	**2001**
Halibut	4.4	7.9
Sablefish	4.7	5.3
Cod	5.7	9.5
Pollock	12.6	27.6
Salmon	46.7	35.1
Other species[a]	25.9	14.6
Total	**100.0**	**100.0**

[a]Other species include crab, flounder, greenling, herring, lingcod, octopus, perch, prowfish, rockfish, shrimp, skate, sole, and turbot.

Source: GAO's analysis of Alaska Department of Fish and Game, Commercial Operators Annual Report data.

Another factor that affects processors economically is a change in the total allowable catch—limits on the amount of fish that can be caught annually. Such limits were used for halibut and sablefish long before the introduction of the IFQ program. Since the introduction of the IFQ program, the total

allowable catch for halibut has increased by 56.4 percent and the total allowable catch for sablefish has decreased by 36.2 percent. In its 1999 report, *Sharing the Fish*, the National Research Council said that changes in the total allowable catch may affect the supply of fish available to processors and therefore the price they pay.[12]

Conclusions

Individual fishing quotas are one of many tools available for conserving and managing fishery resources on a sustainable basis. Concerns have been raised about the possibility of quota holdings becoming concentrated among a few individuals or entities, which, among other things, might lead to control of fish prices and/or might adversely affect wages and working conditions in the fishing industry. Moreover, there is a need to ensure that program rules on foreign holdings and quota concentration levels are complied with. NMFS collects the necessary data on halibut and sablefish quota holders and periodically monitors it to provide these assurances. However, NMFS does not gather sufficient information or periodically analyze the data it does collect on surfclam/ocean quahog and wreckfish quota holders to determine (1) who actually controls the use of the quota and (2) whether the holder is a foreign individual or entity. Furthermore, while each fishery is different, the regional councils have not defined the amount of quota that constitutes an excessive share in the surfclam/ocean quahog and wreckfish IFQ programs. Different program objectives and the political, economic, and social characteristics of each fishery make it difficult to define excessive share. However, without the information on who controls quota and defined limits on quota accumulation, NMFS cannot determine whether eligibility requirements are being met or raise questions as to whether any quota holdings are excessive.

[12] *Sharing the Fish*, 403.

Recommendations for Executive Action

We recommend that the Secretary of Commerce take the following actions to improve the management of IFQ programs:

- To ensure that quota holders meet eligibility requirements, such as being a U.S. citizen or entity, we recommend that the Secretary of Commerce direct the Director of NMFS to collect and analyze information on quota holders, including who actually holds and controls the use of the quota and for whom financial institutions hold quota.

- To help prevent an individual or entity from acquiring an excessive share of the quota in future IFQ programs, we recommend that the Secretary of Commerce require regional fishery management councils to define what constitutes an excessive share for the fishery.

- To assist the regional fishery management councils in defining excessive share for a particular fishery, we recommend that the Secretary of Commerce direct the Director of NMFS to provide guidance to the councils on the factors to consider when determining what constitutes an excessive share in future IFQ programs.

Agency Comments and Our Evaluation

We provided a draft of this report to the Department of Commerce for review and comment. In the Secretary's response, the Department's National Oceanic and Atmospheric Administration provided written comments. NOAA's comments and our detailed responses are presented in appendix V of this report. NOAA generally agreed with the accuracy and conclusions of our report. NOAA agreed in principle with our recommendation to collect and analyze information on quota holders, disagreed with our recommendation to set limits, and agreed with our recommendation to provide guidance for setting limits on quota holdings in future programs. NOAA also provided technical comments that we incorporated in the report as appropriate.

NOAA agreed in principle with our first recommendation, to collect and analyze information on quota holders. While NOAA stated that it would place greater emphasis on collecting this information in its IFQ programs, it noted that its ability to collect economic information might be constrained by provisions of the Magnuson-Stevens Act that protect certain economic and proprietary data. NOAA believed that existing IFQ programs provide adequate information on quota holders, citing, for example, the Alaskan halibut and sablefish program, but stated it would be difficult to

collect information on who actually controlled the quota. However, our recommendation is aimed at requiring all IFQ programs to collect information similar to the information collected in the Alaskan halibut and sablefish program. We do not believe that information on the identity of quota holders and their ownership interests involves economic data protected by the Magnuson-Stevens Act, and, in fact, the Alaskan program requires that such information be provided. We also believe that without a requirement to collect similar information in all IFQ programs, it will be difficult, if not impossible, to monitor for compliance with eligibility requirements. Such information is especially important where banks hold quota on behalf of others, such as in the surfclam/ocean quahog program.

NOAA disagreed with our second recommendation, to set limits on the amount of quota an individual or entity may hold in future IFQ programs. NOAA acknowledged that avoiding excessive shares was a serious mandate and that fishery management councils should analyze the projected impacts of various levels of ownership on market performance, distributional issues, and equity considerations. NOAA stated, however, that councils should have flexibility to deal with preventing excessive shares according to the circumstances of each IFQ program and that limits on quota holdings might be warranted and necessary in certain cases, but not in all IFQ programs. NOAA cited the wreckfish program—a program where there has been little activity—as an example where limits should not be required. We agree with NOAA's position that circumstances vary from fishery to fishery and that councils need to analyze the various issues when determining how to prevent excessive shares. We continue to believe, however, that fishery management councils need to define what constitutes excessive share for future IFQ programs. The Magnuson-Stevens Act clearly mandates that new IFQ programs prevent any person from acquiring an excessive share of quota. Without a specific and measurable definition, it would be difficult for councils and NMFS to know whether any quota holding could be viewed as excessive. A similar conclusion was reached by the National Research Council, which recommended the creation of fishery-specific limits on the accumulation of quota share by individuals or firms in each new IFQ program. We have revised our recommendation to reflect the full range of economic, social, and political considerations that need to be taken into account and the need for guidance to assist councils in determining excessive share.

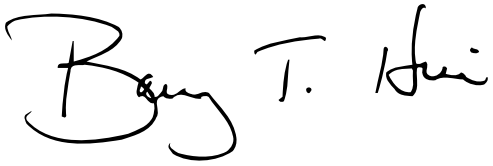
Finally, NOAA agreed with our third recommendation, to provide guidance to fishery management councils on factors to consider when setting limits on quota holdings in future IFQ programs. NOAA agreed that limits should

be based on factors that are appropriate to the fishery. These factors include market effects, distributional issues, and equity considerations. We have revised this recommendation, however, from "providing guidance for setting limits" to "providing guidance for defining what constitutes an excessive share" to take into account NOAA's comments and make it consistent with our second recommendation.

We conducted our review from April 2002 through October 2002 in accordance with generally accepted government auditing standards.

As agreed with your offices, unless you publicly announce the contents of this report earlier, we plan no further distribution until 30 days from the report date. At that time, we will send copies of this report to the Secretary of Commerce and the Director of the National Marine Fisheries Service. We will also provide copies to others upon request. In addition, the report will be available at no charge on the GAO Web site at http://www.gao.gov.

If you or your staff have any questions about this report, please call me at (202) 512-3841 or Keith Oleson at (415) 904-2218. Key contributors to this report are listed in appendix VI.



Barry T. Hill
Director, Natural Resources
and Environment

Scope and Methodology

To assist in deliberations on individual fishing quota (IFQ) programs, we reviewed the Alaskan halibut and sablefish, wreckfish, and surfclam/ocean quahog programs to determine (1) the extent of consolidation of quota holdings, (2) the extent of foreign holdings of quota, and (3) the economic effect of IFQ programs on seafood processors.

For all three objectives, we interviewed agency officials at the Department of Commerce's National Marine Fishery Service's (NMFS) headquarters office and the Northeast, Southeast, and Alaska regional offices; representatives of the Mid-Atlantic, South Atlantic, and North Pacific Fishery Management Councils; officials from the Alaska Department of Fish and Game; and fishery participants, researchers, and other industry experts. We visited Easton, Maryland; Cape May and Atlantic City, New Jersey; and Sitka, Petersburg, Juneau, Homer, Seward, and Kodiak, Alaska, where we interviewed quota holders, processors, and industry representatives and viewed processing plants. We selected these sites in accordance with suggestions from program managers and industry representatives to obtain IFQ program and geographic coverage.

In addition, to determine the extent of consolidation of quota holdings, for each IFQ program, we reviewed pertinent laws, rules, and regulations; the fishery management plan; processes and procedures; and relevant program documents that NMFS used to track quota holdings. We analyzed NMFS data on quota allocations and transfers, searched public corporate ownership and U.S. Coast Guard vessel documentation records, and interviewed NMFS officials, industry experts, and fishery participants to identify who controlled the use of the quota. As agreed with the requesters, we did not review the Maine mahogany quahogs as part of the surfclam/ocean quahog IFQ program because of the fishery's small size and unique characteristics.

To determine the extent of foreign holdings of quota, we reviewed federal laws, regulations, and IFQ program rules pertaining to foreign individuals holding quota in U.S. fisheries. We also reviewed the U.S. Coast Guard's requirements for documenting U.S. fishing vessels. We searched public records on corporate ownership for foreign interest in, and affiliation with, entities holding quota.

To determine the economic effect of IFQ programs on seafood processors, we limited our assessment to the economic effects on Alaskan halibut and sablefish processors because few of these processors were eligible to hold quota under the IFQ program. In contrast, processors in the surfclam/ocean

quahog and wreckfish programs were eligible to hold quota. We analyzed (1) NMFS data on registered buyers, landings by port, and total allowable catch; (2) Alaska Department of Fish and Game, Commercial Operators Annual Report data on fish production, ex-vessel prices, and processing at shore-based plants; and (3) public records on ownership of seafood processing companies. We interviewed fishery participants, including NMFS and regional management council officials, seafood processors, quota holders, researchers, and other experts on IFQ programs, to identify changes in the processing sector after the IFQ program's implementation. We searched the economic literature on the Alaskan halibut and sablefish IFQ program and reviewed the only study that quantified the economic effect of the IFQ program on processors, interviewed the study's principal author, and obtained the views of other economists who had reviewed the study. We could not verify the study's results because the data used in the study were proprietary.

National Marine Fisheries Service Data on Quota Holdings

NMFS data on quota holdings show that consolidation occurred in all three IFQ programs—Alaskan halibut and sablefish (see table 7), wreckfish (see table 8), and surfclam/ocean quahog (see table 9)—with much of the consolidation occurring in early program years.

Table 7: Alaskan Halibut and Sablefish Quota Holders, 1995 through 2001

	Year						
Item	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**
Number of halibut quota holders	4,828	4,227	3,913	3,795	3,677	3,610	3,532
Cumulative percent change		(12.4)	(19.0)	(21.4)	(23.8)	(25.2)	(26.8)
Number of sablefish quota holders	1,051	994	940	919	902	890	889
Cumulative percent change		(5.4)	(10.6)	(12.6)	(14.2)	(15.3)	(15.4)

Note: For 1995, NMFS reported the number of holders who received quota during the initial allocation. Thereafter, NMFS reported the number of holders as of December 31 of each year.

Source: GAO's analysis of NMFS data.

Table 8: Wreckfish Quota Holders, 1992 to 2002

	Year										
Item	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**
Number of wreckfish quota holders	49	35	26	25	25	25	25	25	25	25	25
Cumulative percent change		(28.6)	(46.9)	(49.0)	(49.0)	(49.0)	(49.0)	(49.0)	(49.0)	(49.0)	(49.0)

Source: GAO's analysis of NMFS data.

Table 9: Surfclam and Ocean Quahog Quota Holders, 1990 to 2002

	Year												
Item	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**
Number of surfclam quota holders	111	100	100	102	99	104	103	103	102	98	98	94	92
Cumulative percent change		(9.9)	(9.9)	(8.1)	(10.8)	(6.3)	(7.2)	(7.2)	(8.1)	(11.7)	(11.7)	(15.3)	(17.1)
Number of ocean quahog quota holders	82	72	73	70	59	63	61	58	60	58	57	55	54
Cumulative percent change		(12.2)	(11.0)	(14.6)	(28.0)	(23.2)	(25.6)	(29.3)	(26.8)	(29.3)	(30.5)	(32.9)	(34.1)

Note: Quota allocations held under the same name were aggregated to obtain a unique count of quota holders.

Source: GAO's analysis of NMFS data.

Surfclam/Ocean Quahog Processing Sector

Major holders of surfclam and ocean quahog quota include seafood processors that are vertically integrated--owning both processing plants and fishing vessels. Processing companies that owned fishing vessels were eligible to receive quota under the initial quota allocation and some have held quota from the beginning of the IFQ program. The IFQ program also allows processing companies to purchase and transfer surfclam/ocean quahog quota. According to NMFS data, three-fourths of the companies that processed surfclams and all of the companies that processed ocean quahogs in 2000 were quota holders. In addition, our analysis of NMFS quota allocation data for 2000 showed that seafood processors held about one-third of the total surfclam quota and almost one-half of the total ocean quahog quota.

Further, NMFS data indicate that fewer processors processed surfclams and ocean quahogs since the IFQ program was implemented and that several small- and mid-sized processors left the fishery. The number of surfclam processors decreased by more than 40 percent and the number of ocean quahog processors decreased by more than two-thirds from 1990 to 2000 (see table 10), with the same key companies processing both surfclams and ocean quahogs.[13] The top 4 processors handled about 74 percent of the surfclam catch in 1990 and 86 percent in 2000.

Table 10: Surfclam and Ocean Quahog Processors, 1990 and 2000

	Number of processors	
Processor type	**1990**	**2000**
Surfclams	15	8
Ocean quahogs	14	4

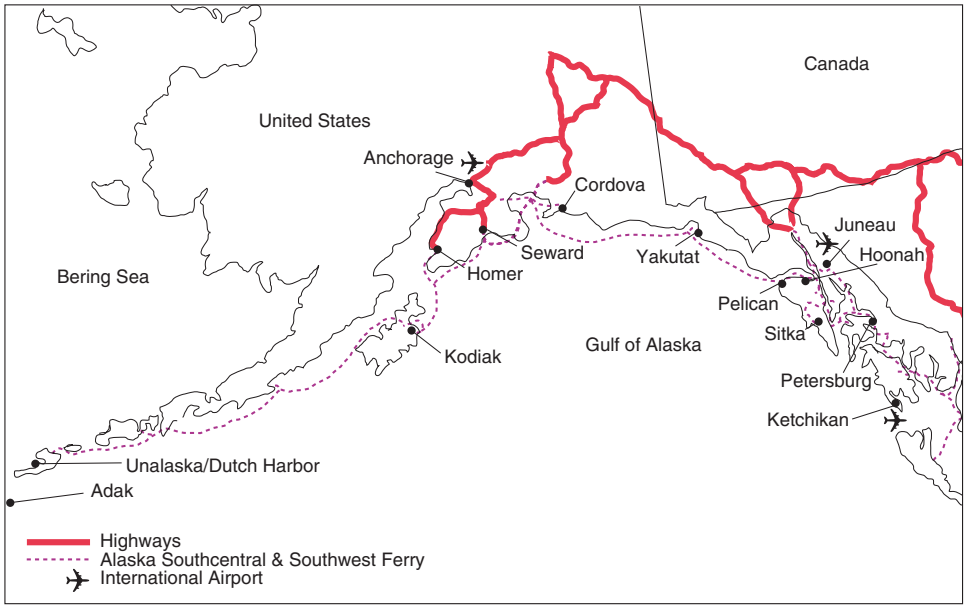
Source: GAO's analysis of NMFS data.

[13] NMFS was only able to provide processor data through the year 2000.

Alaskan Ports and Major Transportation Networks

Ready access to highways and air transportation makes it easier for processors and buyer-brokers to take advantage of the fresh fish market and its potential for higher wholesale prices because they can get their products to market more quickly and at a lower cost than processors or other buyers in more remote locations. Figure 10 shows the location of major Alaskan halibut and sablefish ports in relation to major transportation networks leading to the lower 48 states and international destinations.

Figure 10: Map of Alaskan Ports and Major Transportation Networks



Source: Prepared by GAO using data provided by the Alaska Department of Community and Economic Development.

The Alaskan port with the greatest amount of halibut landed changed between 1995 and 2001, as shown in table 11. NMFS and industry officials attribute much of the change in port rankings to the increase in the fresh halibut market and the need for ready access to transportation networks. While ports may have access to air and ferry service to the lower 48 states, the number of flights and ferries may be limited and subject to weather delays or cancellations.

Table 11: Largest Alaskan Halibut Ports, 1995 and 2001

Port	1995[a] ranking	Percent of 1995 landings	2001 ranking	Percent of 2001 landings
Kodiak[b]	1	23.0	2	15.3
Homer	2	9.7	1	24.0
Sitka[b]	3	8.8	5	4.6
Unalaska/Dutch Harbor[b]	4	8.6	3	11.1
Seward	5	8.5	4	11.0
Petersburg[b]	6	7.2	7	4.0
Hoonah[b]	7	2.8	9	2.5
Cordova[b]	8	2.8	10	2.5
Pelican[b]	9	2.7	19	0.4
Yakutat[b]	10	1.9	12	1.9

Note: Juneau ranked number 13 with 1.4 percent of the landings in 1995 and number 6 with 4.2 percent in 2001. Adak had no reported landings in 1995 and ranked number 8 with 3.8 percent of the landings in 2001.

[a]1995 was the earliest year for which NMFS data were available.

[b]Ports with limited access to major transportation networks.

Source: GAO's analysis of NMFS data.

While sablefish remained primarily a frozen product, sablefish ports experienced a similar change in rankings (see table 12), because, according to processors, many fishermen sell their catch of both halibut and sablefish to the processor who pays the most for the halibut.

Table 12: Largest Alaskan Sablefish Ports, 1995 and 2001

Port	1995[a] ranking	Percent of 1995 landings	2001 ranking	Percent of 2001 landings
Seward	1	22.5	1	19.7
Sitka[b]	2	14.6	3	12.6
Unalaska/Dutch Harbor[b]	3	14.3	2	15.0
Kodiak[b]	4	11.4	4	9.9
Yakutat[b]	5	5.8	10	3.6
Pelican[b]	6	5.2	15	1.0
Petersburg[b]	7	4.2	9	4.0
Cordova[b]	8	3.7	6	5.1
Homer	9	3.1	5	7.0
Hoonah[b]	10	2.0	8	4.3

Note: Juneau ranked number 20 with 0.4 percent of the landings in 1995 and number 7 with 5.0 percent in 2001.

[a]1995 was the earliest year for which NMFS data were available.

[b]Ports with limited access to major transportation networks.

Source: GAO's analysis of NMFS data.

Comments from the Department of Commerce

Note: GAO comments supplementing those in the report text appear at the end of this appendix.

THE SECRETARY OF COMMERCE
Washington, D.C. 20230

NOV 21 2002

Mr. Barry T. Hill
Director, Natural Resources
and Environment
United States General Accounting Office
Washington, D.C. 20548

Dear Mr. Hill:

Thank you for the opportunity to review and comment on the General Accounting Office's draft report entitled, "Individual Fishing Quotas: Better Information Could Improve Program Management." Enclosed is a copy of the Department of Commerce's comments on the draft report.

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

Sincerely,

Donald L. Evans

Enclosure

NOAA Fisheries Comments on the Draft GAO Report on IFQs

"Individual Fishing Quotas: Better Information Could Improve Program Management"
(November 2002)
GAO-03-159

Recommended Changes for Factual Information

See comment 1.

o In the draft letter to Senator John Kerry, GAO uses domestic commercial catch data from 1990 to 2000, stating that catch declined by 7 percent (page 1). Data for 2001 (Fisheries of the United States, 2001) shows an increase in harvests from 2000 (4.114 million tons) to 2001 (4.305 metric tons), or an increase of 4.6 percent. Thus, from 1990 to 2001, domestic harvests fluctuated from year to year, and the 2001 catch level is about the same as the 1990 catch level. The point is that the decade of the 1990s did not witness any steady decline.

See comment 2.

o Page 19, last paragraph, line 2: The text indicates that the halibut and sablefish fisheries were only a few days long prior to IFQs. While this is true for the halibut fishery, the sablefish fishery lasted longer. In 1994, sablefish fishing was allowed for twelve days in most of the Gulf of Alaska; it lasted from January 1 to August 8 in the Bering Sea and all year in the Aleutian Islands area.

See comment 3.

o Page 20, first paragraph, line 8: The sentence which reads, "For example, one processor estimated that the costs to transport fish product from Kodiak - located on an island with limited air service - to Seattle were about 20 cents a pound higher than from Seward or Homer - that had ready access to a major road system and a major airport." This is not correct, since the Kodiak airport is at least on a par with the airport in Homer and has a greater capacity than the airport in Seward. The cost differential may be due to the fact that Homer and Seward are on a road system. The word "costs" should be "cost" and the verb changed from "were" to "was."

See comment 4.

o Page 36, Figure 10: The map shows airports at Anchorage and Juneau. However, there are also airports at Petersburg, Hookah, Sitka, Yakutat, Cordova, Seward, Homer, Kodiak, Unalaska/Dutch Harbor, and Adak. Not all of these are major airports but the airports at Petersburg, Sitka, Yakutat, Cordova, Kodiak, Unalaska/Dutch Harbor, and Adak can all accommodate regularly scheduled jet aircraft.

General Comments

See comment 5.

NOAA Fisheries found the draft GAO report on IFQs to be a well researched and clearly drafted study that addresses some of the more sensitive issues associated with IFQ programs. We were particularly impressed by the careful research on trends in the number of quota holders in the three IFQ programs, and we acknowledge that GAO has, through multiple interviews with IFQ participants, uncovered information on consolidation that is not revealed by NOAA Fisheries data, especially with respect to the surf clam/ocean quahog IFQ. However, NOAA also notes that the GAO report's treatment of developments in the wreckfish IFQ would have benefitted from consulting:

John R. Gauvin, John M. Ward, and Edward A. Burgess, "Description and Evaluation of the Wreckfish (Polyprion Americanus) Fishery Under Individual Transferable Quotas," Marine Resource Economics, (1994) 9(2), pp. 99-118.

NOAA found that the tables on trends in the number of quota holders in the three IFQ programs on page 34 of Appendix III were particularly useful.

The section of the GAO report dealing with foreign ownership was also well done, and it shows, in our judgment, that there is little or no basis for thinking that foreign ownership is an actual or potential problem in U.S. IFQ programs.

Finally, the discussion of the economic effects of IFQs on processors was limited, as the GAO report recognizes, because there is only one report that addresses economic effects on processors in the halibut/sablefish IFQ. There are many still unanswered questions about that study, which was commissioned by the State of Alaska. We concur with and appreciate the analysis on pages 23-29 of that study: "Efficiency and Equity Choices in Fishery Rationalization Policy Design: An Examination of the North Pacific Halibut and Sablefish IFQ Policy Impacts on Processors."

In conclusion, NOAA accepts the basic conclusion of the report, i.e., that more and better information on quota holdings, foreign ownership, and economic impacts on processors would improve IFQ programs.

Specific Comments

See comment 6.

o An important question is "control" over use of quotas in IFQ programs. The GAO report suggests in several places that an entity other than a fishing company (e.g. a bank or holding company) that holds quota automatically controls its use. NOAA questions that this is always the case. A bank may hold quota as collateral without controlling its use. Our understanding is that a bank will normally hold quota shares as collateral to ensure that the fishermen pays his debt to the bank. The bank cannot utilize, lease, or sell quota shares unless the agreement between parties so specifies, and the federal regulations so authorize.

See comment 7.

o Page 6, footnote 2: This footnote is technically correct, but the authors may want to note that the term "bycatch" has an unusual definition in the Magnuson-Stevens Act. The term "bycatch" means fish that are harvested in a fishery, but that are not sold or kept for personal use, and includes economic discards and regulatory discards. Such term does not include fish released alive under a recreational catch and release fishery management program. Therefore, in the Magnuson-Stevens Act, "bycatch" means discards.

See comment 8.

o Page 12, Table 1: The table is only meant to provide information on selected IFQ program objectives. GAO should be aware that ten program objectives were identified by the halibut/sablefish program, including (1) allocation conflicts, (2) gear conflicts, (3) deadloss from lost gear, (4) bycatch loss, (5) discard mortality, (6) excess harvesting capacity, (7) product wholesomeness, (8) safety, (9) economic stability, and (10) rural community and small-boat fleet.

See comment 9.

o Page 13, first three paragraphs: The first sentence in the first paragraph is repeated verbatim in the first sentence of the second paragraph. The second sentence in the first paragraph is repeated almost verbatim as the first sentence of the third paragraph.

See comment 10.

o Page 16, first complete paragraph, lines 9-11: (A) The limits on quota share use and block holdings, and the limits on the amounts of quota share that may be fished from a vessel in a year, are in Code of Federal Regulations (CFR) 679.42(e) , (f), (g), and (h). The limits are specified as limits on quota share "use" rather than as limits on quota share "holdings" (as described in the report). Limits are imposed on "use" rather than on "holdings" to avoid an implication that quota share is more than a privilege. (B) The limits cited in the text are an example of the types of limits that can be imposed; however, GAO should be aware that there are additional limits imposed by the halibut/sablefish program. Regulations at CFR §679.42(h) impose limits on the amount of quota share that may be fished from a single vessel during a year. No vessel may be used to harvest more than one-half of 1 percent of the combined halibut catch limits in all areas, or more than 1 percent of the catch limit in area 2C (Southeast Alaska). No vessel may be used to harvest more than 1 percent of the sablefish fixed gear Total Allowable Catch (TAC) from the Gulf of Alaska and Bering Sea/Aleutian Islands areas, and no vessel may be used to harvest more than 1 percent of the fixed gear TAC east of 140 degrees W (the eastern Gulf of Alaska). Moreover, some quota share is aggregated into indivisible blocks. Regulations at CFR §679.42(g) impose limits on the numbers of these blocks that may be held.

See comment 11.

o Page 21, Tables 3 and 4: The tables make comparisons between the years 1995 and 1999. The year 1995 was the first year in which the IFQ program was operational. If the purpose is to compare the fishery and the buying and processing sector before and after IFQs were introduced, it may be appropriate to change the first year to 1994.

o Page 22, last paragraph: The year 1995 was used as the first year of comparison in this paragraph. The year 1994 may be more appropriate for the reasons explained in the previous comment.

o Page 37, Table 11: This table compares Alaska halibut port rankings between 1995 and 2001. The year 1995 was the first year of the IFQ program. To contrast the situation before the program and after, it might be more appropriate to use the year 1994 as the base.

NOAA Response to GAO Recommendations

The GAO states, "We recommend that the Assistant Administrator for Fisheries should take the following actions to improve the management of IFQ program:"

Recommendation 1: "To ensure that quota holders meet eligibility requirements, such as being a U.S. citizen or entity, we recommend that the Secretary of Commerce direct the Director of NMFS to collect and analyze information on quota holders, including who actually holds and controls the use of the quota and for whom financial institutions hold quota."

NOAA Response: NOAA Fisheries agrees in principle with this recommendation, but notes that our ability to collect some of this information may be constrained by Magnuson-Stevens Act provisions that protect: (1) processors' "economic data" (section 303(b)(7)) and (2) "proprietary or confidential commercial or financial information regarding fishing operations or fish processing operations" (section 402(a). Unfortunately, voluntary economic data collection has not been effective in some regions. This makes it difficult or impossible to effectively monitor the impact of some IFQ programs on fishing operations and processors. NOAA Fisheries notes that the halibut and sablefish IFQ program already effectively complies with this recommendation and that the Alaska crab rationalization plan that the North Pacific Council recommended in June 2002 to Congress includes provisions that would allow mandatory collection of economic data.

NOAA believes that existing programs provide adequate information on the holders of quotas in IFQ programs. In the halibut and sablefish IFQ program NOAA Fisheries issues quota shares initially and approves all transfers of quota shares and IFQs. Therefore, NOAA Fisheries already "knows" who holds all such quota shares and IFQs. With respect to controlling the use of quota and determining for whom financial institutions hold quota, we are dealing with a more difficult issue. In the halibut/sablefish IFQ program, there is voluntary reporting of asserted security interests against quota shares. NOAA has made public periodic analyses of the demographics of quota share ownership, including disclosed financial interests. However, if analysis of other types of "control" is intended, the nature of such "control" must be specified before NOAA Fisheries can design an appropriate data collection system to capture such information.

NOAA Fisheries will place greater emphasis on these questions in its IFQ information collection programs, bearing in mind that specific efforts may be constrained by sections 303(b)(7) and 402(a) of the Magnuson-Stevens Act, and by future actions of Congress.

Recommendation 2: "To help prevent an individual or entity from acquiring an excessive share of the quota in future IFQ programs, we recommend that the Secretary of Commerce require regional fishery management councils to set limits on the amount of quota an individual or entity may hold."

NOAA Response: NOAA does not agree that limits, or caps, on the amount of quota that an individual or single entity may hold should be required in all IFQ programs, but we do believe that councils should study this issue and seriously analyze the projected impacts of various levels of ownership on market performance, distributional issues and equity considerations.

The Magnuson-Stevens Act requires that:

(1) "no particular individual, corporation, or other entity acquires an excessive share" of any catch quota (national standard 4 in section 301(a)), and

(2) a new IFQ program "prevents any person from acquiring an excessive share of the individual fishing quotas issued" (section 303(d)(5)(C)).

To meet these mandates, NOAA agrees that caps on the individual ownership of quota shares may be warranted and necessary in certain cases, such as the halibut/sablefish IFQ program, but not in all such programs. The halibut/sablefish IFQ program (1) includes specific limits on the amounts that an individual or individual entity may use, (2) requires that some quota be aggregated in indivisible blocks, and (3) imposes limits on the number of blocks that may be held by an individual or individual entity. Finally, the program imposes limits on the percentage of TAC that may be fished from a single vessel during a year.

On the other hand, some IFQ programs do not include such limits. The wreckfish IFQ has provisions for monitoring ownership shares but does not mandate caps. The wreckfish program has fewer than 10 quota holders, of which only two vessels actually participated during the most recent season. Thus, individual ownership caps do not serve any meaningful purpose in this program.

NOAA Fisheries agrees that avoiding excessive shares is a serious mandate, and recommends that councils who want to develop a new IFQ program should conduct an informed analysis of the implications of ownership concentration on (1) markets (prices), (2) distribution of shares among industry sectors, and (3) equity, in particular the future participation of small-scale fishermen. These issues will be discussed in greater detail in the technical guidance that is the subject of the next GAO recommendation.

NOAA believes in dealing with the "excessive quota shares" issue flexibly, depending on the circumstances of each IFQ program, within the constraints of sections 301(a) and 303(d)(5)(C) of the Magnuson-Stevens Act. The economic conditions of different federally managed fisheries vary widely, and, therefore, limits on individual quota holdings should be tailored to the specific fisheries based on recommendations of the relevant Regional Fishery Management Council. As a very general rule, IFQ programs in fisheries in which (a) there is a substantial number of participants and (b) the council has a strong desire to maintain as much as possible the participation of small-scale fishermen may require caps on individual shares.

Recommendation 3: "To assist the regional fishery management councils in setting limits on the amount of quota an individual or entity may hold, we recommend that the Secretary of Commerce direct the Director of NMFS to provide guidance to the councils on the factors to consider when setting limits in future IFQ programs."

NOAA Response: NOAA agrees with this recommendation. Guidance on the "factors" that the councils should take into account when setting limits or caps on individual ownership of quota in IFQ programs could be included in guidance that NOAA will provide to the councils on a broad range of IFQ issues. As previously noted, while NOAA does not believe that such caps should be required in each IFQ program, we do agree that, if a council chooses to develop such caps, the limits should be based on factors that are appropriate to the fishery. The factors that councils should take into account when deciding on ownership caps may be placed in three categories: (1) market effects, (2) distributional issues, and (3) equity considerations. NOAA will conduct research to provide specific guidance on these factors, and the final product will be technical guidance on fishery management plans that include IFQs.

GAO Comments

The following are GAO's comments on NOAA's written comments provided by the Secretary of Commerce's letter dated November 21, 2002.

1. We revised the text to reflect that the domestic commercial fish catch remained relatively the same as in 2001 as it was in 1990.

2. We revised the text to reflect that the IFQ program extended the halibut and sablefish fishing seasons in some areas.

3. We changed the text to make it clear that the cost differential was due to the fact that Homer and Seward had access to a road system.

4. We revised the legend for figure 10 to show that the airports are international airports.

5. NOAA commented that the report's treatment of wreckfish would have benefited from consulting a 1994 wreckfish article. We reviewed the article and determined that generally only the article's discussion of consolidation and control of quota holdings was pertinent to our objectives. The article explained that the wreckfish program did not set limits on quota holdings, in part, because it would be difficult to determine who actually controlled the use of the quota. We believe that our report had already adequately addressed this issue. By not defining limits, the information needed to determine who controls the use of quota is not collected and monitored. For this reason, we did not revise our report.

6. Our point was that banks hold quota for someone else who controls its use. As such, consolidation may be greater than NMFS data indicate. Nonetheless, we revised the text to make it clearer that financial institutions held, but did not control the use of quota in IFQ programs.

7. Although our definition was technically correct, we revised footnote 2 by providing the definition of bycatch under the Magnuson-Stevens Act.

8. We revised the title of table 1 to make it clear that the table listed examples of objectives for the IFQ programs we reviewed.

9. We revised the text to remove some of the redundancy.

10. We added a footnote to explain that the rules of the Alaskan halibut and sablefish program specify limits on quota holdings as quota share use caps.

11. We added a note to tables 3, 4, and 11 to indicate that 1995 was the earliest year for which NMFS data were available.

GAO Contact and Staff Acknowledgments

GAO Contact

Keith W. Oleson, (415) 904-2218

Acknowledgments

In addition to the name above, Charles W. Bausell, Jr., Susan J. Malone, Mark R. Metcalfe, Rebecca A. Sandulli, and Tama R. Weinberg made key contributions to this report.

GAO's Mission

The General Accounting Office, the investigative arm of Congress, exists to support Congress in meeting its constitutional responsibilities and to help improve the performance and accountability of the federal government for the American people. GAO examines the use of public funds; evaluates federal programs and policies; and provides analyses, recommendations, and other assistance to help Congress make informed oversight, policy, and funding decisions. GAO's commitment to good government is reflected in its core values of accountability, integrity, and reliability.

Obtaining Copies of GAO Reports and Testimony

The fastest and easiest way to obtain copies of GAO documents at no cost is through the Internet. GAO's Web site (www.gao.gov) contains abstracts and full-text files of current reports and testimony and an expanding archive of older products. The Web site features a search engine to help you locate documents using key words and phrases. You can print these documents in their entirety, including charts and other graphics.

Each day, GAO issues a list of newly released reports, testimony, and correspondence. GAO posts this list, known as "Today's Reports," on its Web site daily. The list contains links to the full-text document files. To have GAO e-mail this list to you every afternoon, go to www.gao.gov and select "Subscribe to GAO Mailing Lists" under "Order GAO Products" heading.

Order by Mail or Phone

The first copy of each printed report is free. Additional copies are $2 each. A check or money order should be made out to the Superintendent of Documents. GAO also accepts VISA and Mastercard. Orders for 100 or more copies mailed to a single address are discounted 25 percent. Orders should be sent to:

U.S. General Accounting Office
441 G Street NW, Room LM
Washington, D.C. 20548

To order by Phone: Voice: (202) 512-6000
TDD: (202) 512-2537
Fax: (202) 512-6061

To Report Fraud, Waste, and Abuse in Federal Programs

Contact:

Web site: www.gao.gov/fraudnet/fraudnet.htm
E-mail: fraudnet@gao.gov
Automated answering system: (800) 424-5454 or (202) 512-7470

Public Affairs

Jeff Nelligan, Managing Director, NelliganJ@gao.gov (202) 512-4800
U.S. General Accounting Office, 441 G Street NW, Room 7149
Washington, D.C. 20548

United States
General Accounting Office
Washington, D.C. 20548-0001

Official Business
Penalty for Private Use $300

Address Service Requested

Presorted Standard
Postage & Fees Paid
GAO
Permit No. GI00