EXECUTIVE SUMMARY

CHANGES UNDER ALASKA'S SABLEFISH IFQ PROGRAM, 1995-1997

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Introduction

In 1995, the National Marine Fisheries Service-Alaska Region (NMFS-AK) implemented a new Individual Fishing Quota (IFQ) program for management of the "fixed gear" sablefish and halibut fisheries off Alaska. These programs were developed by the North Pacific Fishery Management Council (NPFMC) and approved by the U.S. Secretary of Commerce.

The purpose of this study is to document and analyze changes that have occurred during the first three years of the sablefish IFQ program. The report is restricted mainly to topics that can be addressed using National Marine Fisheries Service - Restricted Access Management Division's (NMFS-RAM) administrative and catch data. Some ancillary data are also used.

The Sablefish IFQ Program Basics

Quota shares (QS) are the basic use-privileges under the IFQ program. QS were issued to qualified applicants who owned or leased a vessel that made legal fixed gear landings of sablefish at any time during 1988, 1989, and 1990. Regular QS units were equal to a person's qualifying pounds for an area. Qualifying pounds for an area were the sum of pounds landed from the person's best five years of landings over the six-year period from 1985 to 1990.

The QS that were issued are specific to one of six sablefish management areas and one of four vessel categories. The IFQ management areas are: Southeast, West Yakutat, Central Gulf, Western Gulf, Bering Sea, and Aleutian Islands. The three vessel categories include a harvester-processor vessel category (also termed "freezer" herein) and two catcher vessel categories. The two catcher vessel categories are "60 feet or less," and "greater than 60 feet."

In the Bering Sea and Aleutian Islands areas 20% of the total allowable catch (TACs) was allocated to Community Development Quotas (CDQs) for communities in western Alaska. The Council compensated QS holders in these CDQ areas for the reductions in TAC due to CDQs by issuing them "CDQ compensation QS" in non-CDQ areas Southeast, West Yakutat, Central Gulf, and Western Gulf.

A person's annual IFQ for an area is determined by multiplying their fraction of the total QS units in the area's QS pool by the total allowable catch (TAC) that was allocated to

the area's IFQ fishery. Adjustments for the person's underages and/or overages from the previous year are then made to determine the person's final IFQ for the year.

The QS that were issued are permanently transferable and leasable albeit with many restrictions that are discussed in the report. The NPFMC wanted to achieve some of the benefits associated with IFQ management but they were concerned that the program not lead to radical changes that would hurt communities dependent upon the fishery. As a result, the NPFMC adopted several complex rules in an effort to constrain the changes that could occur under the program. Many of these rules are discussed and explored in the report.

Topics Covered In This Report

The topics covered in the report include basic data on the extent of consolidation of QS holdings since the beginning of the program, the volume of permanent QS transfers and the price of QS units, and the volume of seasonal QS lease transfers and the price of IFQ leases. The report also includes detailed summary data on permanent transfers, including the amount of QS transferred as sales, gift and trades; the relationships between the transferors and transfer recipients; and the finance methods used in sales transfers.

The IFQ program contains several special features which the Council added to address specific objectives. The report provides data which highlight the effects of these features to date.

Topics examined include the amount and percentage of "blocked" QS as opposed to "unblocked" QS, the distribution of Community Development Quota (CDQ) compensation QS, the use of "swaps" of certain CDQ compensation QS across catcher vessel categories, and the use of a provision allowing for the "sweep-up" of small QS blocks to create more fishable blocks.

A concern of some persons is that the IFQ program might result in a radical change in the geographic distribution of QS holdings. The report provides an extensive examination of changes in the geographic distribution of QS holdings during the first three years of the program. Changes in the distribution of QS holdings are examined by state of residence, by Alaska census area, and by special resident-type designators defined for the study that classify communities as "local" or "nonlocal" to the IFQ management area and as "rural" or "urban."

Other distributional questions are also examined. These include changes in the distribution of QS by person-type, changes in the distribution of QS between initial QS recipients and new entrants, and changes in sablefish harvest and delivery patterns during the first three years of the program. The report contains information on the consolidation of IFQ permit holders onto single vessel operations and the underharvest of IFQ during the 1995 to 1997 seasons.

The report contains a total of sixteen chapters. The first two chapters provide an introduction and background information on the fishery and the new IFQ program. The last fourteen chapters contain the results of the study. The following sections of this executive summary provide brief synopses and key results of the topics covered in each of these chapters.

Chapter 3 Consolidation of QS Holdings, 1995-1997

The Council's IFQ program allows QS to be permanently transferred. The Council intended some consolidation of QS to occur to spread out the fishing season. The Council hoped that a longer and slower-paced fishery would improve ex-vessel prices, provide for greater safety and less waste and enhance the profitability of individual fishing operations. However, the Council built many features into the program to constrain the extent and the nature of QS consolidation.

Chapter 3 provides a broad overview of the extent to which QS holdings were consolidated and the numbers of QS holders were reduced during the first three years of the program. Data are presented comparing distributions at initial allocation and at year-end 1997.

- The amount of QS declined slightly due to revocations in all areas except the Aleutian Islands during the first three years of the sablefish IFQ program.
- The number of QS holders declined in all management areas over the three year period due to transfers and consolidation of QS holdings. The declines ranged from 8.1% in the Aleutian Islands to 22.6% in the West Yakutat area. The declines were largest in the four non-CDQ areas.
- Average and median QS holdings increased in all areas as the number of QS holders declined. The increases in the average number of QS units ranged from 8.9% for the Aleutian Islands to 29.1% for the West Yakutat area.
- The number of QS holders declined over the three year period in the two catcher vessel categories in all areas. The freezer vessel categories in the West Yakutat, Bering Sea, and Aleutian Islands areas were the only instances where the number of QS holders stayed the same or increased even slightly.

Chapter 4 QS Transfers and QS Prices

Consolidation of QS and changes in the distribution of QS can occur through permanent transfers of QS. Chapter 4 provides a broad overview of the extent of permanent transfers of QS in the first three years of the program. Any transaction resulting in a permanent change of ownership is treated as a transfer in the chapter. These include regular transfers, sweep-ups of small QS blocks, and administrative transfers due to court action or other causes.

Data are presented on QS transfers, the amount of QS transferred, and the number of unique transferors over the first three years of the program. QS transfer rates and QS holder transfer rates are defined and calculated.

Chapter 4 provides estimates of QS prices over the first three years of the program based upon analyses of priced sales transactions. Estimates are provided for QS sold with and without the associated current year IFQ. Estimates from a statistical model are used to project a more detailed breakdown of 1995 - 1997 QS prices where existing data are too sparse.

- The average QS transfer rates over the three years from 1995 to 1997 ranged from 7.0% in the Bering Sea area to 9.9% in the Aleutian Islands area.
- QS holder transfer rates were higher than QS transfer rates in non-CDQ areas. The average QS holder transfer rates over the three years in the non-CDQ areas ranged from 14.9% in the Western Gulf area to 20.1% in the Southeast area.
- QS holder transfer rates in the CDQ areas over the three year period were 7.7% in the Bering Sea area and 10.6% in the Aleutian Islands area.
- In the Southeast, West Yakutat, and Central Gulf areas, the average price per QS (expressed in dollars per pound of IFQ) increased each year from 1995 to 1997.
- Estimates based upon a statistical model of 1995 to 1997 QS prices in the Southeast, West Yakutat, Central Gulf and Western Gulf areas suggested that the price of a sablefish QS unit varied positively with the amount of QS being transferred.
- Estimates from the statistical model also suggested that prices in 1995 and 1996 were highest in the Southeast area and decreased in each management area from east to west. The patterns were more complex in 1997.

• The price of any given type of QS unit, as estimated from the statistical model, tended to rise from quarter to quarter from 1995 to 1997. Quarterly price decreases tended to come in the second half of the year.

Chapter 5 Sablefish QS Leases

The Council's IFQ program provides for restricted leasing of QS on a seasonal basis. Holders of freezer vessel QS can lease all of the IFQ associated with their QS. During the first three years of the IFQ program, holders of catcher vessel QS could lease up to 10% of their QS. However, the regulations allowing for leasing of catcher vessel QS expired in 1998 and have not been renewed.

Chapter 5 examines the extent to which the leasing provisions were used during the first three years of the sablefish program. Data are presented on the amount and percentage of QS leased and the number and percentage of QS holders who leased out QS. QS and QS holder lease rates are defined and calculated.

For some leases, price information was available. These data are used to provide statistics on IFQ lease prices during the first three years of the program.

- QS leases occurred in all sablefish areas. Average QS lease rates ranged from 1.1% in the West Yakutat area to 16.9% in the Aleutian Islands area over the 1995-1997 period. QS holder lease rates had a smaller range, from 2.1% in the Southeast and Central Gulf areas to 5.5% in the Aleutian Islands area.
- Leasing of sablefish QS was largely confined to freezer processor vessels. QS lease rates for freezer processor QS ranged from 11.0% in the Central Gulf to 30.7% in the Aleutian Islands area over the three year period.
- There was very little catcher vessel QS leased, and catcher vessel QS lease rates were less than 1% in all areas and vessel categories over the first three years of the IFQ program.
- The small number of catcher vessel QS leases may have been due partially to the interaction of the blocking rules and the 10% leasing restriction for catcher vessel QS during most of the first two years of the IFQ program. Regulations changed in September, 1996 allowing persons to lease up to 10% of the IFQ associated with their blocked QS. However, this change did not appear to impact catcher vessel QS lease rates during the 1997 season.
- The use of a hired skipper may have been a better alternative than leasing for some initial QS recipients. The NPFMC adopted regulations in 1997 that attempt to constrain this practice.
- Over all areas, the average lease price of freezer vessel QS varied from \$.75 per pound of IFQ in 1995, to \$.96 per pound of IFQ in 1996, to \$.68 per pound of IFQ in 1997.

Chapter 6 Types of Transfers, Financing of Transfers, Relationships Between Transferors and Transfer Recipients, and Use of Brokers.

Persons who want to transfer QS must complete a transfer application form. The transfer application form collects basic information on each transfer.

Chapter 6 summarizes some of this basic information. Data are provided which classify permanent transfers as sales, gifts, trades, or other. Summary data are included that classify transfers by the nature of the relationship between the parties to the transfer (e.g., family, friend, business partner, or "no relationship"). The chapter also includes data on the use of brokers to facilitate QS transfers.

Chapter 6 also examines priced QS transfers and includes a breakdown of the finance sources used by buyers. The finance sources include bank, Commercial Fishing and Agricultural Bank (CFAB), Department of Commerce and Economic Development (DCED), personal, processor, and other.

- The predominant transfer type in all six sablefish areas over the 1995 to 1997 was "priced sales" (prices reported). The percentage of QS transferred classified as "other sales" (no prices available), "gifts," and "trades" was relatively small in most areas.
- The percentage of QS that was transferred in "priced sales" transfers over the three year period ranged from 70.2% in West Yakutat to 88.6% in the Aleutian Islands.
- The percentage of QS transferred that was classified as "other sales" (no prices available) ranged from 0.0% in the Bering Sea area to 6.3% in the Western Gulf area over the three year period.
- The percentage of QS transferred that was classified as "gift" was relatively small, ranging from 0.1% in the Aleutian Islands area to 7.3% in the Bering Sea area over the three year period.
- The percentage of QS transferred that was classified as "trade" was also relatively small in most areas, ranging from 0.1% in the Western Gulf area to 6.0% in the Southeast and Bering Sea areas over the three year period.
- The services of brokers were utilized in a high percentage of QS transfers. In 1997, brokers were used for some QS transfers in all six sablefish areas. In five of

- the six areas, the majority of the QS transferred was transferred with the help of a broker.
- In 1997, the percentage of QS permanently transferred with the help of a broker ranged from 49.0% in the Southeast area to 82.8% in the West Yakutat area. Broker usage has increased in all areas since 1995.
- In all six sablefish areas, the majority of the QS that was transferred between parties who had "no relationship." The percentage of the QS transferred where there was no relationship between the transferor and transfer recipient ranged from 56.3% in the Southeast area to 87.2% in the Aleutian Islands area over the three year period.
- The percentage of the QS transferred between family members ranged from .4% in the Aleutian Islands area to 13.0% in the Southeast area over the three year period.
- The percentage of the QS transferred between friends ranged from 1.9% in the Aleutian Islands area to 16.0% in the Southeast area over the three year period.
- The percentage of the QS transferred between partners ranged from 3.5% in the Southeast area to 12.0% in the West Yakutat area over the three year period.
- "Personal Resources" were the primary source of financing indicated for "priced sale" transfers over the three year period in all areas except the Central Gulf and Bering Sea. The percentage of QS transferred in "priced sales" transactions that indicated "personal resources" as a finance source ranged from 24.4% in the Bering Sea area to 61.1% in the West Yakutat area over the three year period.
- The percentage of QS transferred in priced sales transactions that indicated "bank" as a finance source ranged from 25.9% in the Southeast area to 62.5% in the Bering Sea area over the three year period.
- The percentage of QS transferred in priced sales transactions that indicated "seller" as a finance source ranged from 2.6% in the Bering Sea area to 19.3% in the Southeast area over the three year period.
- Alaska's Department of Commerce and Economic Development and the Commercial Fishing and Agricultural Bank financed a small number of QS transfers in non-CDQ areas. "Processors" also acted as a minor source of QS financing.

Chapter 7 Distribution of QS By Blocking Factor, CDQ Compensation QS, and CDQ Compensation QS Swaps.

Prior to implementation of the IFQ program, the Council added several special features to the IFQ plan. The Council decided that QS units that were worth less than 20,000 pounds of a hypothetical IFQ when they were issued would be placed into a nonseverable "block" and thereafter could only be transferred as a single unit.

The Council also restricted the number of blocks that a person could hold in an area. Within an area, if a person held any unblocked QS they could hold only one block of QS. If the person did not hold unblocked QS for an area then the person could hold up to two blocks for that area. The objective of these blocking rules was to preserve a portion of the QS for smaller fishing operations.

Another feature of the program was the allocation of 20% of the TAC in the Bering Sea and Aleutian Islands areas to Community Development Quotas (CDQs). This had the result of reducing the available catch for QS holders in these areas. The Council decided that it wanted to make QS holders in all areas share proportionally in this loss by compensating the QS holders in the CDQ areas with an allocation of QS in the non-CDQ areas of Southeast, West Yakutat, Central Gulf, and Western Gulf. These compensatory shares were termed "CDQ compensation QS."

Regulations provide that if a person is issued CDQ compensation QS for an area where the person already has QS, then the CDQ compensation QS is combined with their existing QS and is either "blocked" or "unblocked" depending on sum total of their QS.

However, if a person is issued CDQ compensation QS in an area for which the person has no other QS, then the CDQ compensation QS is left unblocked. Moreover, if the CDQ compensation QS is catcher vessel QS, it can be fished on any size catcher vessel and upon first transfer it can be permanently assigned to the specific catcher vessel category designated by the transfer recipient. This ability to "swap" certain CDQ compensation QS across catcher vessel categories within an area is termed "swapability" in the report. The ability to swap such QS across catcher vessel categories expires upon the first transfer.

Chapter 7 examines the distribution of QS by block status at initial issuance and at year-end 1997. The block status can be "blocked," "unblocked," "non-swappable" CDQ compensation QS, or "swappable" CDQ compensation QS.

- Only in the Bering Sea area was more than 20% of an area's QS issued in blocks. In the Bering Sea area 64.6% of the QS was blocked. Elsewhere the percent of the QS issued as blocks ranged between 8.0% in the Central Gulf area to 19.9% in the Western Gulf area.
- CDQ compensation QS initially represented approximately 3.5% of the total QS issued in the non-CDQ areas (in the Southeast, West Yakutat, Central Gulf, Western Gulf areas).
- Non-swappable CDQ compensation QS was rolled into a person's blocked or unblocked QS at initial issuance. At year-end 1997, the percentage of QS classified as unblocked had increased slightly in all areas.
- The amount of swappable CDQ compensation QS declined from 1995 to 1997. Transfers either with or without an accompanying swap reduce the amount of swappable QS because the privilege to swap across catcher vessel categories disappears upon the first transfer. The decline in swappable CDQ compensation QS ranged from 45.8% in the Southeast area to 59.6% in the Western Gulf area over the three year period.

Chapter 8 "Sweep-ups" of Small QS Blocks

Prior to the IFQ program the sablefish fishery was characterized by short derby-like openings with a large turnover of participants on an annual basis. The Council's initial allocation methodology included persons who owned or leased a vessel(s) that made landings in the sablefish fishery at any time during the 1988, 1989, or 1990 seasons.

Because of this, large numbers of persons with only a small amount of landings received a small initial allocation of QS. The IFQ regulations put initial QS allocations into non-severable blocks if the amount of the QS was worth less than 20,000 pounds of a hypothetical IFQ. Many of the QS blocks were very small and some were too small to make a fishing trip worthwhile.

In an effort to enhance consolidation of these blocks, the Council adopted a "sweep-up" provision for small blocks of QS. Originally it allowed a QS holder to acquire a number of small blocks and combine them into a single block as long as that single block was still worth less than 3,000 pounds of a hypothetical IFQ. In December, 1996 the sweep-up block size limit was raised to 5,000 pounds of a hypothetical sablefish IFQ.

Chapter 8 examines the extent to which the sweep-up provisions were used during the first three years of the sablefish IFQ program. The tables in the section are based on the new higher sweep-up limits.

- The percentage of QS that was in "sweepable" blocks ranged from 2.8% in the Central Gulf area to 8.1% in the Aleutian Islands area at year-end 1997.
- Sweepable blocks were a substantial percentage of the total blocked QS in each area, ranging from 19.0% in the Western Gulf area to 85.4% in the Aleutian Islands area at year-end 1997.
- Substantial percentages of QS holders held sweepable blocks at the end of 1997. Persons holding sweepable blocks represented from 36.0% of all QS holders in the Western Gulf area to 69.5% of all QS holders in the Bering Sea area.
- Very few sweep-up transactions occurred in 1995 and 1996, but in 1997 the number of sweep-up transactions increased substantially. This increase may have been related to the new higher sweep-up limits that went into effect in December, 1996.

Chapter 9 Changes In QS Holdings By Type of Person

Under the Council's IFQ program, QS can be owned by individuals (natural persons who were initial QS recipients), corporations, one-owner corporations, estates, partnerships, crew (natural persons who were not initial QS recipients but who met the qualifications to acquire QS), and other entities. However, the Council has included provisions which should encourage QS to move gradually to individual owner-operators.

Chapter 9 provides data on the amount and percentage of QS held and the number and percentage of QS holders by person-type. Data are provided for the fishery at initial issuance and at year-end 1997.

- Individuals, meaning natural persons who were initial QS recipients, held the highest percentage of QS of any person-type in the Southeast, West Yakutat, and Central Gulf management areas both at initial issuance and at the end of 1997.
- At the end of 1997 the percentage of the QS that was held by individuals varied from 22.7% in the Bering Sea area to 74.9% in the Southeast area. The amount of QS held by individuals declined in all the areas except the Aleutian Islands area over the three year period.
- Crew persons, meaning natural persons who were not initial QS recipients, acquired QS in all sablefish areas. By the end of 1997, crew holdings ranged from 1.6% of the QS in the Bering Sea area to 7.3% of the QS in the Southeast area.
- The percentage of QS held by natural persons, both individuals with initial QS allocations and crew persons who were new entrants, increased in all areas except the Western Gulf and Bering Sea over the three year period.
- The percentage of the sablefish QS held by corporations (including new corporations) fell in the Southeast area and rose in the other areas over the three year period. At the end of 1997, the percentage of QS held by corporations varied from 11.0% in the Southeast area to 66.6% in the Bering Sea area.
- The percentage of QS held by partnerships was relatively small and fell in all areas over the three year time period. At the end of 1997, the percentage of QS held by partnerships varied from 2.5% in the Aleutian Islands area to 8.4% in the Bering Sea area.

Chapter 10 Distribution of QS by State of Residence

Prior to the IFQ program, persons participating in the sablefish fishery came from Alaska and from other states, particularly Washington and Oregon. A concern in Alaska is that QS holdings might gradually drift to holders outside of Alaska, thereby reducing the economic impacts of the sablefish fishery on Alaska.

Chapter 10 examines the distribution of QS and QS holders by state of residence (Alaska, Washington, Oregon, and other). The tables provide a broad overview of how these distributions have changed in the first three years of the IFQ program.

- In all areas most of the QS was held by persons from Washington and Alaska both at initial issuance and at year-end 1997.
- Persons from Washington held the highest percentages of QS both at initial issuance and at year-end 1997 in all areas except Southeast. The percentage of the QS held by persons from Washington varied from 29.1% in the Southeast area to 68.0% in the Aleutian Islands area at year-end 1997.
- At year-end 1997, the percentage of QS held by persons from Alaska ranged from 25.8% in the Western Gulf to 64.9% in the Southeast area.
- Persons from Alaska showed slight increases in QS holdings in all areas over the three year period. Persons from Washington slightly increased their holdings in the West Yakutat area and slightly decreased their holdings in all other areas.
- At the end of 1997, persons from Alaska were the most numerous of QS holders in all areas except the Aleutian Islands.
- The average QS holdings of persons from Washington were higher than the average QS holdings of persons from Alaska in all areas at initial issuance and at year-end 1997.

Chapter 11 Changes By Management Area, Rural-Urban, Local-Nonlocal

Under Alaska's limited entry program, there has been a movement of permits away from holders who live in rural areas that are "local" to limited fisheries to holders who live in urban areas that are "nonlocal" to the limited fisheries. Some persons are concerned that similar results might occur under the sablefish IFQ program.

Chapter 11 examines changes in QS holdings within Alaska and between Alaska and other states using special resident-type classifications. All communities within Alaska are classified as "rural" or "urban" based largely upon 1990 census definitions and as "local" or "nonlocal" to each sablefish management area. Persons within each community can then be placed into one of five resident-types relative to the sablefish management area for which a QS applies. These are as follows:

Alaska Rural Local (ARL) Alaska resident residing in a rural community that is

local to the sablefish management area.

Alaska Urban Local (AUL) Alaska resident residing in an urban community that is

local to the sablefish management area.

Alaska Rural Nonlocal (ARN) Alaska resident residing in a rural community that is

nonlocal to the sablefish management area.

Alaska Urban Nonlocal (AUN) Alaska resident residing in an urban community that is

nonlocal to the sablefish management area.

Nonresidents of Alaska

Chapter 11 examines the distribution of QS and QS holders by these five special residenttypes.

Key Results:

• ARLs received QS in all management areas except the Aleutian Islands area (although their allocation in the Bering Sea area was trivial). Outside of the Bering Sea and Aleutian Islands, their initial shares ranged from 1.9% in the West Yakutat area to 14.3% in the Southeast area. By the end of 1997, ARL holdings had declined slightly in the Southeast, West Yakutat and Western Gulf areas, and had risen in the Central Gulf and Bering Sea areas.

- AULs received significant amounts of QS in the Southeast (45.5%) and the Central Gulf (17.1%) areas, but very small amounts in the West Yakutat, Western Gulf, and Bering Sea areas, and none in the Aleutian Islands area. AUL holdings increased slightly in the Southeast and Central Gulf areas and decreased in the West Yakutat, Western Gulf, and Bering Sea areas by the end of 1997.
- ARNs received small percentages of the QS in all management areas. These percentages ranged from less than 1% in the Southeast and Aleutian Islands areas, up to 2.4% in the West Yakutat area at initial issuance. By year-end 1997, ARN holdings had declined in the Southeast and West Yakutat areas, and had risen in the Central Gulf, Western Gulf, Bering Sea, and Aleutian Islands areas.
- AUNs were initially issued the highest amount of QS for Alaska resident-types in the West Yakutat (30.5%), Central Gulf (18.2%), Western Gulf (18.9%), Bering Sea (36.1%), and Aleutian Islands (22.2%) areas. By the end of 1997, they had decreased their holdings in the Southeast, Bering Sea, and Aleutian Islands areas, and had increased their holdings in all other areas.
- Nonresidents received substantial amounts of QS in all areas. They received over 60% of the QS in all the areas except Southeast. By year-end 1997, nonresident QS holdings had declined slightly in all areas.
- Changes in the distribution of QS holdings by resident-type were the result of transfers, migrations and revocations. The net results of transfers were generally the most significant factor in changes, but migrations also played an important role in four of six areas.
- A substantial percentage of the transfers were across resident-type cohorts in most management areas and resident categories. The exception is nonresidents, who in all management areas received a large majority of their QS from other nonresidents.

Chapter 12 Distribution of Sablefish QS By Census Area

Within Alaska there have been concerns that the IFQ program might result in a dramatic restructuring that will increase the role of the sablefish fishery in some areas while reducing its impact in other areas. Chapter 12 provides another view of the changes that have occurred in the geographic distribution of QS holdings since initial issuance.

In this chapter, QS holders from Alaska are assigned to census areas based upon their addresses. Nonresidents are placed into an "Outside Alaska" classification. The distribution of QS and QS holders are then examined at initial issuance and at year-end 1997.

- Alaska census areas with persons who held relatively high (10% or more at intial issuance or year-end 1997) percentages of the total QS in management areas are: Sitka (Southeast area) Petersburg/Wrangell (Southeast and Central Gulf areas), Kodiak (Central Gulf and Bering Sea areas) and the Kenai Peninsula (Central Gulf, Bering Sea and Aleutian Islands areas).
- Nonresidents held a majority of the QS in all areas except Southeast.
- The number of QS holders from most census areas decreased or remained unchanged in the management areas between initial issuance and the end of 1997. This reflects the overall decline in QS holders due to transfers and consolidation.
- The decline of QS holders in non-CDQ management areas is relatively high for some census areas. This may be partially due to QS holders in CDQ areas transferring their CDQ compensation QS.

Chapter 13 New Entrants In The Fishery

The Council provided a means under the IFQ program for new persons to receive sablefish QS through transfer and enter the fishery. Any person from the United States can acquire harvester-processor (category A) QS. Only persons who are initial QS recipients or IFQ crew members may receive catcher vessel QS through transfer. Under the IFQ program, an IFQ crew member is defined as any individual who has at least 150 days experience working as part of a harvesting crew in any United States commercial fishery or as any individual who receives an initial allocation of QS.

New entrants may also occur by regulations which allow an individual to transfer QS to the individual's solely owned corporation (a new entity). New entrants might also occur because of transfers due to court order, operation of law, or as part of a security agreement. However, in these latter cases IFQ is not assigned unless the person receiving the QS transfer meets all of the eligibility requirements.

Chapter 13 examines the distribution of QS ownership between initial QS recipients and new entrants at year-end 1997. New entrants to the management area, new entrants to the sablefish fishery, and new entrants to the IFQ program are all differentiated.

- A new entrant to a management area may have been an initial QS recipient in some other management area(s). A new entrant to the sablefish IFQ program may have been an initial QS recipient in the halibut fishery. A new entrant to both IFQ programs did not receive an initial allocation in either fishery.
- New entrants to each management area held substantial amounts of the QS in each management area by the end of 1997. The percentage of QS held by new entrants to each management area ranged from 7.1% in the West Yakutat area to 12.2% in the Southeast area.
- New entrants to each management area represented a substantial portion of the QS holders in every management area by the end of 1997. The percentage of QS holders represented by new entrants to each management area ranged from 9.9% in the Bering Sea area to 19.9% in the Southeast area.
- New entrants to the sablefish IFQ fishery program represented a substantial portion of the QS holders in each management area by the end of 1997. The percentage of QS holders represented by new entrants to the sablefish fishery ranged from 5.3% in the Bering Sea area to 19.5% in the Southeast area at the end of 1997.

- The percentage of QS holders represented by new entrants to either of the IFQ programs ranged from 5.3% in the Bering Sea area to 15.0% in the Southeast area at the end of 1997.
- In most years from 1995 through 1997, a large portion of the QS leases in each area went to new entrants to the area.

Chapter 14 Changes In Harvest and Delivery Patterns

Chapter 14 concentrates on sablefish harvest data as opposed to QS holdings. The chapter examines the distribution of harvest and deliveries in several different ways.

Data are provided on the delivery of Alaska-caught sablefish by state of delivery and by Alaska census area of delivery. These data are for the 1991-1997 time period, which covers the four years prior to the IFQ program and the three years since the IFQ program was implemented. These data highlight the variation in delivery patterns over the time period.

Data are also provided which compare the number of persons recording individual landings in the years preceding the IFQ program with the number of persons recording landings in the first three years of the IFQ program.

In addition, the chapter provides data on the harvest of sablefish by year and quarter and the harvest of sablefish by the state of residence of the QS holder. A special section is also included which estimates the use of hired skippers in the fishery under the IFQ program.

- The percentages of the Alaska sablefish harvest delivered in Alaska, other states, and to catcher-processors do not appear to have changed substantially in the first three years of the IFQ program.
- The percentage of the total sablefish harvest delivered to the Ketchikan/Prince of Wales, Wrangell/Petersburg, and Skagway/Yakutat/Angoon aggregated census areas has declined somewhat under the IFQ fishery.
- The percentage of the total sablefish harvest delivered to the Sitka/Juneau/Haines and Kenai Peninsula/Anchorage aggregated census areas has increased somewhat under the IFQ fishery.
- The Kenai Peninsula/Anchorage aggregated census area has received the highest percentage of sablefish pounds delivered in Alaska both before and under the IFQ program. The percentage of landings delivered to the Kenai/Anchorage aggegated census area has risen each year since the beginning of the IFQ program in 1995.
- The percentage of sablefish pounds delivered to the Sitka/Juneau/Haines aggregated census area have risen above delivery levels between 1991 and 1994. This period of increasing deliveries appears to have begun in the year prior to the program, however.

- The vast majority of the sablefish harvest in the first three years of the IFQ program occurred in the second and third quarters of each year in all management areas.
- The majority of the pounds harvested in the Southeast area were credited to Alaska QS holders during the first three years of the program. In the other areas Washington QS holders took the largest percentages of the harvest, and usually a majority of the harvest.
- Hired skippers have been used in all management areas under the IFQ program and their use increased substantially during the first three years of the program. For example, in the Western Gulf area the percentage of the harvest credited to hired skippers increased from 20.3% in 1995 to 69.1% in 1997.
- In 1997, the percentage of the harvest attributed to hired skippers ranged from 12.4% in the Southeast area to 75.5% in the Aleutian Islands area. In 1997, over 50% of the harvest in four of the six management areas was attributed to hired skippers.

Chapter 15 Overharvest and Underharvest of IFQs and TACs

This chapter examines the overharvest and underharvest of IFQ and TACs in the first three years of the IFQ program. The chapter also examines the amount of totally unfished IFQ held by initial QS recipients who have not altered their QS holdings.

- Over the 1991 to 1994 time period, the TAC was exceeded in some years in some areas.
- However, the TAC was underharvested in all areas during the first three years of the IFQ program.
- During 1997, the percentage of the TAC harvested ranged from 59.0% in the Bering Sea area to 99.2% in the Southeast area.
- In the Southeast, West Yakutat, and Central Gulf areas the percentage of the available IFQ harvested was somewhat similar across vessel categories in the first three years of the program.
- In the Western Gulf, Aleutian Islands, and Bering Sea areas there were sometimes large differences between vessel categories in the percentage of harvested IFQ. For example, in the Aleutian Islands in 1997 the percentage of IFQ harvested in the freezer vessel category was 71.3% but the percentage harvested in the "60 foot or less" category was only 40.3%.
- The amount and percentage of QS that belongs to persons who have not altered their holdings since the beginning of the program should decline each year. The percentage of QS that was held by persons who had not changed their holdings by the end of 1995 ranged from 75.0% in the Southeast area to 91.6% in the Western Gulf area. These percentages declined in all areas over the 1995-1997 time period and at the end of 1997 ranged from 52.6% in the Central Gulf area to 69.0% in the Western Gulf area.
- Significant numbers of the persons who had not altered their holdings did not harvest their sablefish IFQs in some of the years. In 1997, the percentage of initial QS recipients who had not altered their holdings and also did not harvest their IFQ ranged from 15.3% in the West Yakutat area to 35.4% in the Bering Sea area. However, the average IFQ amounts of these persons were relatively small.

Chapter 16 Consolidation of IFQ Permit Holders On Vessels

One way a reduction in the number of fishing operations occurs under the IFQ program is the consolidation of QS holdings. Another way a reduction can occur is when IFQ holders combine to fish their IFQ holdings from a single vessel.

Chapter 16 provides time series data on harvests and participation in the sablefish fishery from 1990 through 1997. These data suggest the extent to which vessels have been used by more than one person both before and since implementation of the IFQ program.

- The numbers of persons with catcher vessel landings fell from 1994 levels during the first three years of the IFQ program in the Southeast and Central Gulf areas.
- The numbers of persons with catcher vessel landings rose from 1994 levels during the first three years of the IFQ program in the Western Gulf, Bering Sea and Aleutian Islands areas.
- The numbers of vessels with catcher vessel landings fell from 1994 levels during the first three years of the IFQ program in the Southeast, West Yakutat, and Central Gulf areas.
- The numbers of vessels with catcher vessel landings increased in 1995 over 1994 levels but then declined over the 1996-1997 time period in the Western Gulf, Bering Sea, and Aleutian Islands areas.
- The ratio of "persons with landings" to "vessels with landings" rose above 1991-1994 levels in all six management areas during the first three years of the IFQ program. The data suggest that some IFQ permit holders may be combining together onto a single fishing operation.