1 Introduction

1.1 The Purpose of This Study

This report uses administrative and harvest data from the Restricted Access Management Program (NMFS-RAM) of the National Marine Fisheries Service-Alaska region (NMFS-AK) and other ancillary data to report on the first four years of the new halibut individual fishing quota (IFQ) program in Alaska. The purpose of this report is to provide accurate information on particular topics of interest concerning the program.

In 1995, NMFS-RAM implemented new IFQ programs in Alaska's halibut and sablefish fisheries. The programs had been developed by the North Pacific Fishery Management Council (Council) and approved by the United States Secretary of Commerce.

The new IFQ fishery management programs represent a dramatic change from fishery management under open access. The growth in fishing effort under open access had resulted in large declines in the length of the fishing seasons.

The halibut fishery, in particular, had been reduced to a few short "derby-like" openings each year in some areas. These short hectic openings sometimes caused safety problems, particularly for small vessels when an opening occurred during times of bad weather and rough seas.

The congestion on the fishing grounds during the short openings also led to gear conflicts, gear loss, and wastage. The fact that the harvest occurred during short periods of time caused short-term market gluts and forced frozen product to be held and marketed over long periods of time. These factors resulted in lower ex-vessel prices for fishermen.

The Council hoped that the halibut IFQ program would spread out the season, would allow fishermen to harvest their individual quotas at times opportune to them, and would lead to improved ex-vessel prices and economic profits. They also hoped that the IFQ program would reduce safety problems, congestion on the grounds, gear loss, and wastage of resources.

Through the first four years of the program many of the Council's objectives have been realized. The season has been spread out, ex-vessel prices have improved and congestion on the grounds has been reduced. Fishermen can and do choose the times when they will harvest their IFQs. There is also some evidence that the program has served the other Council objectives.

However, despite these successes, many people continue to have concerns about long-term potential changes that might occur under the program. This is particularly true in

Alaska where there are many coastal communities that depend on commercial fishing for their economic base. The transfer of IFQ use-privileges to persons outside a local area or a radical change in harvest and delivery patterns under the program might have deleterious impacts on some communities.

Because of this, many parties have an interest in closely monitoring the changes that are occurring under the IFQ program. In 1995, the State of Alaska and the National Marine Fisheries Service formed an interagency study team to evaluate changes occurring under the new IFQ program. Several studies were initiated and completed through this process.

The NMFS Restricted Access Management Program (NMFS-RAM) administers the IFQ programs and is committed to continuing this monitoring effort. The main purpose of this study is to use data collected and maintained by NMFS-RAM to document, analyze, and report on changes that occurred during the first four years of the new halibut IFQ program. NMFS-RAM hopes that the information contained in this report will help inform policy discussions on proposals for new IFQ programs or proposals to alter the existing IFQ programs.

The report includes data and information that should help in the evaluation of how different program features are working. A brief description of the halibut fishery and the IFQ program can be found below. An overview of the main topics covered in this report can be found in Chapter 2.

1.2 The Halibut Fishery

Halibut are demersal, living on or near the bottom. Typically they are harvested in waters from 100 to 600 meters in the winter and less than 200 meters in the summer.

In the years before the IFQ program, the directed commercial harvest of halibut was prosecuted with hook and line gear, including longline, handline, mechanical jig, and troll. Halibut from the directed fishery tended to be landed in Alaska, and to some extent in British Columbia, Washington and Oregon. Halibut are also harvested as by-catch in groundfish trawl fisheries, pot fisheries for crab, and longline fisheries for sablefish and Pacific cod. A recreational fishery in Alaska for halibut also grew considerably in the years before the program.

¹This discussion of the halibut fishery is from Chapters 2 and 3 of *Draft for Public Review Environmental Impact Statement, Regulatory Impact Review, Initial Regulatory Flexibility Analysis for Proposed Individual Fishing Quota Management Alternative for the Halibut Fisheries in the Gulf of Alaska and Bering Sea/Aleutian Islands.* North Pacific Fisheries Management Council. Anchorage: July 19, 1991.

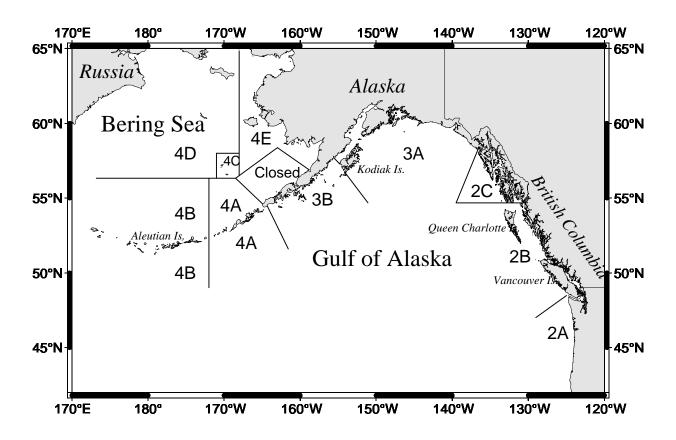


Figure 1. IPHC Halibut Management Areas

The International Pacific Halibut Commission (IPHC) was established by a convention between the United States and Canada, and since 1923 has been responsible for the biological management of the fishery. The IPHC has authority to establish regulatory areas, limit catch by area, license vessels, regulate gear types, protect nursery areas, collect statistics, and conduct scientific research. The IPHC has defined eight management areas off Alaska, and each of these areas has a separate Total Allowable Catch (TAC). The areas are shown in Figure 1.

In 1982, the U.S. government added to the management tools available for halibut by delegating additional regulatory authority to the geographically responsible Fishery Management Councils. The North Pacific Management Council (Council) has authority under the Magnuson-Stevens Fishery Conservation and Management Act and the North Pacific Halibut Act to regulate entry into the Alaska halibut fishery, although the Council must defer to the IPHC on biological management issues. The authority of the IPHC and Council extends to cover the management of halibut within Alaska's waters.

1.3 **Background on the Halibut IFQ Program**

In December 1991, the Council recommended an Individual Fishing Quota (IFQ) Program for management of the "fixed gear" sablefish and halibut fisheries off of Alaska. For halibut, "fixed gear" was defined to include all fishing gear comprised of lines with hooks attached, including one or more stationary, buoyed, and anchored lines with hooks attached. Longlines, jigs, handlines, and troll gear are examples of halibut fixed gear. The development of the program took place over a long time period. The Council's IFQ plan for halibut was approved as a regulatory amendment by the Secretary of Commerce in early 1993.

Quota shares (QS) are the basic use-privileges that were established under the program.³ QS were issued to qualified applicants who owned or leased a vessel that made legal fixed gear landings of halibut at any time during 1988, 1989, and 1990. The regular QS units issued to a person in a management area were equal to the person's qualifying pounds for that area. Qualifying pounds were the sum of the person's best five years of landings (pounds) over the seven year period from 1984 to 1990.

The QS that were issued are specific to one of eight halibut management areas and one of four vessel classes. The management areas are 2C, 3A, 3B, 4A, 4B, 4C, 4D, and 4E as defined by the IPHC. The four vessel classes include a harvester-processor vessel class and three catcher vessel classes. The three catcher vessel classes are "35 feet or less," "36 to 60," and "greater than 60 feet." The harvester-processor vessel category is called "freezer" or "freezer processor" within this report.

³"QS" will be used to represent both "quota share" and "quota shares" in this report depending upon the context. "QS units" and "unit of QS" will also be used in places where greater clarity is needed.

²See the Northern Pacific Halibut Act of 1982, P.L. 97-176.

In Areas 4B, 4C, 4D, and 4E portions of the total allowable catch (TACs) were allocated to Community Development Quotas (CDQs) for groups of communities in western Alaska. In Area 4E the entire TAC was allocated to CDQs and there has been no IFQ fishery. The Council compensated QS holders in these CDQ areas for the reductions in TAC due to CDOs by issuing them additional "CDO compensation OS" in non-CDO Areas 2C through 4A. CDQ compensation QS increased the total QS pool in these areas.

Each year, the amount of QS in the QS pool as of January 31 and the TAC allocated to the IFQ fishery are used to determine the basic QS/IFQ ratio that will be used in each management area for the year.⁴ These data for 1995 through 1998 are shown in Table 1.

Note that the halibut TACs devoted to IFQs were the same in 1995 and 1996 in all areas. However, the QS pool was larger at the beginning of 1996 than it was in 1995 in management Areas 2C through 4B.

In 1997, halibut TACs devoted to IFQs rose substantially in all areas except 4E where there has been no IFQ fishery. However, the QS pools declined in Areas 2C through 4B probably due mainly to resolution of cases that were on appeal. The QS pool rose slightly in Area 4D.⁵ The QS to IFQ ratio fell in all areas other than 4E, resulting in more pounds of IFQ for each QS unit in each area.

In 1998, the TACs devoted to IFQs again rose substantially in all areas except 4E. There were also adjustments in the total QS in the QS pools in Areas 2C, 3A, 3B, and 4D. The net result was another decline in the QS to IFQ ratio in all areas other than 4E, again resulting in more pounds of halibut IFQ for each unit of QS in these areas.

A person's IFQ for an area in a given year is determined by multiplying the person's fractional holding of the total QS pool in the area by the total allowable catch (TAC) allocated to the area's IFQ fishery for the year. Adjustments for the person's underharvest and/or overharvest from the previous year are then made to determine the person's final IFQ for the year.

The QS that are issued are permanently transferable and in some cases can be leased under regulations that are discussed in the report. The Council wanted to achieve some of the benefits associated with IFQ management but was concerned that the program not lead to radical changes that would be deleterious to communities dependent upon the fishery. As a result, the Council adopted several complex rules in an effort to constrain the changes that could occur under the program.

⁴See 50 CFR 679.40 (c).

⁵NMFS-RAM will include QS that is on appeal in the QS pool at the beginning of the year. If the case is resolved in the applicant's favor then the QS and the associated IFQ for the year can be issued. If it is determined that the applicant does not qualify for the QS in dispute, that QS will not be included in the QS pool in subsequent years.

These rules include limits on who may buy QS, limits on the amount of QS that may be held by any one person, constraints on the amount of QS that may be fished from any one boat, restrictions placing some QS holdings into "blocks" that can only be permanently transferred on an "all or nothing basis," and restrictions on the number of "blocks" a person can hold in an area.

These rules represent an effort by the Council to achieve economic efficiency gains under the program while preserving some of the traditional character of the fishery and the diversity of the fishing operations. These rules are outlined in more detail in Chapter 2 and are discussed in subsequent chapters of this report.

Table 1. Quota Share Pools and IFQ TACs by Halibut Management Area, 1995-1998

Halibut Managemen Area	Year	Quota Share Pool (# of QS Units)	IFQ TAC in Pounds excluded)	Ratio of QS / IFQ
2C	1995	59,853,126	9,000,000	6.650
20	1996	59,979,977	9,000,000	6.664
	1997	59,100,570	10,000,000	5.910
	1998	59,551,075	10,500,000	5.672
3A	1995	185,818,173	20.000.000	9.291
37	1996	186,079,384	20,000,000	9.304
	1997	184,935,642	25,000,000	7.397
	1998	184,924,431	26,000,000	7.112
3B	1995	54.435.504	3,700,000	14.712
05	1996	54,505,286	3,700,000	14.731
	1997	53,909,787	9,000,000	5.990
	1998	53,903,627	11,000,000	4.900
4A	1995	14,861,967	1.950.000	7.622
	1996	14,914,713	1,950,000	7.649
	1997	14,502,966	2,940,000	4.933
	1998	14,502,965	3,500,000	4.144
4B	1995	9,236,860	1,848,000	4.998
	1996	9,293,043	1,848,000	5.029
	1997	9,284,774	2,784,000	3.335
	1998	9,284,774	2,800,000	3.316
4C	1995	3,969,186	385,000	10.310
	1996	3,969,186	385,000	10.310
	1997	3,969,186	580,000	6.843
	1998	3,969,186	795,000	4.993
4D	1995	4,685,996	539,000	8.694
	1996	4,685,996	539,000	8.694
	1997	4,790,491	812,000	5.900
	1998	4,869,276	1,113,000	4.375
4E	1995	139,999	0	N.A.
	1996	139,999	0	N.A.
	1997	139,999	0	N.A.
	1998	139,999	0	N.A.

Note: "N.A." means not applicable. All of the TAC in Area 4E has been devoted to Community Development Quotas (CDQs) and none has been available to the IFQ fishery.