

Workplan for the Review of the Halibut and Sablefish IFQ Program February 2016

This workplan is meant to aid in the development of the Halibut and Sablefish IFQ program review. At the December 2015 meeting, the North Pacific Fishery Management Council (Council) and IFQ Implementation Committee provided feedback on the proposed structure and scope of the workplan (minutes are included in the Appendix). Scientific and Statistical Committee (SSC) input is necessary in the development of appropriate methods and content within the scope of review established by the Council. The Council's Advisory Panel did not review the outline for the IFQ program review, but will be reviewing the work-plan at the February 2016 meeting. Their input will be advantageous to informing the scope and methodology for this review. The work-plan is modified from the version presented to the Council in December to include Council feedback and places less emphasis on resources to guide policy scope. This work-plan specifies the types of data, other information (e.g. literature), and methods that staff intends to utilize to inform the IFQ program review.

The work-plan is outlined as follows: Section 1 explains the requirement for a comprehensive program review. Section 2 highlights sources that the Council and staff considered in establishing the scope of the review.¹ Section 3 is an annotated table of contents, which details the scope of the work intended to be done and the analytical approach. Section 4 lists the work team. The IFQ Implementation Committee and Council minutes from the December 2015 meeting are included in the Appendix.

The requirement for a comprehensive program review

In December of 2014, NMFS recommended that the Council initiate a formal and comprehensive review of the Halibut and Sablefish IFQ Program. Section 303A(i)(1)(B) of the Magnuson-Stevens Act requires the Council and NMFS to review all Limited Access Privilege Programs (LAPPs) that have been approved by the Secretary of Commerce, including those programs approved prior to the enactment of the reauthorized Magnuson-Stevens Act in 2007. Furthermore, Section 303A(c)(1)(G) of the Magnuson-Stevens Act specifies that reviews of these LAPPs should occur no less frequently than once every 7 years. NMFS recommended that the IFQ program review be initiated by 2017 to meet the requirements of the Magnuson-Stevens Act. Because the IFQ program was enacted prior to the 2007 reauthorization of the Magnuson-Stevens Act, it has not been subject to the mandatory review process of LAPPs under the Act. In the 20 years since implementation of the IFQ program, this will be the first formal and comprehensive review of the program.

At the time of implementation, the Council identified 10 objectives for the program. Since 1995 the Council has instituted numerous changes to the IFQ program, largely easing restrictions in the program with respect to the use and transfer of quota shares with the exception of hired skipper use, which it has repeatedly tried to constrain. The intent of this review is to evaluate the IFQ program with respect to the 10 original policy objectives for the program. It is the prerogative of the Council to determine whether these original objectives still hold for the IFQ program.

Although this will be the first comprehensive review of the IFQ program, there have been numerous

¹ The outline for the IFQ Program Review, which outlines these sources is available under Agenda item D4 at http://legistar2.granicus.com/npfmc/meetings/2015/12/931_A_North_Pacific_Council_15-12-07_Meeting_Agenda.pdf

regulatory impact reviews and reports² produced by Council and NMFS staff that provide relevant information about quota share ownership and transfers, IFQ use and landings, and with respect to specific provisions in the program. This IFQ program review will synthesize much of the information provided in these previous reports and analyses.

Establishing a policy scope for the review

Unless otherwise stipulated by the Council at program implementation or otherwise, LAPP reviews do not currently have a checklist of required elements that must be included. The Council has the flexibility to request whatever information they deem necessary to evaluate the IFQ program. In addition, the National Standards of the Magnuson-Stevens Act establish requirements for the management of fisheries under fishery management plans (FMPs).

There are also a number of guidance documents that may aid the Council in requesting appropriate, relevant information and discussion to address the goals of the program as well as the general requirements of a LAPP. First, NOAA has produced a Catch Share Policy document that provides policy recommendation for nine guiding principles in the development and evaluation of catch share (or LAPP) programs.³ Secondly, there have also been reviews of other LAPP programs that could serve as examples. Thirdly, public comment is another informative and important resource to influence the policy scope of issues highlighted for the review.

The goals of the Halibut and Sablefish IFQ Program

In 1991 the Council recommended an IFQ program for the management of the fixed gear (hook and line) halibut and sablefish fisheries off of Alaska.⁴ The Secretary of Commerce approved the Council's IFQ program as a regulatory amendment in 1993, and the program was implemented by NMFS for the fishing season in 1995. The fundamental component of the IFQ program is quota shares, issued to participants as a percentage of the quota share pool for a species-specific IFQ regulatory area, which is translated into annual IFQ allocations in the form of fishable pounds.

The IFQ program was developed to address issues associated with the race-for-fish that had resulted from the open-access and effort control management of the halibut and sablefish fisheries. Specifically, the Council identified several problems that emerged in these fisheries due to the previous management regime, including increased fishing, processing, and marketing costs without increasing catch, decreased product quality, sablefish and halibut prices, and the availability of fresh halibut, increased conflicts among halibut fishermen, sablefish fishermen, or other interest groups, adverse effects on halibut and sablefish stocks, and unintended distributions of benefits and costs.

² See for example "Changes under Alaska's halibut and sablefish IFQ program 1995 through 2014: [Halibut and Sablefish](#)" and the "Report to the Fleet" for 2012. The Report to the Fleet is also available for previous years online as well: <http://alaskafisheries.noaa.gov/ram/ifqreports.htm>

³ NMFS is currently in the process of developing guidance for conducting reviews of catch share programs in coordination with all regional fishery management councils.

⁴ The final SEIS/EA for Amendments 15/20, the IFQ management alternative is available at: https://alaskafisheries.noaa.gov/analyses/groundfish/Amd15_20seis.pdf.

In the original Supplemental Environmental Impact Statement for the IFQ program, the Council identified 10 policy objectives that it intended to address through specific elements of the IFQ program. Specifically, in selecting the elements of the IFQ program the Council attempted to do the following:

- 1) Address the problems that occurred with the open-access management regime.
 - The Council identified 10 specific problems: Allocation conflicts, gear conflicts, deadloss from lost gear, bycatch loss, discard mortality, excess harvesting capacity, product wholesomeness, safety, economic stability in the fisheries and communities, and rural coastal community development of a small boat fleet.
- 2) Link the initial quota share allocations to recent dependence on the halibut and sablefish fixed gear fisheries.
- 3) Broadly distribute quota share to prevent excessively large quota share from being given to some persons.
- 4) Maintain the diversity in the fleet with respect to vessel categories.
- 5) Maintain the existing business relationships among vessel owners, crews, and processors.
- 6) Assure that those directly involved in the fishery benefit from the IFQ program by assuring that these two fisheries are dominated by owner/operator operations.
- 7) Limit the concentration of quota share ownership and IFQ usage that will occur over time.
- 8) Limit the adjustment cost to current participants including Alaskan coastal communities.
- 9) Increase the ability of rural coastal communities adjacent to the Bering Sea and Aleutian Islands to share in the wealth generated by the IFQ program.
- 10) Achieve previously stated Council goals and objectives and meet Magnuson-Stevens Act requirements.

The intent of this review is to assess the impacts of the IFQ program with respect to these initial 10 policy objectives.

Annotated proposed table of contents

Given that this will be the first comprehensive review of the halibut and sablefish IFQ program since its implementation 20 years ago, there is the potential for this review to become extensive. While the intent is for the review to be comprehensive, it is not intended to be an exhaustive study of any one issue. Although the Council may choose to focus on some issues more specifically, a rigorous evaluation of specific issues may be better suited for a discussion paper or analysis.

The analysts' intention for the review is to evaluate the impacts of the program with respect to the Council's 10 original policy objectives for the program.⁵ There is substantial overlap between many of these objectives. Given this, many of these objectives have been aggregated into single sections in the table of contents, with sub-sections discussing specific issues as summarized in the paragraphs below each section heading.

The review will use quantitative and qualitative analyses to focus on the present status of the fisheries in relation to the 10 objectives and to changes since the implementation of the program. Findings from

⁵ Although not expressly addressed in this proposed outline, objective 10 of the original EIS ("achieve previously stated Council goals and objectives and meet MFCMA requirements") is woven in throughout this analysis.

relevant literature will also be utilized whenever possible. The analysts note that most of these objectives are broad and do not include specific, measurable objectives. In addition, many of these objectives overlap while others are inherently conflicting. As a result, the analysts are unlikely to be able to quantify or make definitive statements about whether or not the program is meeting any or all of the policy objectives. Rather, the intent is to provide information on the status and evolution of the IFQ program with respect to these policy objectives to the extent practicable.

0. EXECUTIVE SUMMARY

The executive summary will be developed to be a stand-alone document. It will include summaries of the key findings of the IFQ program review.

1. BACKGROUND INFORMATION

1.1. INTRODUCTION

This section will provide all of the background information on the review and the objective of the review. It will detail the requirements for a program review and available authoritative guidance. It will lay out the outline of the analysis and describe the data sources that are used within the document. Primary data sources include NMFS's Restricted Access Management program's harvest and administrative data, Alaska Department of Fish and Game fish tickets sourced through AKFIN, information from Commercial Operator's Annual Report (COAR) containing production data self-reported annually, NMFS's IFQ loan program data, IPHC's biological management data, and NIOSH's safety data. If data are used from sources that are not traditionally relied on in Council analyses, a more detailed description of the data collection and analysis methodology will be included in an appendix to the review.

1.2. DESCRIPTION OF MANAGEMENT

Given that this is the first comprehensive review of the IFQ program, it is the analysts' intention to include an extensive description of the program, inclusive of all the original management elements of the program and how they have been amended over the last 20 years. It is expected that a comprehensive description of the IFQ program is necessary for understanding how the program is performing with respect to the Council's original objectives and how it has impacted participants, stakeholders, and communities.

The description of management section will include background information on how the halibut and sablefish fisheries are prosecuted and the management of the fisheries prior to the IFQ program. Similar elements have been included in program descriptions in previous LAPP reviews for the Council. The remainder of the description section is outlined below.

- 1) Stated objectives of the IFQ program
- 2) Total allowable catch
- 3) Quota share – initial allocation

This section will be a description of the biological management of the two fisheries and the designated management areas.

This section will be a description of how quota shares were initially allocated (including CDQ compensation quota share) and how shares are translated into annual IFQ pounds.

4) Quota share – use provisions

This section will be a description of the use privileges associated with quota shares by quota share type and different entities (i.e. initial recipient or second-generation shareholder; individual or business entity). This section will include information about the vessel class and area designation for quota shares (and changes to these over the course of the IFQ program), the hired skipper use privilege for initial recipients and the owner-on-board mandate for second generation shareholders, and the overage and underage allowances for quota shareholders.

5) Quota share – transferability provisions

This section will be a description of the quota share and IFQ transferability provisions by quota share type and different entities (i.e. initial recipient or second-generation shareholder; individual or business entity). This section will include a description of the eligibility provisions to acquire quota share by vessel class and area, the restrictions on IFQ transferability or leasing and the exemptions under which catcher vessel IFQ may be leased, the quota share block program and sweep up provisions, and accumulation caps (individual and vessel use caps).

6) The Community Quota Entity (CQE) program

This section will be a brief description of the CQE program. The intent of this section will be to provide a general description of the CQE program as the program will be discussed in relation to specific issues highlighted in the review (e.g., the owner-on-board mandate and new entry). The CQE program was reviewed by the Council in 2010. As a forthcoming appendix to the IFQ program review, there will also be a brief review of the CQE program providing an update to the 2010 CQE report.

7) The Halibut Charter Sector

This section will be a brief description of the changes to the quota share and IFQ trading provisions between the commercial and charter fishing sectors beginning in 2014. The potential impacts of the leasing opportunity under the guided angler fish (GAF) provisions will be discussed in the context of potential impacts on IFQ participants.

2. ANALYTICAL SECTION

2.1 OVERALL TRENDS IN THE IFQ FISHERIES AND CONTEXT FOR THIS ANALYSIS

Prior to presenting the analytical section of the review, addressing the impacts of the IFQ program with respect to its 10 original policy objectives, we propose to highlight some of the overall changes in the halibut and sablefish fisheries and the IFQ program. Perhaps one of the most significant impacts on IFQ participants has been the decreasing TACs in the halibut and

sablefish fisheries since the late 2000s. The potential impacts of the IFQ program on the biological management of the halibut and sablefish fisheries will be discussed in more detail under the section “Biological Management Issues.” Herein, we will discuss broadly how the decreasing TACs may be impacting IFQ participants.

The overall management context of the IFQ program for the 20 years since its implementation has largely been one of decreasing restrictions over time. The one overarching exception to this has been with respect to the owner-operator characteristic of the fleet. The Council has repeatedly re-asserted its position on limiting hired skipper use and catcher vessel quota share acquisition by non-individual entities in an effort to continue progress toward fully individual owned and owner-operated IFQ fisheries. At the same time, however, the Council elected to authorize certain communities to be able to form community quota entities (CQEs), which can purchase halibut and sablefish quota shares and lease the resultant IFQ to their residents, and more recently to allow the charter sector to lease IFQ as guided angler fish (GAF) from the commercial sector. To some degree the lease provisions in the CQE and the GAF programs contradict the Council’s broader objective of transitioning the IFQ fleets towards becoming wholly individual-owned and owner-operated. Herein, we will discuss the regulatory history of the IFQ program with respect to trends in the Council’s vision for the program.

In the years since the implementation of the IFQ program, some of the most important impacts on IFQ participants have taken place outside of the management framework of the IFQ program. It is important to keep this broader context in mind when reviewing the IFQ program itself. We will briefly discuss how management regimes in other Alaskan fisheries may be impacting IFQ participants.

Many of the provisions in the IFQ program are differentiated by IFQ regulatory area and were intended to protect the unique characteristics of the fleets across these areas. For example, at the time of implementation of the IFQ program, shareholders in the IFQ regulatory areas, which roughly correspond to Southeast Alaska (halibut Area 2C and the sablefish Southeast Outside area), were more constrained in how much quota share they could hold and fish on any one vessel through the individual and vessel use caps, respectively. Furthermore, individual initial recipients in these southeast regulatory areas, unlike those in other regulatory areas, may also not use hired skippers to fish their annual IFQ allocations. Although it is difficult to isolate the impacts of differentiated provisions from inherent differences in fleets across regulatory areas, this section will also summarize how participation varies across the areas and, to the degree possible, link those differences to distinct regulatory provisions.

2.2 LESSONS LEARNED FROM INITIAL ALLOCATIONS

This section will address Objectives 2 and 3 of the original EIS for the program.

- Objective 2: Link the initial quota share allocations to recent dependence on the halibut and sablefish fixed gear fisheries
- Objective 3: Broadly distribute quota share to prevent excessively large quota share from being given to some persons.

The mechanisms by which initial allocations were administered in the IFQ program will be discussed under the “Description of Management” section. In this section we intend to focus on the underlying reasoning for these allocations with respect to Objectives 2 and 3. Furthermore, this section will discuss the potential implications of these allocation decisions, especially with respect to immediate consolidation and regulatory changes following the implementation of the program. Specifically, this section will provide a discussion of how broad quota share distribution resulted in some fishermen not having enough IFQ pounds to make economically worthwhile fishing trips, which resulted in significant consolidation in the first couple of years of the IFQ program and in the Council lifting some of the restrictions on consolidation.

This section will be informed with data on quota share transfers since IFQ implementation, including quota share transfer rates by area – the percent of total quota shares that were transferred in a given year, the quota shareholder transfer rate – the percent of total quota shareholders that transferred quota shares, and the average amount of quota shares that were transferred. Trends in these variables will serve as a starting point for the discussion of how broad initial quota share allocations may have impacted consolidation immediately following IFQ implementation. Several studies conducted after the first several years of the IFQ program may also be used to inform this section of the review.⁶

2.3 HARVESTING FLEXIBILITY, CAPACITY AND CONSOLIDATION

This section will address Objectives 1, 4, and 7 of the original EIS for the program.

- Objective 1: Address the problems that have occurred with the current management regime – excess harvesting capacity, allocation conflicts, gear conflicts, product wholesomeness
- Objective 4: Maintain the diversity in the fleet with respect to vessel categories.
- Objective 7: Limit the concentration of quota share ownership and IFQ usage that will occur over time.

Because Objectives 1, 4, and 7 affect similar components of the IFQ program and are achieved through the same mechanisms (e.g., harvesting flexibility and quota share transferability), Section 2.3 will include several sub-headings, including gear conflicts, allocation conflicts, product wholesomeness, harvesting capacity, and fleet diversity.

2.3.1 Gear Conflicts

It was anticipated that the IFQ program would reduce gear conflicts within and between the halibut and sablefish fisheries by providing greater flexibility in when fishermen may participate in the fisheries. (Reductions in interactions between fishermen could also stem from decreases in the numbers of vessels in the fisheries as a result of consolidation

⁶ Alaska’s Commercial Fisheries Entry Commission generated two research reports after the first several years of the IFQ program, available here: [sablefish](#) and [halibut](#).

Knapp, G. (1997). Initial effects of the Alaska halibut IFQ program: survey comments of Alaska fishermen. *Marine Resource Economics*, 239-248.

Hartley, M., & Fina, M. (2001). Changes in fleet capacity following the introduction of individual vessel quotas in the Alaskan Pacific halibut and sablefish fishery. *FAO Fisheries Technical Paper*, 186-207.

under the IFQ program). However, it was also anticipated that longer halibut and sablefish fishing seasons could potentially increase gear conflicts with the groundfish trawl fisheries, because the trawl fleet could not as easily avoid halibut and sablefish fishermen if they could be at sea for nine months versus two weeks. Historical conflicts between pot longline gear and hook-and-line fishermen led to Amendment 14, which was implemented prior to the IFQ program and designated the area east of 147° W. longitude as hook-and-line only and phased out the pot longline fishery in the Central and Western Gulf of Alaska, allocating that allowable harvest to the hook-and-line fleet. (In April 2015 the Council passed a Motion to authorize pot longline gear in the Gulf of Alaska sablefish IFQ fisheries.)

Given that gear-conflicts between IFQ fishermen and between IFQ fishermen and those participating in other fisheries are not tracked, there is no data (to our knowledge) that could be used to inform an analysis of the impacts of the IFQ program on such conflicts. Similarly to previous analyses of gear conflicts for regulatory amendments to the IFQ fisheries, the IFQ program review will focus on providing a qualitative approach to analyzing the impacts of the IFQ program on gear conflicts in addition to citations of relevant literature whenever possible. For example, in the first several years of the IFQ program, Knapp (1997) found that “reduced interactions with other fishermen” was one of the benefits cited by IFQ participants surveyed about the impacts of IFQ implementation, (see Footnote 11).

2.3.2 Allocation Conflicts

With respect to allocation conflicts, it was recognized at the time of program implementation that the IFQ program could actually engender controversies between various stakeholders. Specifically, analysts for the original EIS for the program highlighted that the initial allocations under the IFQ program necessarily excluded certain user groups (e.g., crewmembers), that initial recipients would receive much of the benefits of the program at the cost of future participants who would have to pay for quota shares, and that the public in general would have to pay for the management and enforcement costs of the program. Impacts of the IFQ program on crewmembers will be discussed in detail under the “Crewmember Impacts” section. With respect to the costs to the public, the IFQ program does have a system of recovering the incremental costs related to management, monitoring and enforcement, which will be described in the program review under “Management Costs and Recovery.” Inter-generational distributions of the benefits of IFQ program implementation will be discussed further in the “Entry Opportunities” section.

It was also recognized during IFQ implementation that conflicts may arise between fishermen and CDQ communities over allocations. The Council and NMFS sought to address issues with issuing halibut and sablefish CDQ allocations by allocating CDQ compensation quota share, described in more detail in the “Description of Management” section.

Allocation conflicts could have also emerged due to quota share designation by vessel class, if members of one vessel class believed they should have access to quota that they perceived was being operated in a less efficient manner by another vessel class. However, the Council explicitly included maintaining fleet diversity amongst its objectives for the program. We propose to discuss quota share distributions and trading restrictions between vessel classes in the section “Fleet Diversity.”

Given that these allocation issues are discussed elsewhere, Section 2.3.2 will provide a broader discussion of how allocation issues may or may not have been addressed with initial allocations.

2.3.3 Product Wholesomeness

The IFQ program was anticipated to lead to improvements in product wholesomeness by increasing fishermen’s flexibility in when and how they fish, prolonging the fishing season and allowing fishermen to respond to market incentives. As such, it was anticipated that the quality of the landed product would improve and that fishermen and processors could take advantage of the fresh market for halibut and the seasonal consumption patterns for sablefish. Product quality improvements and better targeting of markets were expected to result in higher ex-vessel prices in both fisheries.

This section is intended to provide a discussion of changes in product wholesomeness for both IFQ species since implementation of the IFQ program. To the extent possible, the analysts will use COAR data on product form (fresh versus frozen) and ex-vessel prices to assess changes in product wholesomeness since IFQ implementation. It is expected that ex-vessel prices should to some degree capture changes in product form (although ex-vessel prices will also reflect changes in marketing strategies and broader trends in supply and demand).

2.3.4 Harvesting Flexibility

Many of the benefits that were anticipated to materialize from the implementation of the IFQ program (e.g. longer fishing seasons, better product, less gear conflict) were associated with the flexibility that would be afforded by quota share allocations. The majority of these effects are discussed under other sections of this outline. In this section, the analysts will discuss the 10% adjustment policy (underage and overage), which was intended to provide additional flexibility benefits to IFQ participants, and the inter-area harvest provision that was implemented in 2005 allowing harvest of halibut Area 4C IFQ and CDQ in Area 4D.

Under the 10% adjustment policy, which has been in place since the start of the IFQ program, a person’s annual IFQ allocation may be adjusted by up to 10% to cover under or over harvest from the previous year. In this section, the analysts will assess the annual utilization of the 10% adjustment provision in the IFQ fisheries since IFQ

implementation. This will include a presentation of time-series data of the total amounts of IFQ that were transferred as underage or overage adjustments and of the total number of permits that were subject to such adjustments. To the extent practicable, this time-series data will be area-specific.

In 2004, in response to localized depletion and resultant limitations to the optimal utilization of Area 4C IFQ (and CDQ), the Council passed an Omnibus (IV) amendment package providing for the harvest of Area 4C IFQ (and CDQ) in Area 4D. This section will, therefore, also include data on the utilization of the inter-area harvest provision for Area 4C halibut IFQ holders. Such utilization should be reflected in the inter-annual changes in the harvest of Area 4C IFQ following the implementation of the 2005 amendment. However, other factors such as seasonal weather patterns and resource accessibility would also affect this harvest. The utilization of CDQ halibut will not be addressed in the IFQ Program Review.

2.3.5 Harvesting Capacity

In developing the IFQ program, the Council sought to balance addressing the problems with the race for fish (including excess harvesting capacity⁷ and gear conflicts) that had resulted from the previous management regime and preventing excessive consolidation. In addition, in order to ensure that the benefits of implementing the IFQ program were spread amongst a large number of participants the Council allocated quota shares to as many participants as possible, introducing more people into the two fisheries. In effect, the Council implemented countervailing provisions into the IFQ program to try to affect these contradictory goals. One of the tools that the Council employed to try to minimize consolidation was use caps, limiting the amount of quota shares that could be held by participants (quota share use caps) and the amount of IFQ that could be landed on any one vessel in a season (vessel IFQ caps).

The analysts will analyze capacity and consolidation across the IFQ fisheries and examine the efficacy of the individual and vessel use caps with respect to achieving management goals for the IFQ program. This section will include information about trends in indicators of consolidation (with respect to the level of the individual as well as the vessel.) The analysts propose to present time-series data on quota shareholders and holdings, including average holdings and distributions by ranges of holdings, and on average landings and shareholders per vessel. (Consolidation indicators at the community level will be presented under the Community Impacts section). This section will also include time-series data on the percentage of shareholders by area who are near the quota share use caps and on the percentage of vessels by area that are near the vessel use caps, providing a discussion of how changes in the TACs may be making these caps more

⁷ Harvesting capacity may be defined with respect to inputs (e.g., the capacity of the fleet to harvest fish expressed in terms of gross tonnage and hold capacity) or outputs (the maximum amount of fish that the fishing fleet can expect to catch). For the former see: (<https://stats.oecd.org/glossary/detail.asp?ID=1202>) and for the latter: (http://www.nmfs.noaa.gov/ocs/mafacs/meetings/2008_11/docs/capacity_mafac110508.pdf).

binding. The analysts will also explore the linkages between differentiated area-specific vessel and quota share use caps and consolidation.

In addition to this summary information, the analysts propose including commonly-used metrics of inequality (the Gini coefficient) and of market power (the Herfindahl-Hirschman Index (HHI)). Both of these metrics can be used to assess quota share and landings concentration and in addition to time-series data on quota shareholdings and consolidation provide a tool for analyzing the IFQ program with respect to the objectives of addressing excess harvesting capacity and limiting consolidation. The analysts propose to present these metrics over the 20 years since the implementation of the IFQ program in order to examine whether these metrics have stabilized over time.

2.3.6 Fleet Diversity

In the IFQ program catcher vessel quota shares are designated by vessel class, specific to vessel length, and inter-class trading of quota shares is prohibited. The Council's intention was to prevent a redistribution of fishing privileges amongst vessel classes. However, inter-class quota share trading constraints limited the potential efficiency gains that could have been had with an unrestricted market. Although these gains would have likely occurred at the price of more widespread fishing opportunities and employment in the fisheries.

In this section, the analysts will present summary data on quota share distributions by vessel class. These distributions were essentially fixed at the time of IFQ implementation, with minor changes over the last 20 years as a result of administrative revocations. However, the fish up and the fish down provisions do provide shareholders with some opportunities to move quota shares across vessel classes. Therefore, in this section the analysts will also present time series data on the distribution of fishery value by vessel length and on the utilization of the fish up and fish down provisions as represented by the amount of quota shares fished across vessel classes.

Given that maintaining fleet diversity was anticipated to have costs, with respect to limiting economic efficiency gains that could be had with an unrestricted market, in this section the analysts will also provide some discussion of the efficiency and distributional tradeoffs of inter-class trading constraints. This section will be informed by a discussion of the differences between vessel class quota share prices as well as recent literature on the efficiency costs of quota share trading restrictions.⁸ Quota share prices should reflect the present discounted value of future earnings expectations in the fishery. The analysts will also seek to provide information on the distributional tradeoffs of quota share trading restrictions, including maintaining employment and fishing opportunities.

⁸ Kroetz, K., J.N. Sanchirico, D.K. Lew (2015). Efficiency costs of social objectives in tradable permit programs. *Journal of the Association of Environmental and Resource Economics*, 2:3, 339-366.

Fleet diversity is also a factor of vessels participating across multiple areas and/or multiple fisheries. By providing for much longer fishing seasons and increased flexibility in how fishermen can participate in the IFQ fisheries, the IFQ program may have provided shareholders with the opportunity to diversify into multiple areas and multiple fisheries. Therefore, the analysts will also present time series data on fleet diversification, with respect to diversification into multiple areas and/or multiple fisheries, at the vessel level.

2.4 CREWMEMBER AND PROCESSOR IMPACTS

This section will address Objective 5 of the original EIS for the program.

- Objective 5: Maintain the existing business relationships among vessel owners, crews, and processors

2.4.1 Crewmember Impacts

At the time of implementation of the IFQ program, it was recognized that the program would likely increase the relative bargaining strength of whoever controlled the quotas. In other words, the increase in bargaining strength for initial quota share recipients would be relative to a decrease in bargaining strength for crewmembers and processors. After some discussion of including crewmembers among the initial recipients, the Council elected to allocate quota shares only to persons who owned or leased a vessel with fixed gear sablefish or halibut landings off Alaska during the qualifying period. This was intended to provide those who had borne the greatest financial risk in developing the harvesting sector with initial quota share allocations and to ensure a smooth transition to IFQ management by maintaining business relationships within the harvesting sector. The investment of crewmembers in the fisheries was recognized through the mandate that catcher vessel quota share acquisition by transfer be limited to bona fide crewmembers (i.e. those with 150 days of commercial fish harvesting experience in a U.S. commercial fishery) and initial quota share recipients.

The intent of this section is to discuss the relationships between vessel owners and crewmembers in the IFQ fisheries. Specifically, this section will provide a discussion of how the IFQ program may have affected the bargaining power of crewmembers due to consolidation and the elimination of vessels and associated crew jobs. This section will also include a discussion of how the IFQ program may have affected crewmember earnings. The following paragraphs outline potential ways in which, in the face of limited data on crew numbers and earnings, the analysts could provide information for this section.

There is limited data on crewmembers in the IFQ fisheries. The following two paragraphs describe potential ways in which the limited information that does exist on IFQ crewmembers could be extrapolated to estimate crewmember numbers and earnings. These estimates would have to be heavily qualified, with descriptions of the limitations of

the data and of the methodology applied to derive these estimates. The analysts look to the SSC to provide guidance on whether the quantitative information produced from this process could be utilized to inform this section of the IFQ program review. An alternative to the approach described below would be to provide strictly qualitative information, using IFQ participant input to help formulate descriptions of how the IFQ program may have impacted crewmembers in these fisheries.

Since 2006, crew sizes have been reported on fish tickets for halibut and sablefish in e-Landings. Taken together with the vessel length information included on fish tickets, the analysts can create distributions of crewmembers by vessel class and apply those to estimate total crewmember jobs, given the number of vessels per class. These distributions can be applied retroactively to estimate changes in crewmember numbers over time. The “crew size” field on fish tickets is not audited. Therefore, the analysts propose to validate (to the extent possible) the crewmember numbers estimated from above with input from IFQ participants and any other relevant information available from the literature. For example, the results of a 2009 NMFS survey of IFQ participants⁹ include estimates of crew distributions and crew, captain, and boat shares (as a percentage of gross revenues).

If estimates of crewmember numbers and crew, captain and boat shares are consistent with those provided by IFQ participants, the following describes a potential methodology that could be applied to generate estimates of crewmember earnings. Using the average ex-vessel price (specific to an IFQ area and year) and the weight of fish sold, the analysts may be able to estimate gross revenues per vessel. By applying the crew sizes and shares (crew, captain, and boat) estimated above and assuming that the boat share is a deduction for the operating costs, we may also be able to provide ballpark estimates of crewmember earnings. (If the boat share is not the deduction for the operating costs, the results of the 2009 survey also include information providing a range of estimates for various operating costs as a percentage of gross revenues.) However, we would look to IFQ participants to provide information on whether this is how operating costs are usually deducted from revenues and potentially to ground truth the derived estimates of earnings. The impacts of specific programmatic provisions on these shares and earnings, e.g. leasing and hired skipper use, may be explored as well, but will likely be limited to more qualitative information.

The analysts will also seek to provide information on changes in crewmember leverage and tenure of employment as a result of the implementation of the IFQ program. Changes in crewmember leverage should, to a degree, be captured in changes in average crewmember earnings. For those who remained in the fishery, the tenure of crewmember employment likely changed due to the lengthening of the IFQ fishing seasons, potentially

⁹ See: <https://alaskafisheries.noaa.gov/sites/default/files/reports/noaa-tm-akr11-sablefish-halibut-qsholders.pdf>

providing more stable employment. This section would benefit from IFQ participant input as well as any relevant literature.

2.4.2 Processor Impacts

The IFQ program was anticipated to shift some power from processors to quota shareholders as the latter gained the flexibility to decide when and where to land their fish. Furthermore, changes in processing needs especially in the halibut fishery (from a primarily frozen to an increasingly fresh market) resulting from the lengthening of the fishing seasons, allowed fishermen to enter into custom processing or wholesale arrangements.

This section will provide a discussion of the shifts in processing capacity, bargaining strength, and market share between fishermen and processors that resulted from the IFQ program, utilizing existent literature, and quantitative and qualitative information to the extent possible. The impacts of the IFQ program on processing with respect to product quality will be explored in detail in the “Product Wholesomeness” section. Regional and community shifts in processing will be covered in detail under the “Community Impacts” section.

2.5 OWNER-OPERATOR CHARACTERISTIC OF THE FLEET

This section will address Objective 6 of the original EIS for the program.

- Objective 6: Assure that those directly involved in the fishery benefit from the IFQ program by assuring that these two fisheries are dominated by owner/operator operations

One of the original objectives for the IFQ program was to ensure that the sablefish and halibut fisheries were dominated by owner-operator operations. However, several provisions were included in the program that allowed for outright or de facto leasing.

Since the beginning of the IFQ program, the Council has focused its efforts for an owner-operator fleet on the catcher vessel fleet. IFQ derived from catcher processor (or Class A) shares have been eligible for leasing since program implementation. Leasing of IFQ derived from catcher vessel shares has generally been prohibited since 1998. However, several provisions have been implemented allowing leasing of catcher vessel IFQ under special conditions, including medical leases, survivorship transfer privileges, military leases, leases through CQEs, and IFQ to GAF transfers.

At the implementation of the IFQ program, the Council sought to balance providing initial recipients with the flexibility to continue in the business practices that they had had prior to the IFQ program (Objective 5) and to provide for an ultimate transition of the catcher vessel IFQ fleets to becoming owner-operated (Objective 6). Therefore, the Council mandated that catcher vessel shareholders be on board the vessel while their IFQ is being fished, but provided an exception to individual initial recipients of catcher vessel shares, who may use hired skippers to harvest their catcher vessel IFQ. Non-individual entities (e.g., corporations, partnerships, etc.) by definition have to use hired skippers to harvest their annual IFQ allocations. The Council also

prohibited the acquisition of catcher vessel quota shares by non-individual entities unless those entities were initial recipients of catcher vessel shares.

The Council has repeatedly expressed its frustration at the slow transition of the catcher vessel fleet towards full ownership by owner-operators due to the increasing use of hired skippers by initial quota share recipients and has on five occasions tried to address this with amendments to the hired skipper use provision. This transition has been slowed primarily by two factors: 1) an increasing use of hired skippers by individual initial recipients and 2) the continued ownership of catcher vessel quota shares by non-individual entities (e.g. corporations, partnerships, etc.).

In Area 2C of the halibut fishery and the Southeast Outside area of the sablefish fishery, the Council implemented additional provisions intended to protect the historically owner-operator characteristic of the catcher vessel fleets in these areas. In these areas, the Council prohibited any individuals from using hired skippers and the acquisition of catcher vessel quota shares by non-individual entities (including those that were initial recipients) by transfer. Therefore, this section will also include an assessment of these differentiated regulations on the catcher vessel fleet in these areas.

In this section, the analysts will discuss the potential financial incentives for leasing. The analysts will also show trends in leasing in the IFQ fisheries, through Class A IFQ leases, medical transfers, survivorship transfers, military leases, CQE leases, and IFQ to GAF transfers. To the extent possible, the utilization of each of these leasing provisions will be presented as a factor of the number of transfers, transferors, and the amount of leased IFQ. The medical, survivorship, and military leases are all emergency transfer provisions, intended to provide temporary relief to shareholders in times of hardship. Therefore, in assessing the utilization of these three catcher vessel IFQ lease provisions, the analysts will also look at the consecutive numbers of years that these provisions are being utilized by the same shareholders. This section will also focus on trends in the halibut and sablefish IFQ fisheries with respect to hired skipper use as a factor of the increasing use of hired skippers by individual initial recipients and the continued ownership of catcher vessel quota shares by non-individual entities.

2.6 ENTRY OPPORTUNITIES

Providing entry opportunities for new participants (i.e. non initial recipients of quota shares) is implicit to many of the objectives of the IFQ program (e.g., owner-operator characteristic of the fleet, limiting consolidation, maintaining fleet diversity). In addition, analysts for the original EIS for the IFQ program recognized that initial allocations could result in inter-generational equity issues as the benefits of program implementation, with respect to rent accrual, flow largely to initial recipients. In this section, we will discuss the impacts of implementing the IFQ program on non-initial recipients of quota shares in the halibut and sablefish fisheries.

This section will include a discussion of quota share transfer activity since the implementation of the program. Quota share transfer rates (the percentage of the available quota share - either specific to an area or a vessel class and area - that is being transferred) are expected to have been high in the first couple years but should have stabilized over time, as participants adjusted to the IFQ program. The analysts also intend to include the distribution of IFQ shareholders by age, presenting past distributions to the extent possible. Quota share transfer rates may be expected to

respond to a right skewed age distribution of shareholders, unless aging shareholders are able to retain their quota shares without directly participating in the fisheries.

This section will also explore the differentiated accessibility into the IFQ fisheries for initial recipients and second-generation shareholders (i.e., non-initial recipients), using (to the extent possible) information on quota share availability, quota share transfer prices, transfer types, and financing since the implementation of the IFQ program. Given that initial recipients were given quota shares gratis and that initial recipients may use the equity in their initially-issued quota shares as leverage to purchase additional quota shares, initial recipients may have an advantage in the quota share market. To the degree that some initial recipients gift their quota shares to some second-generation shareholders, inequities in accessibility may be perpetuated. Furthermore, over the last several years, accessibility into the IFQ fisheries may have become more difficult due to limitations on lending. Due to decreasing TACs, the principal balances of quota share loans in some IFQ regulatory areas are slightly greater than the estimated current market value of the underlying quota. In order to reduce the risk of defaults, the NMFS Financial Services Division may be limiting lending for halibut and sablefish quota shares.

This section will also include a discussion of the block program, which was intended to ensure that small quantities of quota shares are available in part for new entrants, and the sweep up provision, which was intended to provide that small quantities of shares could be swept up into harvestable amounts of IFQ. In particular, the impacts of a 2007 amendment, which provided for increased numbers of blocks that may be held by shareholders in the halibut IFQ fishery and for increased amounts of sweepable quota pounds, will be evaluated. One potential way of doing this would be to test whether there is a structural change in a model of new entry following the 2007 amendment (e.g. of the count of new entrants).

Relevant literature will be cited to the extent possible, including a NMFS (2009) survey of quota shareholders that asked about intentions to purchase quota shares and considerations in that decision. This section would also greatly benefit from stakeholder input about entry opportunities and impediments, including knowledge of loan programs and access to financing.

2.7 COMMUNITY IMPACTS

This section will address Objectives 1, 8, and 9 of the original EIS for the program.

- Objective 1: Address the problems that have occurred with the current management regime - economic stability in the fisheries and communities, and rural coastal community development of a small boat fleet.
- Objective 8: Limit the adjustment cost to current participants including Alaskan coastal communities.
- Objective 9: Increase the ability of rural coastal communities adjacent to the Bering Sea and Aleutian Island to share in the wealth generated by the IFQ program.

In developing the halibut and sablefish IFQ program, the Council was concerned with the potential impacts of the program on coastal communities. Many of the provisions included in the

program to protect small operators and the owner-operator characteristic of the fleet were also intended to ensure that the benefits of the IFQ fisheries flowed to coastal communities. This section will assess the effects of the IFQ program on communities, with respect to both quota share holdings and landings.

The IFQ program was anticipated to change processing needs especially in the halibut fishery as the market shifted from a frozen to a fresh product. Remote communities, which could compete in the pre-IFQ processing market of mostly frozen product, were anticipated to be less competitive in a fresh market reliant on moving product more quickly, by air or road. It was also expected that some processing would shift from outside of Alaska into Alaska as the switch to a fresh market would mean that processors closer to the fishing grounds would potentially be able to offer higher ex-vessel prices. (Given that transit time to Seattle would mean the Seattle ports were receiving fish that was already several days old.) In effect it was anticipated that the IFQ program would release some of the previous constraints on processing and lead to a mix of frozen and fresh product, but that this was likely to come at the cost of shifting processing out of some communities.

This section will assess changes in quota share holdings and landings for Alaska, Washington, Oregon, and other states. Given that the Council also made an explicit reference to rural communities in its objectives for the program, the effects of the IFQ program with respect to quota share holdings and landings on rural Alaskan communities will also be assessed, wherein rural is defined as a community with less than 2,500 people, based on the U.S. Census Bureau definition, although there are other potential ways of defining rural communities.¹⁰ Information on quota shareholdings and landings by specific communities is provided in publicly available reports through NMFS.¹¹ It is not staff's intent to reproduce these community-level reports for this review but rather to provide this information on the aggregated level that was identified in the Council's original objectives.

With respect to both quota shareholdings and landings by community, the analysts will present time-series data across the identified categories of communities. Previously, researchers utilized halibut quota share transaction data from 1994 to 1999 to examine whether quota shareholdings were migrating away from small, remote Alaskan fishing communities and to assess whether community-based factors influence an individual's decision to buy or sell quota shares.¹² To the extent that similar data is available for the years 2000 through 2015, such an analysis could be replicated with different community attributes of interest. For example, during the presentation of the outline of topics for the IFQ Program Review in December of 2015, the Council recommended that communities be stratified with respect to transportation (road access and airports) for this section of the review. Such a distinction is particularly applicable to examining impacts of the IFQ program on communities with respect to processing, as the shift towards an increasingly fresh product especially in the halibut fishery increased the need for processors' access to transportation. Time-series data of landings in the IFQ fisheries could also be utilized to

¹⁰ For example, eligibility to participate in the CQE program is constrained to communities with a population of fewer than 1,500 people.

¹¹ See Halibut Transfer Report: <http://alaskafisheries.noaa.gov/ram/halibut-transferfrpt2015.pdf>; Sablefish Transfer Report: <http://alaskafisheries.noaa.gov/ram/sablefish-transferfrpt2015.pdf>; and Report on holdings of IFQ by residents of selected Gulf of Alaska fishing communities: http://alaskafisheries.noaa.gov/ram/reports/ifq_community_holdings_95-12.pdf

¹² Carothers, C., Lew, D. K., & Sepez, J. (2010). Fishing rights and small communities: Alaska halibut IFQ transfer patterns. *Ocean & Coastal Management*, 53(9), 518-523.

examine the changes with IFQ implementation, utilizing community attributes of interest (e.g., population, access to transportation) to stratify communities.

Researchers at NMFS's Alaska's Fisheries Science Center have developed community fisheries engagement and reliance indices, as well as social vulnerability and resilience indices, which may also be incorporated into this section of the IFQ program review.¹³ The former indices utilize information on commercial harvesting and processing, recreational fishing, subsistence fishing, and species-specific dependence, while the latter utilize a broader set of information including labor force participation, housing characteristics, poverty, population composition, personal disruption, and housing disruption. The AFSC has also been working to present these vulnerability indices by catch share program and to test how community vulnerability has changed over time. This suite of indicators could be a valuable asset to assessing the impacts of the IFQ program on communities.

Objective 9 relates to the implementation of the CDQ program. Since the CDQ program is a separate management program, it will not be reviewed as part of the IFQ program review. However, with respect to the participation of rural coastal communities in the IFQ fisheries, a recent analysis by Council staff for the development of the Pacific Cod CDQ fishery¹⁴ includes a description of CDQ resident participation in the CDQ halibut fishery and will be incorporated by reference.

2.8 FISHING VESSEL SAFETY

This section will address Objective 1 of the original EIS for the program.

- Objective 1: Address the problems that have occurred with the current management regime – Safety

Prior to the IFQ program, the race for fish in the halibut and sablefish fisheries resulted in very short fishing seasons that sometimes resulted in fishermen going out to sea in hazardous weather conditions and generally engaging in unsafe fishing practices. It was expected that longer fishing seasons, greater flexibility, and decreased capacity would provide safety benefits for participants in the halibut and sablefish IFQ fisheries. This section will provide summary information on several indicators of safety in the halibut and sablefish fisheries over the 20 years of the IFQ program.

2.9 BIOLOGICAL MANAGEMENT ISSUES

This section will address Objective 1 of the original EIS for the program.

- Objective 1: Address the problems that have occurred with the current management regime – Deadloss from lost gear, bycatch loss, discard mortality

One of the chief reasons for the implementation of the IFQ program was to address biological management issues for the halibut and sablefish fisheries associated with the race for fish that had emerged under the previous management regime. Prior to IFQ implementation, shortening

¹³ Engagement represents the scale of the fishing industry in the community while reliance represents the importance of the fishing industry in terms of numbers per resident. Broadly, vulnerability and resilience indices refer to a community's susceptibility and capacity to respond to change, respectively.

¹⁴ See: [C1 CDQ Pcod Public Review.pdf](#)

seasons and overcapacity in the fisheries had led to bycatch and discard issues as well as deadloss from lost and abandoned gear. In addition, the season length restrictions were not always effective at maintaining harvests within the area-specific TACs.

The intent of this section is to highlight how the IFQ program affected the biological management issues associated with the previous management regime for the halibut and sablefish fisheries. In response to comments from the IFQ implementation committee and public comment, any known linkages between the implementation of the IFQ program and the biology of the halibut and/or sablefish fish stocks (e.g., population dynamics, size-at-age, and localized depletion) will also be cited in this section, to the extent possible.

2.10 INSEASON MANAGEMENT

Harvest specifications establish specific limits on the commercial harvest of groundfish used to manage the groundfish fisheries. Harvest specifications establish the overfishing level (OFL), acceptable biological catch (ABC), and total allowable catch (TAC) for each species or species group.

Sablefish are assessed as one population in federal waters. However, sablefish is managed by area. TACs are established for the Bering Sea (BS), Aleutian Islands (AI), and four Gulf of Alaska sub-areas – Western (WGOA), Central (CGOA), West Yakutat (WY), and Southeast Outside (SE Outside).

The sablefish GOA, BS, and AI TACs are then allocated by gear type – trawl and fixed gear. The fixed gear TACs are fully allocated to the IFQ program, none of the TAC is set aside for sablefish caught incidentally in other fixed gear fisheries (i.e., in the Pacific cod and halibut IFQ fisheries), or wherein vessels have an IFQ holder on board with unused sablefish IFQ for that area. As a result of these incidental catches, sablefish harvests have exceeded the fixed gear TACs in some areas and in some years. However, the area TACs have not been exceeded since the implementation of the IFQ program because the trawl TAC allocation has not been fully harvested. NMFS does not consider this a current management issue, but recommends that the Council consider the potential for increased trawl harvest of sablefish under the Gulf of Alaska Trawl Bycatch Management Program.

This section will present times-series data of sablefish removals by gear type and area – fixed gear and trawl, with a breakdown of the fixed gear fleet by the directed IFQ fleet and incidental catch in the other fleets.

2.11 OTHER ISSUES

2.11.1 RECORD KEEPING AND REPORTING

Recordkeeping and reporting requirements for the IFQ fisheries include landing reports, logbooks, applications for quota share and IFQ transfers, payment of cost recovery fees, and annual reports for CQEs. In recent years, NMFS has transitioned a number of recordkeeping and reporting requirements from paper to electronic submissions from IFQ fishery participants. Electronic reporting is more efficient and less costly for fishery participants and for NMFS to process. Therefore, NMFS intends to continue to electronic recordkeeping and reporting methods to the extent practicable. This section will provide an overview of the current recordkeeping and reporting requirements for the IFQ fisheries

and provide an analysis of the impacts on fishery participants and NMFS of continuing the transition to electronic methods of recordkeeping and reporting.

2.11.2 OBSERVER PROGRAM

In 2013, NMFS made significant changes to the North Pacific Groundfish and Halibut Fisheries Observer Program, including how observers are deployed, how observer coverage is funded, and the vessels and processors that must have some or all of their operations observed. These changes should increase the statistical reliability of data collected by the program, address cost inequalities among fishery participants, expand observer coverage to previously unobserved fisheries, and improve fisheries management overall. The 2013 restructuring of the Observer Program also placed a lot more vessels participating in the IFQ fisheries under partial observer coverage, increasing their costs of participating in the fisheries.

This section will summarize how changes to the Observer Program may be impacting IFQ participants. Specifically, to the extent possible, the analysts will provide information on costs incurred by IFQ participants for the Observer Program and a discussion of the potential impacts of those costs. The intent of this section is not to address specific issues related to observer coverage in the IFQ fisheries, which are being examined as part of other analytical packages.

2.11.3 MONITORING AND ENFORCEMENT

Under the Magnuson-Stevens Act, Section 303A LAPPs are directed to include an effective system of monitoring and enforcement. This section is intended to highlight monitoring and enforcement changes in the halibut and sablefish fisheries since IFQ implementation, with respect to the types and distribution of violations. Any violations that have implications for how the IFQ program is meeting its 10 original policy objectives will be highlighted.

2.11.4 MANAGEMENT COSTS AND RECOVERY

The Magnuson-Stevens Act authorizes and requires NOAA Fisheries to collect fees to pay for the costs of management (including data collection and analysis, monitoring and enforcement activities) arising from the IFQ program. At the end of each fishing season, IFQ permit holders must remit payment to NMFS based on a percentage calculated from the ex-vessel value of the IFQ program fisheries and the incremental costs of managing the fishery. The Magnuson-Stevens Act limits the fee percentage to no more than three percent of the ex-vessel value of fish harvested under the IFQ program. The amount of cost recovery fees collected varies annually because total ex-vessel value and total program costs fluctuate from year to year.

NMFS calculates recoverable costs by adding together the incremental costs of management, data collection, and enforcement for the halibut and sablefish IFQ fisheries that would not have been incurred but for the implementation of the program. For

purposes of calculating IFQ cost recovery fees, NMFS distinguishes between two types of ex-vessel value: actual and standard. Actual ex-vessel value is the amount of all compensation, monetary or non-monetary, that an IFQ permit holder received as payment for his or her IFQ fish sold. Standard ex-vessel value is calculated based on information submitted by registered buyers and is the default value on which to base fee liability calculations. IFQ permit holders have the option of using actual ex-vessel value if they can satisfactorily document it; otherwise, the standard ex-vessel value is used.

The IFQ program review provides NMFS with the opportunity to review the current methods for calculating the ex-vessel value of the IFQ fisheries for purposes of assessing cost recovery fees. This section will evaluate potential methods for collecting IFQ fishery ex-vessel value information that would improve and streamline current data collection requirements for registered buyers. In response to requests from the IFQ Implementation Committee and public comment, this section will also include a summary of IFQ cost recovery fees and total costs of IFQ management over time.

2.11.5 HOUSEKEEPING

The IFQ program review provides NMFS with the opportunity to review current IFQ program regulations to evaluate whether they could be clarified and/or streamlined. In this section, NMFS will identify whether any such issues exist in the IFQ regulations and how such issues may be addressed.

3. KEY FINDINGS AND CONCLUSIONS

The final section of the review is intended to summarize the findings of the analysis with respect to how the IFQ program is meeting the original objectives for the program identified by the Council and other issues identified herein. This section will also highlight areas that appear to contain the largest challenges in reaching these objectives, as well as a discussion on the Council's authority related to those challenges.

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