

Report from the multi-agency and industry work group meeting on the implications of extending the halibut season

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Introduction

At the 2003 Annual Meeting, industry representatives asked the IPHC to task a work group with reviewing the issues associated with a halibut season extension. The goal of the meeting was to review issues relevant to two season extension options. The discussion focused on the administrative issues that would require modification for a halibut season extension as well as issues relating to logistics, enforcement, data collection, and fishery interactions. There was some discussion on whether the seasons should or should not be extended, however, that was not the purpose of the meeting, as the Commissioners will evaluate that question separately. The objective of the meeting was to review the administrative issues so that the Commissioners could be provided with specifics to evaluate potential administrative problems.

A work group meeting was held in Seattle on July 23-24, 2003. Participating agencies and their representatives are listed below: NMFS: Jessica Gharrett, Tracy Buck, Jay Ginter, Yvonne de Reynier, Jamie Goen; Fisheries and Oceans, Canada (DFO): Max Stocker, Terri Bonnet; Alaska Department of Fish and Game (ADF&G): Earl Krygier; National Oceanic and Atmospheric Administration General Counsel (NOAA GC): Jonathon Pollard; National Oceanic and Atmospheric Administration Enforcement (NOAA Enforcement) Sherrie Tinsley-Myers; NPFMC: Jane DiCosimo; Northwest Indian Fisheries Commission (NWIFC): Robert Jones; United States Coast Guard (USCG): Capt. Rich Preston; and IPHC: Bruce Leaman, Gregg Williams, Tom Kong, Lara Hutton, Heather Gilroy. Mike Sigler (NMFS) took part in the sablefish fishery discussions by conference call. The following were the harvester representatives appointed by the conference board to attend: Gary Williamson (B.C.), Herb van Grootel (B.C.), Drew Scalzi (Homer), Walter Sargent (Kodiak), Eric Olsen (Seattle/Western Alaska), Wade Bassi (Seattle/Western Alaska), Dave Soma (Seattle/Union) and Steve Joner (Makah representative). The processor advisor board members attending were: Blake Tipton (SM Products Ltd), John Woodruff (Icicle Seafoods), Shari Gross (Halibut Association of North America), Dana Besecker (Dana F. Besecker Co), and Bill Graves (San Juan Seafoods).

This report summarizes the discussion and recommendations from the meeting. Reports or written comments provided by different agencies, which were distributed prior to or after the meeting, are available upon request from the IPHC office in Seattle. The sablefish season was also discussed, as that season is currently linked to the halibut season.

Season options and discussion points

The discussion focused on two season options: A 12-month fishing season and a 10.5-month fishing season (or a 5 to 6 week closure).

The following were the main agenda items:

1. Halibut fishery issues
2. Changes to assessment cycles, meeting cycles, and data collection programs
3. Other fisheries affected by a halibut season extension
4. Additional coverage by enforcement and longer data collection season
5. Processors' issues
6. Harvesters' issues

The discussions focused on answering the following questions, where possible.

- a) What is the change that is required?
- b) What are the decision points?
- c) How should it be implemented?
- d) How long will it take to implement?

Work group meeting discussion

The following summarizes by topic the discussion that took place.

1. Halibut fishery issues

A) Quota share programs

i) British Columbia Individual Vessel Quota (IVQ) program

DFO could accommodate a 10.5- or 12-month halibut fishing season. Fishing regulations and the issuance of IVQ are done as part of the Conditions of License and the Integrated Fisheries Management Plan. The Conditions of License are agreements between the harvester and DFO and are picked up and signed by vessel owners/operators at different DFO offices prior to the fishery. Transfers of IVQ can occur in-season but only on un-fished quota. IVQs can be purchased throughout the fishing season and account balances (halibut and bycatch amounts) are constantly changing. All fishing trips are required to be landed within one week of the season closing date (by November 22 for the November 15 closure). IVQ accounts are finalized at the end of November for the following year's fishing season.

The timing of issuance of vessel shares, calculations, and finalizing reports would need to be changed, but it is possible if DFO has one year's notice. If DFO knew in January that the following year's halibut season was to be extended, they could accommodate a 10.5- or 12-month season.

The required changes would be implemented as part of the Integrated Fisheries Management Plan and the Conditions of License; both are currently started in November for finalization in January/February prior to the fishing season in March. If the season were earlier, these items could be completed earlier. It generally takes both documents 1-2 months to be prepared and finalized.

ii) Alaska Individual Fishing Quota (IFQ) program

10.5 month halibut season

Restricted Access Management (RAM) can operationally accommodate a 10.5-month season for the Alaska quota share program. The current QS program requires the fishery to be closed for 1.5 months between permit years to determine QS pools, calculate IFQs, print and mail permits, establish fees and bill permit holders, implement regulatory and reporting changes, and maintain and update databases and computer software.

If the fishing season were extended to accommodate a 10.5-month fishery, changes would still need to occur and implementation would take one to two years. The first decision point would be season dates, and the required changes are different depending on the selected season dates. The changes would include amending the IFQ regulations, the IFQ Cost Recovery (Fee) regulations, and NMFS Record-keeping and Reporting regulations. There are several IFQ and NMFS regulations that would need to be amended, as they are date specific. For example, the NMFS regulations currently state the calculation of IFQs must be based on QS pools as of January 31 of that year. It was suggested that the Commission recommend that NMFS change the date specific regulations to allow the Commission flexibility in choosing different season start dates. In the above example, the regulation could be changed to state that the calculation of IFQs will occur five weeks prior to the season opening date. If the season dates were March 1 to January 15, amendments would need to be made to the Fee regulations and the Record-keeping and Reporting regulations. If the season started earlier than March 1st and ran for 10.5 months, other date specific or IFQ regulations would need to change. Amendments to dates would be by Secretarial (agency) action with internal NMFS discussion, consultation with the North Pacific Fishery Management Council (NPFMC or Council) Committee, and regulatory development process. An additional recommendation for operational efficiency would be to require reporting of IFQ harvest (landing reports) within a certain date (for example, five days) following the completion of the IFQ fishing season.

12-month halibut season

The QS program as it is currently defined could not accommodate a 12-month season as serious administrative and logistical problems would occur. The NPFMC would need to review and analyze the required changes that would need to occur for a 12-month halibut fishery.

Two of the essential problems with a continuous season are: (1) dependence of new year's permits on prior year final account balances; and (2) the year-end interdependence of calculations for permits involved in transfers in which either the transferor had a negative pound balance or in which QS was transferred without all equivalent IFQ pounds. Thus, overage and underage adjustments require that all involved permit balances be reconciled after all landings are reported and before new permits can be computed. The current adjustment feature and transfer flexibility would need to be reviewed and changes would need to occur. The definitions of acceptable transfers were discussed and several options for change were briefly reviewed. Some options, a combination of which might be necessary, were discussed including: dropping the underage/overage programs; disallowing the transfer of negative balances of QS or IFQ; not allowing individuals to keep IFQ pounds if they sell QS units; not allowing IFQ transfers without QS transfers; and stopping all

transfers some period of time prior to new permit computation. These are all significant changes to the QS program and decisions for the Council. The Council would determine the required action and make recommendations to the Secretary of Commerce. The Council's recommendations could be implemented only with the approval of the Secretary and publication in the Federal Register. Companion changes to the sablefish IFQ program would require a Fishery Management Plan (FMP) amendment developed pursuant to the Magnuson-Stevens Fishery Conservation and Management Act and all attendant requirements (see section 3(A), below).

B) Area 2A fisheries and catch sharing plan required changes

i) Tribal issues

The biggest challenge in the tribal fisheries would be for the tribes to negotiate a catch sharing plan or allocation agreement amongst their groups. As the season start date has become earlier in the year, some tribes have more opportunity to catch halibut (in the greater depths) due to the location of their community and the size of their vessels. Discussions have started on allocation among the tribes, but if the season were earlier in the year, they would likely need to come to an agreement more quickly. A longer season would provide more flexibility with integrated fisheries management of halibut, sablefish, and rockfish and any resulting decrease in yelloweye rockfish bycatch would be beneficial.

ii) Catch Sharing Plan

The Area 2A Catch Sharing Plan (CSP) provides framework for allocating the Area 2A catch limit among user groups. The Pacific Fishery Management Council (PFMC) could accommodate a longer season by discussing the CSP at the June and September meetings instead of the meetings later in the year. There are date-specific regulations adopted in the CSP that could be changed during the annual regulation process.

C) Fair start issues

IPHC regulations require a 72-hour setline fishing closure prior to the fishery and DFO has a closure of hook-and-line fishing for all species from February 26 to March 1 to maintain a fair start in the halibut fishery. The fishing closure dates would have to be changed if the halibut opening dates changed or if the season was extended to 12 months.

D) Different opening dates for different regulatory areas

There appeared to be no additional operational problems with opening different regulatory areas at different times. The IFQ permits could still be printed with the regulatory area referenced. There was a question of compliance, meaning fishing in the stated area, but this is a concern with the present halibut fishery. Coast Guard and enforcement activity could change from enforcing wide areas to emphasizing the regulatory area boundary lines. In Alaska, there are more and more vessels with Vessel Monitoring Systems (VMS) as they are a requirement in other fisheries and an option in the halibut fishery for Area 4 clearances. The VMS is a transponder that allows enforcement to track the vessels location and activity to ensure they are not fishing or traveling through restricted areas. It is believed that VMS will be required in additional fisheries and this will affect

compliance in some cases. The working group believed that a requirement for VMS might facilitate separate regulatory area openings.

2. Changes to assessment cycles, meeting cycles, and data collection programs

A) Changes to IPHC assessment cycle

The assessment cycle and Annual Meeting discussions would be modified if the fishing season were extended to 10.5 or 12 months. At the Annual Meeting, the budgets, research and stock assessment are reviewed and catch limits and regulations are adopted. The Annual Meeting should occur when the halibut fishery is closed (or when few are fishing) so the industry can participate and when agency personnel are available. If there were a 12-month or 10.5-month halibut fishery, the season would be closed or there would be fewer landings from late November through January. When reviewing the Council meeting schedule and considering holidays, the Annual Meeting would still be scheduled for late January.

The stock assessment would be completed using data from the previous year or may use partial, current year's data. The Annual Meeting would take place in January and catch limits and regulations would be determined for the following year. The implementation of the regulations could take place in the fall, late fall, or at any convenient time 1.5 to 2 months prior to the opening dates.

B) North Pacific Fishery Management Council meetings

The NPFMC has postponed reviewing IFQ issues since 1999. A Council committee reviewed proposals received in 1999 and 2003 for changes to the halibut and sablefish IFQ regulations. The Council will review committee recommendations in December 2003 and decide whether to proceed with analyses. No timeline has been set for action.

C) Pacific Fishery Management Council meetings

The PFMC could accommodate a longer halibut season. The Annual Catch Sharing Plan could be discussed at the June and September meetings instead of the meetings later in the year.

D) Printing and issuing NMFS IFQ, DFO-IPHC, and IPHC logbooks

Currently NMFS logbooks are used for only one year as regulations change yearly, causing the format to change every year. The NMFS logbooks are available for fisheries starting January 1.

DFO logbooks could be available if the halibut season were extended. New logbooks are not produced every year.

IPHC logbooks are available at any time and can be used for multiple years.

E) Issuing annual Commercial Fisheries Entry Commission (CFEC) permit cards

The CFEC cards are available in November; therefore, the cards could be available if the halibut fishery were extended.

F) Publishing of regulations

The minimum amount of time that is necessary for the halibut regulations to be published is 1.5 months. If the season were extended, the regulations prepared after the January meeting would be adopted for the following year so they could be finalized at any time before the new fishing year began.

3. Other fisheries affected by a halibut season extension

Both governments have been discussing and reviewing options for integrated fisheries. The NPFMC is reviewing discussion papers on different season options for the 12-species groundfish complex, alternative start dates, fishing seasons, and quotas set more than 1 year in advance. The outcome of these government meetings will affect the other fisheries. DFO is also reviewing integrated fisheries management and total retention options. The Commission has expanded its data collection programs to assist with multi-species management by governments: for example, IPHC research vessels carry DFO-contracted employees in Area 2B to monitor other-species catch and joint logbook programs exist. It was recognized that each agency's decision will affect the other fisheries.

A) Sablefish fishery

In Alaska, sablefish IFQ season dates are currently linked to halibut season dates, to maximize operational efficiency and minimize harvesting costs, bycatch and discard mortality. The Alaska Regional Administrator has the authority to change the sablefish dates to match those of halibut. If the sablefish season were extended past the current dates, it is probable that the effects on the sablefish stock would need to be analyzed by the NPFMC and could require a FMP amendment, which can take a minimum of 18 months to complete. The NPFMC schedule is such that IFQ issues are discussed every other year: proposals are reviewed by the NPFMC in December, final action is taken in June, and rulings are implemented for the following season. Therefore, it is likely that a season extension for sablefish may take up to two years to implement from the time it is proposed. The NPFMC could also prioritize such an action as high and action may be taken more quickly.

The primary concern for NMFS sablefish scientists would be increased wastage if the halibut and sablefish seasons were not concurrent. If the fisheries could not be concurrent. Another possible solution would be allowing sablefish retention in a "bycatch only (with QS)" capacity during a winter halibut fishery. However, identification of a target QS fishery may be problematic. This would not require an FMP amendment.

The stock assessment scientists reviewed post-spawning fishing with year-round fishing of sablefish and found there was little difference in spawning biomass per recruit. They determined there were no biological implications, assessment cycle concerns, or market issues with a longer sablefish season.

ADF&G manages three state water sablefish fisheries that are under Guideline Harvest Limits (GHL) (Prince William Sound, Chatham and Clarence Straits) and are currently open during the summer season. They also manage state water Aleutian Island and North Gulf Coast sablefish fisheries that are open during the federal IFQ season to allow historic sablefish harvest from state waters. Fishers with IFQ must subtract their catch from their IFQ, those without can only fish until historic state water fishery GHL is reached. If the GHL is reached both IFQ and non-IFQ fishing must stop in state waters. A halibut season extension would not effect these fisheries.

DFO staff sees no problem in extending the halibut season in relation to the sablefish season. Currently the sablefish season is open from August 1 to July 31.

B) Halibut bycatch in the sablefish fishery and sablefish bycatch in halibut fishery

The two Alaskan fisheries are currently linked together for bycatch reasons. A season extension would not change that relationship except as discussed in the previous item. NMFS would have to review the allocation of sablefish retention to the Community Development Quota groups if both halibut and sablefish seasons were extended.

C) Groundfish stocks: Bycatch and allocation of Pacific cod

For the last several years, the NPFMC and the Commission have been asked to review extending the halibut fishery or allowing bycatch of halibut in the Pacific cod fishery. If the halibut season were extended this would decrease bycatch of halibut in other hook-and-line fisheries, particularly the Pacific cod fishery. Many of the concerns of halibut bycatch have come from the Homer small vessel Pacific cod fleet. One positive effect would be the decrease in prior-hook-injuries (PHI) of halibut from this fishery. High instances of PHI are found around Kodiak and other areas from the cod fishery. If the halibut season were extended the bycatch limits would need to be reviewed.

There was discussion on options of allowing a halibut bycatch-only fishery in the winter. A similar management system exists in Area 2A, where sablefish longliners in the limited entry primary fixed gear fishery are permitted to retain some of their halibut bycatch. If bycatch-only fisheries were allowed, the bycatch mortality estimates would need to be reviewed and recalculated. The small boat fleet does not have 100% observer coverage, so estimates would need to be determined. Under a retention allowance, the sublegal halibut would still need to be discarded, incurring discard mortality rates (DMR) of approximately 16%. The legal fish would be retained, with a DMR of 100%, rather than 16%. The goal should be that the allowed retention rate should not increase bycatch mortality above the current levels. For vessels to retain halibut they would need to hold quota shares and would need to meet QS requirements.

D) Bycatch of rockfish and the rockfish fisheries

In southeast Alaska, the demersal shelf rockfish (DSR) season is set specifically to take place during the halibut closed season to maximize catch for the DSR directed fleet. These fishers are largely different from the fishers that target halibut IFQ. The Alaska Board of Fish sets a southeast DSR catch limit, which is taken in a winter fishery (January-February) and as bycatch during the halibut season. The remaining catch limit at the close of the halibut season is then available to the rockfish fleet at the end of the year. If it were determined that the season should be extended, it would be easier to manage the DSR fishery if the halibut season were only extended to 10.5 months. If the halibut season were 12 months, it would be problematic to manage the rockfish fishery and determine the catch limit. There would be significant costs to develop a new fisheries management plan. A plan has been discussed in the past but it was noted that it would be beneficial for the State and the NPFMC to determine a procedure that allows full retention.

The rockfish fishery in the central Gulf of Alaska is managed differently from the southeast Alaska fishery, with hook restrictions and area closures. The central Gulf fishery has recently moved to areas further offshore, but that is because of competition with the sport fishing vessels. ADF&G

has less concern for this fishery with respect to a halibut season extension, but better rockfish stock assessment is necessary, especially in the northern Gulf.

DFO staff perceived no problem with an extended season in relation to rockfish in Canada. Currently, IVQ fishers can purchase/trade bycatch allowance amounts if they are over their allowed bycatch percents. These vessels obtain the bycatch amounts from vessels that have landed little amounts of bycatch. It was stated that the system worked well especially because, in many cases, the processors assisted in finding the available bycatch allowances from other vessels. There are currently rockfish protection areas where no fishing is allowed.

E) Gear interaction with seabirds

Seabird Avoidance Devices are required in the halibut fisheries in Alaska and British Columbia; therefore a longer season should show little or no change in the effect on Short-tailed albatross.

F) Commercial and sport halibut ground competition

Extending the commercial halibut fishery could increase competition on the fishing grounds between the charter and commercial fleets. The increase would not be expected to be substantial because the additional fishing months occur during a period of low sport fishing effort. In some areas of Alaska, this is currently a concern and the Alaska Board of Fish and the NPFMC will work cooperatively on the issue to determine if Local Area Management Plans (LAMPs) are necessary. IPHC has provided the commercial data to ADF&G to be used in the LAMP process.

4. Additional coverage by enforcement and longer data collection season

A) NOAA Enforcement

NOAA Enforcement would monitor the same amount of landings or possibly monitor more landings if there were fewer offloads occurring at the same time within a port. The enforcement program would be structured the same, but coverage would be spread out over a longer time period. The data clerks are seasonal employees and there would be increased costs. Some of the additional costs would be offset by the Fee Collection program.

For discussion on bycatch-only fisheries, it should be noted that there could be enforcement problems in limited fisheries with split quota shares. It might be difficult to convince courts to penalize overages in one season if more quota were to be available in a subsequent season during the same year.

B) United States Coast Guard

The USCG would be able to provide an incremental increase in the total amount of patrol effort dedicated to IFQ. The enforcement program would continue to focus on at-sea boardings, along with a shoreside component. However, vessel boardings could be limited in winter months due to weather. Further safety concerns are discussed below.

C) IPHC samplers

If the halibut season were extended from the present season length, the port sampling program would be extended to cover the fishery. Sampling of halibut during the winter months may not take

place at all summer sampling locations. The samplers may not be paid by salary; the coverage could be hourly. In situations where fishing logs were missed, these could be obtained at a later date. PIT tag scanners will be employed to scan halibut landings through 2006, with a possible extension through 2007. If the season were extended prior to 2005, scanners would be employed to scan the landings, but some ports may not be covered for the entire season. The current costs of the port sampling and the PIT tag scanning programs are approximately \$30,000 to \$37,000 per month per program, depending on the coverage extent.

D) Observer coverage

In Alaska, the State Board of Fish and the NPFMC will be trying to determine a joint protocol for observer coverage and procedures over the next several years. If the State manages some Pacific cod or sablefish fisheries outside the Federal fisheries, it will be important that the current, federally-required observer coverage is not decreased. It was pointed out that there was a need for better observer coverage in all small boat fisheries.

It is likely that there will not be a problem with the required observer coverage for the sablefish fishery if the season were extended concurrently with the halibut fishery.

In 2002, 6.8% of the Area 2B halibut trips were observed. There has also been research on video monitoring, including GPS information and identification of species caught and discarded. Projects include validation work between video data and landing data. The present target for observer coverage (including video-only observations) is 25% of trips. A halibut season extension would not effect these projects.

E) DFO Enforcement

There would be an incremental cost for enforcement during a longer halibut season. Although the IVQ officers are currently paid year round, operational costs would still be incurred. The fishers pay for the enforcement of the QS fisheries, so a longer season would increase their cost.

F) Archipelago Marine Research (AMR)

AMR has no concerns with a longer season as they are already covering other year-round fisheries. The fishers would pay for the additional cost of monitoring the fishery.

G) Safety

The USCG is concerned with any extension of the halibut season into the months of December through February due to safety concerns. December through February are typically the most dangerous months, with higher numbers of fatalities and vessel losses due to sinkings caused by heavy weather and icing. The search and rescue threat may also increase as vessels pursue halibut further off shore, in typically worse weather, in hopes of receiving a higher price as is typical at the beginning of the season.

5. Processors' issues

Processors expressed a variety of opinions depending on the location and size of their business and whether they market fresh and/or frozen product. Some believe that trade-offs to a season

extension (e.g., regulatory area interceptions) would outweigh the benefits of a longer season. The effects of halibut aquaculture on the market were discussed and there were varying opinions on the effects, the amount of competition they would bring to the wild fish market, and when they would occur. If the halibut season were extended, there are some concerns with safety to the fleet, cost to the agencies, and if quota shares were known a year in advance, it may effect the ex-vessel price. There was a discussion on the effect of earlier fishing on the stock. As the fish that are caught early in the season are smaller, a greater number of individual fish would be removed. It was explained that the limits are poundage-based and that the yield per recruit is the same.

A) Marketing and market share

It is the general opinion of the processors that it is more difficult to market fish from the week before U.S. Thanksgiving to the week after Christmas. If there continued to be a season closure, late November through December would be a time of preference. One key to the current success of marketing fresh halibut is the consistent availability of fresh halibut throughout the fishing season. The success in 2002 was due to the high catches (74 million pounds) and the season length (March 18-November 18). Even with the season extended by two weeks in 2003, fresh halibut has not been available from the processors every day. This could be due to the longer season or to fishers not scheduling their deliveries evenly throughout the season.

The winter closure allows the processors that cannot ship halibut fresh (Bering Sea and remote areas) and that rely on a frozen product to have a market share in the winter. The current market demands some frozen product and these outlying processing plants can provide it.

A winter closure allows for excitement at the beginning of the season with an increased ex-vessel price to the fishers who provide the first fresh fish to the market. An additional factor contributing to the recent higher ex-vessel price is that there is much less Russian halibut on the market than as seen several years ago.

B) Processing availability

Some of the small processing plants close in the winter. There would be increased costs to some of the processing sector if they remain open for a longer time period. In some cases, they would not remain open.

C) Positive reasons for extending the season

It was the general opinion of the processors attending the meeting that extending the season for part of the time would be beneficial if bycatch of halibut in other fisheries were decreased. Halibut bycatch by the small boat fleet in the Pacific cod fishery is a concern to the industry.

D) Fish quality

It is important for the industry to continue to work on landing and shipping quality halibut throughout the season. It will be important to ensure that the winter landings are of high quality as there may be small loads (especially in a bycatch fishery) which could increase costs.

6. Harvesters' issues

It was the general consensus that good science and knowledge of the stocks and their migration are necessary and that continued research is important. Migration was a concern especially to the

Canadian participants who would not support change without knowledge of migration effects. It was suggested by some that possibilities for extending the season should be looked at with an open mind, with a variety of options, and not limited to opening the coast as one-unit. Some believed that a consistent supply of wild halibut should be an available choice for consumers. Some regulatory areas could open earlier in the year or halibut could be kept as bycatch in winter fisheries in some areas.

A recurring theme was promoting integrated fisheries along with reducing bycatch and discard mortality. One of the major benefits of the season extension, decreased bycatch mortality, would be seen in the Pacific cod fishery, especially around the Homer and Kodiak areas.

Harvesters also suggested that the Commissioners request that NMFS make the necessary changes to the date-specific regulations so that if the Commissioners did want to change the season, it could be done.

Recommendations and conclusions

The meeting consisted of discussions on the administrative changes necessary to allow a longer halibut season and the issues that may arise to affect processors, harvesters, and fishery managers if such an extension were to occur. There were those who believed a longer season was necessary to maintain market exposure. Others, including the Canadian harvesters, believed that migration was a concern and that no change would be supported without further knowledge of migration effects. Continued research would be necessary to address these concerns. Many opinions were voiced. However, they will not be summarized in these conclusions, as the main focus of the meeting was not whether or not an extension should occur, but how one could be effected. The recommendations and conclusions from the administrative discussions follow.

Recommendations

It was the general opinion of the participants that the Commission should request that NMFS restructure the date-specific quota share regulations to reference a time relative to the season opening or closing dates when operational events (such as permit calculations and issuance) should occur. This would be appropriate even if the halibut season were not changed in the near future, as it would allow the Commission flexibility in setting season dates. The halibut season (quota share) opening date is now partially restricted by the NMFS date-specific regulations.

Conclusions

By most accounts, a 10.5-month halibut season is more practical from an administrative and logistical point of view than a 12-month season. For a 12-month halibut fishery, the Alaska QS program would need significant administrative changes including major changes to the transfer and underage/overage programs. The NPFMC would need to review the quota share program and determine the cost versus benefits of a 12-month fishery. If the NPFMC determines it is appropriate to make the changes to allow a continuous fishery, it would have to substantially redesign program features and would take several years to implement. DFO can accommodate a 10.5- or 12-month halibut fishery with a year's notice.

A 10.5-month halibut fishery could be more easily accommodated. The current Alaska halibut QS program could accommodate a 10.5-month season as the closed period allows time to deter-

mine QS pools, calculate IFQs, print and mail permits, maintain fee programs, implement new regulations, and maintain software and databases. No changes would need to be made to the transfer or underage/overage programs. The exact changes required would depend on the specific season dates. Therefore, the first decision point would be to determine the season dates. If the changes require an FMP amendment, it will take up to two years to implement. DFO could accommodate a 10.5-month season as it would be implemented through the Condition of License and the Integrated Fisheries Management Plan.

Another issue to review when discussing any change to the halibut season is the bycatch of non-target species. DFO perceived no problem with extending the halibut season in relation to sablefish, rockfish or other fisheries. In Alaska, bycatch of sablefish is a concern if the fishery is not concurrent with the halibut fishery. It is probable that an FMP amendment may be required if the sablefish season were extended and it would take up to two years to implement.

Currently, the directed Alaskan State water DSR fishery occurs during the time when the halibut season is closed and the catch limit is calculated after the bycatch is determined. Lengthening the halibut season could cause problems for setting the DSR season in southeast Alaska if a greater portion of the DSR quota was caught during the halibut fishery. A 10.5-month season would have less adverse effect on DSR fisheries management than would an even longer season.

There are no additional operational problems with opening different regulatory areas at different times. Other options for extending the halibut season would be to allow halibut bycatch-only winter fisheries in some areas, for persons with IFQ permits. The allowed retention rate would need to be determined and the bycatch mortality estimates would need to be reviewed and recalculated.

Enforcement of the fisheries, safety to the fleet, and cost were discussed. Any winter fishing could cause safety concerns especially if the fishery occurs further offshore. The enforcement programs would be expanded to meet the needs of the halibut fishery and there could be incremental cost to the agencies and the industry.