Element 6. Catch accounting system

- 1. The current Statewide Harvest Survey and/or logbook data would be used to determine the annual harvest.
- 2. A catch accounting system will need to be developed for the GAF landed in the charter industry.
- 3. As part of data collection, the collection of length measurements should occur when supplemental IFQs are leased for use and compared to the annual average length to make sure that accurate removable poundage is accounted for and to allow length measurement information gathered to be used in the formulation of the average weight used in the conversion of IFQs to GAF.

The Council adopted the language (above) as part of its intent for catch accounting systems for the charter sector. There are two types of charter fish to monitor and enforce: common pool and GAFs. The Council has stated its intent to monitor the common pool using ADF&G data. **Staff requests clarification of whether any additional clarification on using the SHWS and/or logbook data is forthcoming as a result of an ADF&G analysis of the two data collection programs that will be reviewed by the SSC in April 2008, or whether the identification of a preferred data collection system for monitoring and enforcing the common pool allocation would be deferred to the agencies.** The Council added a third statement regarding its intent that length measurements of GAFs be collected for accurate accounting.

The Council also adopted the following language (see box) as its intent for the development of a catch accounting system for GAFs. It specifically did not adopt these three proposed options for analysis that were recommended by its Halibut Stakeholder Committee in December 2007. It adopted them for NMFS to consider in its development of an implementation plan for the Council's preferred alternative. **Staff requests that the Council clarify its intent for preferred features of a catch accounting system for monitoring and enforcing GAFs.** Such clarification will assist NMFS in its development of a discussion of potential alternate catch accounting systems; this discussion will be included in the next draft of this analysis. NMFS and ADF&G will be better able to estimate costs for data collection and monitoring requirements after the implementation options have been better identified by the Council. At final action, the Council may choose to select a preferred GAF catch accounting system or defer that decision to the agencies.

Recordkeeping and Reporting One of the critical issues for successful implementation of a successful interim management regime for charter halibut operators is to shorten the feedback loop for collection of data regarding charter harvests. The Council has requested that staff include in their report a discussion of options for shortening the feedback loop.

It is also the intent of the Council in proposing these options that the real time collection of data should not be used for in-season management changes or in-season closures; rather it is the intent of the Council that these options be used to shorten the data collection feedback loop to facilitate the timely advance adoption of management tools designed to achieve the charter sector allocation without in-season changes or in-season closures in order to maintain, to the extent possible, a season of historic length with a minimum two fish bag limit.

Option 1. Electronic Reporting. Each GSM permit holder would be assigned a unique reporting number and would use that number to electronically report the number of halibut caught by clients that day on a daily basis. The electronic reporting would be done either through an Internet website or a dial-in telephone system. As additional verification each client would sign the mandatory logbook next to the entry containing their name, license number, number and type of fish caught, and any other required information. Logbooks would continue to be submitted weekly.

Option 2. Harvest Tag. Uniquely numbered harvest tags would be distributed to each GSM permit holder at the beginning of the season and additional tags would be available throughout the season if needed. The number of harvest tags would be greater than the number of fish allocated to the charter sector for that year (i.e., the tags are not a management tool for restricting or closing charter fishing in-season). When a halibut is landed the harvest tag would be required to be inserted in the jaw and the harvest tag number recorded in the log book entry for the angler license number of the person who caught the fish. When the fish is processed the tag would be removed and mailed in using pre-addressed, stamped envelopes supplied for that purpose. GSM operators would pay a fee to cover the cost of the envelopes and tags. Harvest tags would preferably be bar coded to enable machine reading, with peel off bar code stickers for placement in the log book.

Option 3. Punch Cards. Each GSM permit holder would be issued a supply of uniquely numbered punch cards with punch outs equal to any daily bag limit for that year or six halibut (whichever is fewer). The cards would issued at the beginning of the season and additional cards would be available as needed (i.e., the cards are not a management tool for restricting or closing charter fishing in-season). Each day every client angler would be assigned a punch card and that punch card number would be entered in the log book next to the license number. As each halibut is landed by a client their respective card would be punched, and at the end of the day the client would sign the punch card in the space provided. The punch card would then be sealed in a supplied stamped and addressed envelope, which would be mailed by the permit holder. GSM permit holders would pay a fee to cover the cost of the punch cards and mailing envelopes. Any log book entry for which a signed punch card (i.e., the daily bag limit or six fish).

The Council may wish to consider the following conclusions from the background section provided below.

- 1. better estimates of implementation costs will be generated if the Council refines its management objectives for catch accounting;
- 2. real time data likely will be required for managing individual GAF accounts;
- 3. a simpler system to collect real time date would be better (cost, effectiveness, acceptance) than a complicated system;
- 4. real time data may be collected under an electronic reporting system;
- 5. harvest tags are not necessary to monitor and enforce GAFs, but could meet another management goal of streamlining the delay between an overage and revising regulations;
- 6. costs associated with transferring IFQs to and from the charter sector would be borne by the commercial sector under the cost recovery program; and
- 7. transferring unused GAFs back to the commercial IFQ holder will accrue more costs than one-way transfers.

Background This following summary is provided to inform the reader of information that will be considered by the agencies in developing the monitoring and enforcement program to implement the Council's preferred alternative. It is provided to assist the Council in providing the requested clarifications on preferred features to implement the GAF program. It summarizes current management tools and previous reports on monitoring and enforcement aspects of previously proposed charter halibut management programs, as discussed by the Enforcement Committee and an interagency work group.

In February 2008 the Enforcement Committee discussed accounting of the use of commercial halibut IFQs in the charter fishery. Staff from the Office of Law Enforcement (OLE) provided the following observations on potential enforcement tools for an initial allocation and accounting commercial IFQs used in the charter halibut fishery. *These comments are presented for discussion purposes only; they are part of the decision making process for designing the implementation plan.*

- a. There are two opportunities to check for compliance; at-sea and dockside. There are limited benefits to tracking a sport caught halibut once it leaves the dock. If it enters the commercial stream, enforcement staff would pursue a violation of commercial regulations.
- b. Either dockside or at-sea, enforcement staff can count halibut on board and compare the count to the paper logbook. They can also verify catch limits.
- c. The use of tags may not be appropriate in the charter halibut fishery. Tags may create a new bureaucracy; they will be redundant to a logbook; and give the industry another regulation with which to comply.
- d. Application Period Some people may falsify their applications. Applications for quota could potentially result in fraudulent claims.
 - i. Qualifying information
 - ii. Ownership information
 - iii. Historical catch
- e. Logbooks A federal logbook, as designed by Wostmann and Associates, would be very helpful. A paper logbook that was originally proposed to implement a charter halibut IFQ program would have required the captain of the vessel to enter halibut into the log immediately after catch, and also require the sport fisherman who caught it to sign their name and sport fish license number. Logbooks would be mailed in at the end of the season. Logbooks could also be used as an audit tool to compare with electronic reports.
- f. Electronic reporting Operators would be given the option to report via internet or using telephone interactive voice response (IVR) reporting (voice recognition or touch-tone keypad input).
- g. Charter vs Sport fishing Changing the definition to one that identifies a charter vessel as one which is licensed as such with ADF&G, then that will assist enforcement greatly. This has been a problem in the past for enforcement to prove a vessel was "for hire" before applying charter regulations to a vessel.
- h. Halibut sold commercially A problem with sport caught halibut from charter vessels being sold commercially will continue. It is unclear how or whether new regulations would affect that.

The Enforcement Committee discussed the above enforcement issues and made the following observations in its in February 2008 minutes.

"The summary included an overview of the different accounting tools available, which include electronic reporting, logbooks, harvest tags, and punch cards. It was noted during the discussion that the individuals working on the accounting of commercial halibut IFQs have not found any fatal flaws that would make enforcement and monitoring of the IFQs unachievable. It was also noted that the level of complexity with regards to enforcement of the commercial halibut IFQs increases as leasing flexibility for IFQs increases. In addition, having separate pools of halibut that would accommodate leased IFQ in the charter fishery or guided angler fish (GAF) and common pool charter halibut fish also increases the level of complexity in accounting of halibut harvest in the charter vessel fishery. The Committee agreed that in designing and analyzing the accounting of GAF, the enforcement cost associated with each of the different accounting tools should be very apparent since enforcement cost will likely influence what accounting tools will be used. Also, the complexity of the regulations will have some effect on compliance and enforceability (i.e. the simpler the regulations are to understand, the easier they will be understood by the industry and enforcement personnel). In summary, the Committee is optimistic that the agencies working on the accounting of GAF will provide an analysis of the enforcement issues in time for the April 2008 meeting. At that time, the Enforcement Committee would be in a better position to provide specific recommendations to the Council."

<u>Current management measures</u> include GHLs for Area 2C and 3A that have been set to define a target for charter harvests. The GHL is not a binding (or "hard") cap and does not trigger any in-season restrictions on client harvests when it is reached. Other management measures intended to slow the charter harvest have also been implemented. Those management measures include a prohibition on skipper and crew harvests of halibut in Areas 2C and 3A and a maximum size limit of 32" on the one of the two halibut a person may retain as part of their daily bag limit in Area 2C; a one-fish bag limit may be proposed to correspond to the reduced GHL in Area 2C for 2008. Management measures may be considered for Area 3A in late 2008 if data indicate that the 2007 GHL was exceeded.

Management of the charter sector does not include a limit on the amount of halibut the charter sector may harvest, so it is not critical that timely and accurate <u>in-season</u> harvest estimates are generated. The halibut that remains after deducting the needs of all other sectors from the total available determines the commercial catch limit. The IPHC used the GHLs in Area 2C and Area 3A in its determination of the commercial fishery CEY for the first time in 2007, after it was assured that the Council and NMFS would implement management measures to keep the charter fisheries to those limits. Even under Alternative 2, the allocation to the charter sector is not a hard cap. Instead current data collection programs focus on providing annual post-season charter harvest estimates

Measures that restrict the size of halibut retained or the persons that may harvest halibut are difficult to design to constrain total harvests over time. For example, limiting skipper and crew halibut harvests is expected to reduce the amount of halibut being harvested, but increased client demand will result in continued growth in charter harvests by anglers. So, while implementing a limit on skipper and crew harvests reduces the total amount of halibut harvested by the sector, it is not expected to constrain client harvest as client demand increases. Because of the problems associated with determining potential harvests that are associated with specific proposed restrictions, it will be difficult to craft a suite of measures that are precise enough to limit the charter sector harvest to a desired level without placing undue burdens on the sector (i.e., being more restrictive than might have been necessary). The Council has acknowledged that more restrictive measures may be implemented to assure that the charter sector does not exceed its allocation.

The proposed action, which along with a Council recommendation for separate accountability by each sector, is anticipated to better limit charter harvests. The commercial IFQ program holds each QS holder accountable for his/her individual allocation at the end of each year (with overage and underage allowances). The entire charter fleet (soon expected to be limited to a known pool of businesses that hold charter halibut limited entry permits) would be held accountable for overages of the sector allocation over multiple years. The Council's policy for the proposed action states, "Therefore, the Council intends to adjust its management measures as needed to ensure that the sport charter sector is held at or below its allocation on average over a rolling five-year period." But it is unclear from the Council's record how it wishes to have this proposed recommendation for a rolling five-year average implemented. Staff requests that the Council identify its intent. The Council may mean that it would not respond to individual seasonal overages but only when a seasonal overage exceeds the average of five year's harvests in relation to the initial allocation, as harvests in some years may be below the allocations and could be used to balance out an overage from another year within the rolling five year period. Additional issues such as whether this policy would be applied only five years after the allocations are implemented since there is no history to roll into an average prior to its implementation are discussed in more detail under Element 1 of the RIR. Staff seeks clarification on how to apply the rolling five-year period.

The Council has identified its intent to regulate the charter sector post-season. Consideration of future management action(s) would be automatically triggered and scheduled for action after any charter sector allocation overage (except as clarified by the Council's policy of applying a rolling five-year average). Any new regulations would be implemented two to three years after an allocation has been exceeded (or more than five depending on the requested clarification by the Council). The Council has also identified the possibility that overly constraining measures could be implemented so as to avoid future allocation overages.

A data collection program to implement the proposed alternative must be able to account for charter halibut harvests against the common pool allocations and to monitor (in-season) commercial IFQs that are leased by charter limited entry permit holders for use in the charter sector. *Note that two data collection programs are needed; only one to monitor the use of commercial halibut IFQs in the charter sector would be a new program.*

<u>Current Data Collection Program</u> The Alaska Department of Fish and Game Sport Fish Division (ADF&G–SF) is the only management agency that currently collects comprehensive harvest information from the halibut charter operators. ADF&G–Sport Fish Division began requiring charter operators to submit saltwater logbook reports to their agency that specifically reports halibut harvests on a weekly basis starting in 2006. Those logbooks provide halibut specific information, unlike logbooks in previous years that only collected data for "bottom fish." The April 10, 2006 statewide news release from ADF&G-SF describes the reporting requirements and states the following.

"Saltwater sport fish charter businesses are required by law to maintain a logbook for each vessel that carries clients. Logbooks must be filled out on a daily basis for each charter trip. Logbook sheets must be returned to ADF&G on a weekly basis, while there is activity. Weeks of no activity do not have to be returned...

...It is the responsibility of the licensed sport fish charter business owner to ensure that all data for fishing activities in 2006 is submitted to ADF&G in the manner described in the logbook. It is the responsibility of the guide to ensure that daily trip activity is accurately recorded as described in the logbook."

A sample page from the 2008 ADF&G-SF logbook is shown below. One logbook report must be completed and returned for each trip fished. If the trip covers multiple days the logbook identifies which day of the trip that logbook page covers. The business and vessel section of the logbook identifies the guide business owner. the guide, and the vessel used to carry clients. The trip information section requires that the date of offload, the port of offload, the number of clients on the trip, the area fished, the number of rods fished, and the number of hours spent fishing be reported. Catch and harvest information is collected for each individual angler. Their sport fish license number is used to identify anglers in the logbook. The number of each species harvested or released is also recorded in the logbook. The angler's license information was first required in 2007. Before a trip begins, the guide must record 1) the 2008 sport fishing license number, permanent identification number (PID) or disabled veteran (DAV) license number for anyone that will fish during any part of the trip, including paying and non-paying (comped) anglers and crew; 2) the first and last name of each angler in the space provided below their license number; the birth date and first and last name and of each youth angler under the age of 16; 3) for each angler, the number of halibut kept year-to-date YTD in IPHC Area 2C in the "YTD in 2C" box from the back side of the angler's fish license or 2008 Harvest Record card. At the end of a fishing trip, the guide that leads the trip must sign and complete the logbook page at the end of each day of fishing or at the end of each trip within a day (for multiple trips within a day).



Figure 1 Alaska Department of Fish and Game Saltwater Sport Fishing Charter Trip Logbook

Issues that need to be considered when determining whether the data reported in the logbooks are sufficient to manage the charter sector harvest allocation include data timeliness, accuracy, and precision. If any of these components of the logbook data collection program is deemed to be insufficient to manage a charter allocation, an additional data collection program may be necessary.

Saltwater logbook pages must be submitted to ADF&G-SF each week. Because the logbooks are submitted on paper, the data must be entered into a database before it can be used. More than 2,000 trips were taken during the peak fishing weeks in both Areas 2C and 3A during 2006. Since each trip must be reported separately on a logbook, during the peak season over 2,000 logbook pages would need to be entered into the database. Note that the remote nature of charter operations may affect any type of electronic reporting.

It is critical that logbook data be accurate to provide a correct measurement of total removals. Individual angler information along with the harvest data are linked in the logbook to verify that accurate data are being collected in the logbooks. ADF&G-SF staff will verify logbook data reported by the guide by surveying anglers that are identified in the logbook about their trip. A report on this comparison is scheduled for review by the Council's Science and Statistical Committee in April 2008.

<u>Recordkeeping and reporting</u> The Council has acknowledged the need to develop timely, accurate, and independently verifiable charter halibut harvest records, but has left the design of that data collection system to the agencies. Originally recommended by its stakeholder committee, the Council identified its intent in proposing the following options that the real time collection of data should not be used for in-season management changes or in-season closures. Rather the Council intends that one or more of the three proposed options be used to shorten the data collection feedback loop to facilitate the timely advance adoption of management tools designed to achieve the charter sector allocation without in-season changes or in-season closures in order to maintain, to the extent possible, a season of historic length with a minimum two fish bag limit.

Because NMFS will not be able to provide cost estimates for a fully developed reporting system in this analysis, the Council may be precluded from selecting a specific timeline for its preferred regulatory cycle under *Element 4*. Therefore, Element 4 (timeline) is descriptive and not a decision point. In fact, priorities outside of Council (and often NMFS) control will determine the speed with which any regulatory actions are implemented.

Before reviewing *potential* reporting mechanisms, it is critical to understand that **two separate databases** will be needed to track charter halibut harvests under the proposed alternative. A core database is needed to monitor harvests to account for the charter halibut allocation, or what stakeholders have come to call the "**common pool**." The Statewide Harvest Survey (SWHS) (or mail survey) self reports charter halibut harvests by anglers. The SWHS is the basis for determining total charter halibut harvests and setting the Guideline Harvest Levels for Area 2C and Area 3A. It is the basis for determining the charter halibut allocation in this analysis. A second database is the logbook survey, which collects self-reported harvests by charter operators. The logbook survey was the basis for determining eligibility under the limited entry program (and the withdrawn charter IFQ program). A comparison of self reported charter halibut harvests by ADF&G Sport Fish Division is scheduled for Council review in April 2008.

A second (and likely more complex) accounting system is needed to monitor and enforce those charter halibut that will be counted against commercial halibut IFQs that are transferred for use in the charter sector, also referred to as **Guided Angler Fish** or GAF. A GAF would put an angler on par with regulations for an unguided angler, that is, he/she would be exempt from any regulations specific to reducing charter halibut harvests.

Management of GAF will require distinguishing a charter halibut that was harvested using leased IFQs from those fished against the charter common pool allocation. Allowing unused leased IFQs to the charter sector to revert back to the commercial sector will result in some implementation difficulties (e.g., underage/overage accounting) that will need to be addressed in the new accounting system. Agency staff identified that GAF would be managed as whole fish (i.e., no partial GAFs). Some additional (minor) harvest savings could accrue due to accounting of a whole average sized fish from the common pool or from GAFs. The size of a second halibut in Area 2C in 2007 was artificially constrained by current regulations. Note that the revised GHL reporting/accounting program may use a more specific time and area average weight.

Wostmann (2003b) provided a conceptual design of a landing reporting system of the withdrawn charter IFQ program, but many comments regarding record keeping and reporting also apply to the narrower application of commercial IFQs transferred for use in the charter sector. It identified the importance of developing a new system that would be compatible with the existing commercial halibut IFQ program. It must support the management of quota shares and the transfer of shares within and between the charter and commercial sectors. Enforcement of regulations for charter operations is more difficult than for commercial operations because landing activity is not concentrated at processors, is widely dispersed, and includes many remote locations. An objective of the data collection program is to make compliance and accurate reporting as easy and convenient as possible to minimize the incidence of improper reporting caused by confusion over requirements. Additionally, the system will need to provide features to make enforcement efforts efficient and effective.

For managing a **combined charter and commercial fishery CEY**, staff noted the following issues as they relate to the Council's proposed policy to set a sector allocation and request that the IPHC apply the splits in its annual process to set catch limits.

- a. The IPHC only adopts catch limits; it does not formerly adopt Total CEY or Fishery CEY;
- b. Lack of IPHC adoption of CEYs is problematic as basis for any allocation formula; and
- c. If a floating allocation is selected, it should be set and measured against the same CEY basis (this is not the case in current regulations)

In October 2007 the Council requested that interagency staff¹ review Stakeholder Committee recommendations for development of a catch accounting system for GAFs using 1) electronic reporting; 2) harvest tags; and punch cards. Staff recommended against setting an allocation using one type of harvest record and managing the allocation with another. Staff also identified the dynamic tension between over-reporting (creating catch history) if records are used as the basis for the allocation and under-reporting (after implementation) if the perception of enforcement of the allocation is low. While the use of harvest tags to account for common pool halibut harvests may not be necessary, it could be done to achieve savings of one year between the fishery and accounting for that year's fishery. The Council had tasked staff with providing recommendations for how to reduce the time lag between an overage and implementation of measures to eliminate the overage. Staff comments follow.

1. Electronic Reporting. Each limited entry permit holder could be assigned a unique reporting number and could use that number to electronically report the number of halibut caught by clients that day on a daily basis. The electronic reporting could be done either through an Internet website or a dial-in telephone system. As additional verification each client could be required to sign the mandatory logbook next to the entry containing their name, license number, number and type of fish caught, and any other required information. Logbooks could continue to be submitted weekly.

At an interagency meeting, staff reviewed electronic reporting as a means for effectively monitoring and enforcing a charter halibut allocation. It identified that electronic reporting (ER) could supplement or substitute for a harvest tag system (described below). It identified that ER may result in enforcement difficulties at-sea because reporting would not occur until the end of the fishing day, theoretically and NMFS needs an enforcement tool for at-sea boardings. Staff identified potential requirements, such as reporting or signing the harvest tag "immediately upon landing. . ." NMFS staff plans to examine the commercial E-landings system to determine where it is not (always) required because internet is sporadic in some locations. However, E-landings still requires senders to email data. Participants could use satellite phones for reporting. But electronic reporting is still self-reported, and is not independently verifiable.

2. Harvest Tag. Uniquely numbered harvest tags could be distributed to each limited entry permit holder at the beginning of the season and additional tags could be available throughout the season if needed. The number of harvest tags could be greater than the number of fish allocated to the charter sector for that year (i.e., the tags are not a management tool for restricting or closing charter fishing in-season). When a halibut is landed the harvest tag could be required to be inserted into the fish and the harvest tag number recorded in the log book entry for the angler license number of the person who caught the fish. When the fish is processed the tag could be removed and mailed in using pre-addressed, stamped envelopes supplied for that purpose. Limited entry permit holders could pay a fee to cover the cost of the envelopes and tags. Harvest tags could preferably be bar coded to enable machine reading, with peel off bar code stickers for placement in the log book.

Interagency staff identified that harvest tags addressed numerous record keeping and enforcement requirements for a number of implementation issues including shortening the regulatory timeline by one year, which is of paramount interest to the Council in the design of this program. A key point to the use of halibut harvest tags is whether they are issued through charter operators (which results in them taking on characteristics of a share-based fishery) or directly to the angler (similar to how ADF&G sport licenses are issued). Discussion of the general design of a harvest tag program includes the following features:

- a. Tags issued by NMFS, since the State of Alaska is not authorized to directly manage halibut;
- b. Linked to ADF&G sport fish license number;
- c. Harvest tag = one fish;
- d. Would be redundant to SWHS and/or logbook program (independent verification with logbook);
- e. Could be used to manage *both* the common pool halibut and GAF halibut;

¹ Staff of NOAA, ADF&G, IPHC, and Council convened twice to provide guidance to the Council on draft alternatives for analysis. Reports were distributed to the Council and public at the December 2007 Council meeting. Since these meetings, opinions and recommendations may have evolved due to further internal discussions.

- f. Common pool halibut harvest tags could be issued equal to the number of fish in the allocation or increased by a correction factor for unused, lost, etc. tags;
- g. Would not require tag returns; once issued they are counted as fished. Unique number associated with each tag, entered in logbook for individual harvest record; Basic assumption that all tickets are used (so allocation is taken) or the number of tickets can be calculated to include the average number of halibut taken (one ticket -0.8 fish);
- h. Some portion could be issued pre-season (earlier if fixed pound allocation not tied to IPHC decisions);
- i. Halibut harvest tags reduce the reliance on self-reporting and increase reliance on independent third party corroboration;
- j. Could have two types of distinguishable halibut harvest tags:
- k. Common pool halibut harvest tags would be held by individual anglers after obtaining a ADF&G sport fishing license; and
- 1. GAF halibut harvest tags would be held by charter operator who leased commercial IFQs;
- m. Both types could have a two-part ticket with one part to be signed by angler; other half to be attached or copied into the charter operator's logbook and turned in with logbook verifiable paper trail for enforcement;
- n. Use caps could allow flexibility to individuals but not allow larger operators to corner the market;
- o. Could work best if charter operators can book a client and know that tickets are available and can lease fish;
- p. Some portion of total tags could be sold pre-season for advance bookings;
- q. Could put time limit on tags to spread them out over the season;
- r. Might be able to charge an administrative fee;
- s. Could result in secondary resale markets for tags;
- t. Harvest tags could have greater value in years of low abundance;
- u. Harvest tags could result in overestimates of harvest (because we assume it is used fully once issued), but it is unlikely to under report (if used legally);
- v. Instead of annual toolbox regulations, fewer harvest tags could be issued to reduce harvest; and
- w. Economic analysis would have to factor in limited entry aspect of halibut harvest tags.

In its discussions, the staff emphasized timeliness and accuracy of data (faster (only) is not better) as a critical feature of any management program. Shortening the time period in which charter halibut data can be finalized for use in management is the main mechanism that has been identified to shorten the delayed feedback between an overage and implementation of restrictive management measure(s). Staff previously identified some additional time savings that could be achieved by the Council in changes to its analysis and review process.

3. Punch Cards. Each limited entry permit holder could be issued a supply of uniquely numbered punch cards with punch outs equal to any daily or annual limit for that year. The cards could be issued at the beginning of the season and additional cards could be available as needed (i.e., the cards are not a management tool for restricting or closing charter fishing in-season). Each day every client angler could be assigned a punch card and that punch card number could be entered in the log book next to the license number. As each halibut is landed by a client their respective card could be punched, and at the end of the day the client could sign the punch card in the space provided. The punch card could then be sealed in a supplied stamped and addressed envelope, which could be mailed by the permit holder. Limited entry permit holders could pay a fee to cover the cost of the punch cards and mailing envelopes. Any log book entry for which a signed punch card is not received could be corrected to read the maximum number of fish printed on a punch card (i.e., the daily bag limit or six fish).

Interagency staff did not discuss the use of a punch card to monitor charter halibut removals.

A fourth option for an interactive voice response system (IVRS) is described by Wostmann (2005) in a report to NMFS. The primary benefit of an IVRS is to provide an alternative to the web for data reporting when Internet access is unavailable for data reporting. It could allow charter operators to report from locations that are off the Internet "grid" but where cellular or satellite phone service is available. An IVRS could come at additional cost to NMFS and possibly charter operators.

Interagency staff did not discuss the use of IVRS to monitor charter halibut removals.

<u>Previous studies of potential data collection programs</u> In a statement of work developed for a 2003 contract for development of a now defunct data collection and monitoring program for individually held charter IFQs, NMFS staff identified the necessity to collect the data required to adequately implement a proposed program for the charter halibut fleet. At a minimum, this data collection system would need to collect data on individual charter vessel operator and/or sportfish client harvests, fleetwide harvests, and the location of harvests. The data collection system would need to provide data on a timely basis, and provide measures to ensure adequate monitoring and enforcement of catch data. Typically, this means that data would be independently verifiable and not based simply on a self-reporting system. A contractor to NMFS provided three reports to guide the agency in the development of data collection systems to implement a (since withdrawn) recommendation by the Council for a charter IFQ program. Many of the conclusions and recommendations are germane to the current analysis.

Wostmann (2003a) surveyed charter data collection programs in other jurisdictions and the data reporting capabilities and experiences of the charter halibut fleet in Alaska at that time. The report concluded that data collection should be integrated into the ADF&G logbook (which has since been achieved), electronic logbooks are feasible although US mail was preferred (although only halibut reporting may mitigate some concerns), tagging the fish was acceptable to industry but reported to be of questionable value for enforcement and administration of the program.

On *data requirements*, Wostmann (2003a) reported that neither recording an angler's ADF&G sportfish license number (first required by ADF&G in 2007) nor recording lengths of retained fish was problematic; however, ADF&G has concerns with this approach. The report recommended that rules for measuring and recording fish lengths must be easily understandable and unambiguous. Appropriate statistical areas must be identified for reporting (likely to be ADF&G statistical areas); these could be correlated with the corresponding IPHC area in electronic reporting. It reports that requiring operators to return to the dock before processing or mutilating the fish in a manner that prevents measuring lengths would pose problems to some operators who lack the storage capacity for whole fish and would inconvenience operators who process fish before returning to the dock, but these requirements are currently in place for determining the minimum size or the number of fish caught while on board the vessel. Operators reported that requirements for data entry before fishing and before docking or unloading at the end of a trip would not be excessively burdensome.

On *internet and phone reporting*, Wostmann (2003a) reported that electronic reporting forms are likely to be used to allow both agency staffs and the charter operators to view activity and account balances of commercial IFQ transferred for use to the charter sector and to transfer commercial IFQs between commercial and charter users. It reported that remote operations generally have telephones, and many had Internet access. It is expected that phone (cellular and satellite) and Internet access has improved in some locations since 2003.

On *tagging fish*, Wostmann (2003a) reported that most surveyed operators reported that tags would be ineffective at remote lodges and other locations with a single operator and where enforcement is rare when tags were considered for monitoring charter IFQ halibut. Operators reported that they could self- regulate those who fished out of ports with significant charter activity through peer pressure and tips to the agencies.

References

Wostmann & Associates. 2003a. Halibut Guided Charter Data Collection Study of Guided Charter Industry Perspectives on Data Collection Methods. 40 p. Avail. From NMFS Sustainable Fisheries, Juneau, Alaska.

Wostmann & Associates. 2003b. Halibut Guided Charter Data Collection Conceptual Design. 51 p. Avail. From NMFS Sustainable Fisheries, Juneau, Alaska.

Wostmann & Associates. 2005. Interactive Voice Response System for Halibut Guided Charter Data Collection Feasibility Study. 39 p. Avail. From NMFS Sustainable Fisheries, Juneau, Alaska.