

# Integrating a Recreational Fishery into a Catch Share Program:

Case Study of Alaska's Guided Halibut  
Sport Fishery

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Catch Accountability Through Compensated Halibut

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# Abstract

In recent years, declining Pacific halibut stocks have prompted regulators to increase restrictions for Alaska's guided anglers. Charter operators, who depend on guided angler business, are struggling in the face of their clients' declining fishing opportunities. The Catch Accountability Through Compensated Halibut (CATCH) project is researching a solution to increase the guided sport (charter) sector's allocation by integrating it into the commercial halibut Individual Fishing Quota (IFQ) program. Under the proposed plan, an organization representing guided anglers would purchase commercial halibut quota from willing IFQ sellers and hold it in a common "pool" for all guided anglers. This pool of quota would be used to supplement the guided sport sector's allocation, thereby increasing access to the fishery for all anglers equally. The CATCH plan offers a market-based solution for addressing allocation issues without undermining the conservation goals of the IFQ Program. Quota transfers would occur between willing sellers and willing buyers, providing commercial IFQ participants with an additional market for their quota. By increasing fishing opportunities for anglers, the CATCH plan would result in a more economically viable and stable charter sector, which would greatly benefit Alaska's coastal communities.

Keywords: Pacific halibut, Alaska, guided anglers, sport fishing, charter sector, catch shares, recreational fishing, fisheries management, IFQ, CATCH.

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# Executive Summary

## INTRODUCTION

In recent years, declining Pacific halibut stocks have prompted regulators to increase restrictions for Alaska's guided anglers. Charter operators, who depend on guided angler business, are struggling in the face of their clients' declining fishing opportunities. There is currently no mechanism for the guided sector as a whole to increase its allocation, other than through the North Pacific Fishery Management Council's authority to reallocate halibut resources between user groups. This situation poses a great risk to the economic viability of the guided sport sector and the coastal communities it supports.

The Catch Accountability Through Compensated Halibut (CATCH) project is researching a market-based solution to increase the guided sector's allocation by integrating it into the Alaska Halibut and Sablefish Fixed Gear Individual Fishing Quota (IFQ) Program. Under this conceptual plan, NMFS would authorize an organization representing guided anglers to purchase commercial halibut quota from willing IFQ sellers and hold it in a common "pool." This pool of quota would be used to provide stability in guided angler regulations, with the objective of maintaining a historic two halibut of any size daily bag limit in Area 3A (Southcentral Alaska), and reaching a one halibut of any size daily bag limit in times of low abundance and a two halibut of any size daily bag limit in times of high abundance in Area 2C (Southeast Alaska).

The CATCH program offers a market-based solution for addressing allocation issues without undermining the conservation goals of the Alaska Halibut and Sablefish IFQ Program. Quota transfers would occur between willing sellers and willing buyers, providing the commercial fleet with an additional market for their quota. By increasing access to the fishery for all anglers equally, the CATCH program would result in a more economically viable and stable charter sector, which would greatly benefit Alaska's coastal communities.

## BACKGROUND

### Halibut Management in Alaska

Alaska's recreational and commercial halibut fisheries are managed at the international and national levels, with support from the State. Each year, prior to the fishing season, the International Pacific Halibut Commission (IPHC) recommends catch limits to the United States and Canadian governments for each of the IPHC Regulatory Areas. The U.S. Secretary of State accepts or rejects the catch limits, NOAA's National Marine Fisheries Service (NMFS) publishes and implements the new regulations, and the North Pacific Fishery Management Council (NPFMC) decides how to allocate the halibut catch among the various user groups.

### Status of Halibut Stocks

Halibut stocks have experienced a 50% decrease in exploitable biomass over the past decade (NPFMC 2012b). Scientists have found a general decline in size-at-age across ages, sexes, and areas, which they attribute to a combination of factors such as competition for food, population densities, biological threats, trawler bycatch, and fishing pressure from all sectors (NPFMC 2012b, 2012c; Valero 2011). IPHC staff also recently discovered that they have been overestimating halibut biomass for years and should have imposed much more restrictive harvest rates.

## Catch Shares

Under “catch share” systems, individuals or groups are given an exclusive right to harvest a share of the total allowable catch of a given fishery. Once their share of the catch is reached, they are required by regulation to stop fishing. If they exceed their shares in a given year, they must lease or buy additional shares to cover their overage or they are subject to a fine or revocation of their privilege.

Proponents of catch shares claim that they improve compliance to catch limits, promote fisheries sustainability, result in more stability and predictability for fishermen, help stabilize fish landings and catch limits, improve product quality, increase profits, and improve at-sea safety. Opponents argue that catch shares unfairly allocate fishing privileges to a select group of fishermen, create job loss, marginalize other user groups such as recreational fishermen, result in absentee ownership, and privatize a public resource. To date, there are no recreational catch share programs in the U.S., but there is growing interest with several pilot projects underway.

## Alaska’s Commercial Halibut Fishery

Pacific halibut is a highly valued commercial species in Alaska, supporting jobs on vessels, in fishing plants, and within related dockside industries. The NPFMC has managed the commercial longline fishery under the Alaska Halibut and Sablefish Fixed Gear Individual Fishing Program since 1995. This IFQ program was one of the first catch share programs to strongly emphasize social goals aimed at preserving the traditional character of the fishing fleet, avoiding excessive consolidation, and maintaining fishing opportunities for new entrants. The program includes a Community Development Quota (CDQ) program, which allocates a percentage of the quota share to economically disadvantaged coastal western Alaskan communities. It also has a Community Quota Entity (CQE) program, which allows eligible rural communities to participate in the IFQ program.

## Alaska’s Guided Sport Fishery

Marine recreational fishing in Alaska generates significant economic benefits to coastal communities. Pacific Halibut is a prized trophy fish, and is the state’s most commonly caught recreational species (NMFS 2012).

From 2003 to 2013, the NPFMC managed the guided halibut sport fishery under a Guideline Harvest Level (GHL) program, with target harvest levels, which, if exceeded, triggered more restrictive management measures the following year. For the first time, “guided” and “unguided” anglers were managed separately (unguided anglers continued to be managed under daily bag limits, with no annual limits or target harvest levels). The NPFMC’s management measures effectively kept Area 3A guided anglers within the GHL each year, but were not effective in Area 2C where guided anglers exceeded the GHL between 2004 and 2010. As a result, regulators decreased Area 2C’s daily bag limit from two fish of any size, to an historic low of one fish equal to or under 37-inches in length in 2011.

The GHL was a “soft” cap, which, if exceeded, did not result in immediate penalties, but did result in more restrictive harvest measures the following year. This concerned commercial fishermen, since the IPHC set annual commercial catch limits after deducting the guided sport catch from the available exploitable biomass. Any harvest over the GHL was viewed as a de facto reallocation of halibut from the commercial sector to the guided sport sector.

To remedy this, in 2014 the NMFS will replace the GHM with a new Catch Sharing Plan (CSP), under which the guided sector will share a combined catch limit with the commercial sector, with each receiving a percentage of the allowable harvest. Guided angler harvest will no longer be deducted before the IPHC sets commercial catch limits.

A special provision of the CSP will allow individual charter operators to lease limited amounts of commercial quota, which will be converted into Guided Angler Fish (GAF). By leasing GAF, charter operators can provide their clients with additional fishing opportunities up to the bag limits of unguided anglers. However, GAF is widely viewed as an uncertain and temporary, year-to-year solution, which may only benefit a few. Opponents argue that it will not provide stability and predictability to the charter sector as intended, since no one can predict IFQ availability and price in advance. The program is also criticized for encouraging absentee use of quota shares, a use prohibited by the design of the IFQ program. The CATCH concept presented in this paper, offers a permanent, alternative solution to GAF, which would benefit all guided anglers equally.

## RESEARCH RESULTS

### Integrating a Recreational Fishery into a Catch Share Program

Recreational catch share programs have been slow to develop due to difficulty in monitoring, unknown impacts on stakeholders, opposition to the privatization of a public resource, and the inherent differences between recreational and commercial fisheries. Nonetheless, there has been substantial interest in recreational catch shares, as stated in NOAA's Catch Share Policy (2010). The closest any fishery has come to implementing a recreational catch share program was the Alaska Charter IFQ program, which was never implemented. There have also been pilot projects in the Gulf of Mexico and Rhode Island. Each of these programs allocates a secure share of the catch to a charter operator, party boat, or head boat captain. However, this takes fishing rights away from anglers (the public) and grants them to a select group of business owners (charter operators). These programs also require sector separation, with separate management for guided and unguided anglers. While this already exists in Alaska's guided recreational halibut fishery, it is something the recreational fishing community widely opposes nationwide. Alternative programs could grant privileges to individual anglers, a collective group of charter operators, or a collective group of anglers, as proposed here.

#### CATCH Concept of a Guided Angler Catch Share Pool

The CATCH program would provide a means for the guided sport fishery to purchase commercial halibut quota on the open market and hold it in a common "pool" for the benefit of all guided anglers. By giving guided anglers a way to permanently increase their allocation, the program aims to provide relief from the economic impacts of overly restrictive regulations, maintain public access to the fishery, and provide stability to the guided recreational sector. The concept would work in the following way:

- An organization or "holding entity" would be formed to purchase, hold, and manage commercial halibut quota shares on behalf of the guided recreational sector. NMFS would approve this entity as a qualified participant in the Alaska Halibut and Sablefish IFQ Program.
- The holding entity would obtain funds from a loan, grant, or other funding source, and would use those funds to purchase halibut quota on the open market from willing commercial IFQ sellers. NMFS would consider controls to protect the objectives of the IFQ program (e.g., limits on quota share transfers).

- This purchased quota would be held in a common “pool” for the benefit of all guided recreational anglers. The pool of quota would be added to the annual guided sector allocation, and this “revised” allocation would be the basis from which the NPFMC and IPHC would recommend the next season’s harvest management measures to the Secretary of Commerce.
- The guided sector would retire its debt through some form of long-term funding mechanism such as a halibut stamp, charter fee, or combination of financing tools.
- The charter sector would work with state and federal agencies to improve accountability tools and reporting requirements to ensure guided anglers participate with the level of accountability required for a catch share program.

**CATCH RECOMMENDATIONS FOR INTEGRATING A RECREATIONAL FISHERY INTO A CATCH SHARE PROGRAM**

- A recreational catch share program should aim to maintain access and opportunity for all anglers equally, and not a select group of anglers.
- Regulators should assign fishing privileges to anglers and not charter operators.
- The program should aim for stability in regulations, exploring creative ways of keeping the sector accountable in ways that avoid in-season management and closures, which are devastating for charter businesses and coastal communities.
- Managers should be flexible when setting annual catch limits and accountability measures for a recreational fishery given the uncertainties in estimating angler demand.
- The program should provide mechanisms that support the best socio-economic utilization of the fishery for coastal communities, whether commercial or recreational.

## Guided Angler Holding Entity

The CATCH program requires a holding entity or administrative body to purchase and manage halibut quota share on behalf of the guided recreational sector. The holding entity would perform administrative functions such as arranging and maintaining financing, negotiating quota share purchase prices, and completing the necessary reporting requirements. This report explores different options for a holding entity including the federal government, the State of Alaska, a Regional Fishery Association (as defined in the Magnuson-Stevens Act), and a Recreational Quota Entity (modeled after the Community Quota Entity program in the IFQ program).



### **CATCH RECOMMENDATIONS FOR A HOLDING ENTITY**

- The NPFMC should pursue a Recreational Quota Entity (RQE) program, modeled after the Community Quota Entity (CQE) program.
- NMFS should approve a RQE as an eligible participant of the Alaska IFQ Halibut and Sablefish Program, with authority to purchase, sell, lease and manage halibut quota share in trust for all halibut guided anglers in common.
- One RQE should be formed to represent both IPHC Regulatory Area 2C and Area 3A, with each area having its own, separate quota share management pool.
- One Board of Directors should oversee the program, with subcommittees representing each Area. The Board should be composed of charter operators from Area 2C, charter operators from Area 3A, and recreational anglers. Other stakeholders may also be relevant on the Board, but this decision should be made when the by-laws are written.
- If a State halibut stamp is achieved as a funding mechanism for this program, then a non-profit corporation, as described in the Alaska Non-Profit Corporations Act, should be formed as the legal entity of the RQE.
- If a charter assessment or tax is pursued as an alternate to a State halibut stamp, then a regional non-profit association (RNPA) should be formed as the legal entity consisting of charter operators acting on behalf of their clients. The RNPA should have statutory authority to conduct elections for each Area's charter permit holders to vote on a self-imposed state tax. Any quota share purchased would become the property of all guided anglers in common.

## Quota Transfer Mechanisms

### **Transfer Goals and Needs**

The goal of the CATCH program is to transfer enough halibut quota to:

- Maintain a two halibut of any size daily bag limit in Area 3A;
- Reach a one halibut of any size daily bag limit in times of low abundance and a two halibut of any size daily bag limit in times of high abundance in Area 2C.

To reach these goals under CSP management, the report estimates that the CATCH program would need to transfer a total of:

- 785,000 pounds in Area 3A (two halibut of any size).
- 587,000 pounds in Area 2C (initially one halibut of any size).

## Transfer and Use Restrictions

The IFQ program has a number of transfer restrictions including geographic trading limits, social trading limits (vessel categories, blocks, quota share use caps, vessel use caps, leasing restrictions, owner-on-board provisions), and administrative-based limitations. The social trading limits were developed to maintain the original objectives of the IFQ program, to prevent consolidation of ownership, limit windfall profits from transfers, protect the traditional makeup of the fishery, and maintain opportunities for new entrants. The report examines how each of these restrictions might apply to the CATCH entity.

## Temporary Relaxation of Restrictions

While some restrictions are necessary, too many rules come with trade-offs, and can reduce the economic efficiency and value of the fleet. For this reason, NOAA's Catch Share Policy (2010) urges fishery management councils to "be mindful of imposing too many constraints on the transferability that would stifle the innovation and flexibility fishermen need for competitive cost-efficient business decision making."

The CATCH project commissioned economists from The Research Group to conduct an economic analysis of this project (Davis, Sylvia and Cusack 2013). The economists suggest having a one-time waiver or general waiver on transfer and use restrictions. This would give the CATCH entity a greater chance at finding sufficient quota share to fulfill its bag limit objectives. It would also benefit commercial quota holders who bought into the IFQ market at its peak, and are now interested in selling to recover their losses, or who wish to retire from the fishery but cannot find willing buyers. By relaxing transfer and use restrictions, regulators would increase the value of commercial quota share.

## Leasing

A two-way leasing arrangement between the CATCH entity and commercial quota share holders would allow flexibility in adjusting to short term fluctuations in abundance for both sectors. Limitations on leasing would protect each sector from "absentee landlords" (in which either sector buys more quota than they need so that they can lease it back to the other sector at a profit). For example, only 10–15% of IFQ holdings maybe leased between sectors.

## How to deal with Surplus IFQ and Quota Shares

If the current trend continues, the CATCH entity would be purchasing quota shares during times of low abundance, which could eventually equate to more fish per quota share unit in times of higher abundance. The report explores the following options for managing a surplus of IFQ and quota shares:

- Do nothing or status quo.
- Allow commercial fishermen to harvest surplus allocation.
- Lease surplus allocation to commercial fishermen.
- Rollover surplus allocation to the next year.

## Administrative Issues

Under the CATCH program, guided anglers would be fishing under two different types of allocation: the traditional regulatory allocation, and the quota share pool. The NPFMC would need to manage the two pools separately so that the quota retains its original designation under a two-way transfer. This section explores other administrative issues, such as cost recovery and market-based transfer systems under the CATCH program.

### RECOMMENDATIONS FOR QUOTA TRANSFER MECHANISMS

A transfer mechanism design must take into consideration the many trade-offs involved in balancing the economic and social benefits that a reallocation of quota shares may have on each sector. CATCH recommends the following:

- Quota share should be fully transferable (two-way) across sectors, and should retain its original commercial designation.
- All quota share transfers should be between a willing seller and a willing buyer.
- The NPFMC should allow limited, two-way, leasing of quota share between sectors. This would allow flexibility in adjusting to short-term fluctuations in abundance for both commercial and recreational sectors, and would help both sectors improve efficiencies and profitability.
- In defining the quota transfer mechanisms for the CATCH entity, every effort should be made to allow transfers to occur in the least restrictive environment as possible. This would help to ensure quota shares retain their asset values for both the commercial and recreational fisheries.
- When considering transfer and use restrictions, a thorough analysis should be conducted to determine whether a restriction on Class D shares would have as great a negative impact on new entrants as the original drafters of the IFQ program had anticipated.
- An additional analysis should examine whether there is, in fact, a great threat of consolidation if the CATCH entity were to purchase under relaxed rules.
- A limited rollover of harvest balance, positive or negative, should be considered to allow for flexibility in managing a constantly changing level of recreational fishery participation.

## Accountability

Accountability is key to effective fisheries management, and is critical to the success of catch share programs.

### How to Keep the Guided Sector Accountable Under the CATCH Program

In traditional catch share programs, participants must stop fishing once they reach their exclusive allocation, or find additional IFQ to purchase or lease to cover their overage. However, in-season closures are extremely detrimental to the charter sector, since anglers book trips many months, or even years, in advance, often with non-refundable air and lodging expenses. Recreational fisheries across the nation have spent years working to promote stability in regulations and oppose in-season management and closures. The NPFMC is also committed to finding solutions that will not result in any in-season changes or in-season closures (NPFMC 2007c).

Numerous reports stress the importance of flexibility and innovation in the design of catch share programs (Bonzon et al. 2010, 99; National Research Council 1999; NOAA 2010). With this in mind, the CATCH program aims to come up with creative ways of holding guided anglers accountable that do not depend on in-season closures or in-season management. The report explores the feasibility of different proactive measures including:

- Setting aside conservative “buffers” to account for uncertainty in angler demand (e.g., setting aside 10% of allocation).
- Voluntary self-management among charter operators (e.g., inducing clients to reduce take of fish).
- Harvest tickets (sometimes called tags), in which a fixed number of tickets are assigned to anglers, and once they are used, fishing must end.

If the proactive measures are not successful at keeping the fishery within allocation, then reactive measures could be implemented such as:

- Leasing or buying additional shares to cover overages.
- Rollover allowances that deduct overharvest from the next season’s allocation.

### **Data Collection and Reporting**

Under the CATCH program, charter harvest will need to be tracked in as close to real time as possible to allow fishery participants, managers, and enforcement officials to know, at any given time, how much quota in the pool has been fished, and whether there is enough in the pool to cover the landings. With an electronic reporting system, charter halibut permit holders could report daily on the number of halibut caught by clients through an Internet web-based system similar to the commercial eLandings system or through a phone-in system.

Harvest tags or “jaw tags” could be used to help track the number of fish landed as a way to validate logbooks or electronic reporting. However, harvest tags would not work towards the goal of real-time reporting and would add significant administrative costs.

### **Precision in Harvest Accounting**

There are different ways of measuring harvest in the commercial and recreational halibut fisheries, which pose a challenge for any inter-sector transfer program including GAF. Under the Catch Sharing Plan, the conversion between annual IFQ and GAF will be based on the average weight of halibut that the charter sector landed per region in the previous year, as determined by ADF&G. However, there are different average sizes between sub-regions. NMFS instead recommends measuring the length of each halibut retained, and using the IPHC’s length-to-weight table as a standard for calculating transfers between IFQ and GAF (NMFS Alaska 2012c). The CATCH program could also adopt this method.

## RECOMMENDATIONS FOR ACCOUNTABILITY

- Regulators should adopt flexible means of holding the guided sector accountable that avoid having to enforce a “stop fishing” measure, which would be devastating to the charter sector. Priority should instead be given to the following accountability tools:
  - » A reasonable buffer should be set aside to account for uncertainties in angler harvest and regulations. Once an appropriate buffer is in place, additional purchased quota share can be used to relax restrictive harvest measures.
  - » The program should include rollover allowances to account for harvest overages and underages, taking into consideration the status of the stocks and the uncertainty in recreational harvest (e.g., if stocks are doing well, the NPFMC can relax from taking immediate action on overages and instead use a three year rolling average in recommending harvest measures.). In addition, rollover underage allowances should only apply to the next season’s allocation and should not be banked for use in future years.
  - » The CATCH program should allow limited annual leasing between the commercial and charter sectors, so that if there is a shortage of allocation near the end of the season, or if overharvest has already occurred, the CATCH entity can lease from willing IFQ holders who have not already fished their quota.
- Managers should adopt an electronic reporting system to improve the timeliness and accuracy of charter harvest data, with both an Internet reporting system and possibly an Interactive Voice Recording phone service.
- The program should adopt the NMFS’ recommended measurement for GAF fish, which measures the length of each halibut retained and uses the IPHC’s length-to-weight table as a standard for calculating transfers.

## Funding

The holding entity will need to raise funds to purchase and manage enough quota shares to achieve its daily bag limit objectives. There will be administrative costs such as legal consultation during setup, banking fees, personnel, and filing for taxes. There may also be external government administrative costs, such as NMFS administrative fees to pay for the costs of tracking, purchasing, and sales of quota.

### Funding Needs

Funding needs will depend on how much quota share is needed to reach the desired bag limits, and will be influenced by transfer and use restrictions, availability and price of quota on the market, and how the holding entity impacts that price. For illustrative purposes, this report makes a number of assumptions to come up with the following estimates:

- At a price range of \$25 to \$50 per pound, Area 2C would need between \$14.6 million and \$29.4 million to transfer 587,000 pounds, and Area 3A would need between \$19.6 million and \$39.3 million to transfer 785,000 pounds.
- Annual financing costs in Area 2C would be approximately \$1.32 million. The annual revenue raised by a \$20 stamp would come to an estimated \$1.48 million. Therefore, a \$20 halibut stamp would likely be sufficient to cover the annual costs for loan repayment, and even a \$10 stamp could have a meaningful impact.

Davis, Sylvia and Cusack (2013) conducted a similar analysis of financing requirements for Area 2C under the CATCH program. Their results show that if adequate quota share could be secured at \$35 per pound and angler participation increased significantly at a stamp fee of \$20 per day, revenues would be adequate to finance the necessary purchase. However, if quota share costs were \$50 per pound or more, then even a \$30 stamp per angler day would be inadequate to finance the required purchase, unless angler participation rates increased by 30% or more.

### Financing Mechanisms

The CATCH program would require initial capital to start purchasing quota share and a long-term revenue stream to retire any loans acquired and to continue purchasing quota share. Grants from government programs, philanthropic foundations, individuals, or non-governmental organizations are the most affordable funding source, but can be limited in amount. Some banks have made loans to purchase quota share/IFQ, but commercial banks may be unwilling to lend to a new, high-risk entity with no credit history, proven operating capacity, or existing assets. They also may be unwilling to accept quota share as collateral for loans. The entity will likely have a better chance applying for government or special interest loans.

To pay off the loan, a federal halibut stamp could be modeled after the successful Federal Duck Stamp Program. However, the process would be lengthy and full of uncertainties, and may require amendments to the Magnuson-Stevens Act or Halibut Act. A state halibut stamp would not require congressional action, and could be modeled after the Alaska king salmon stamp program and enforced in the same manner. Either the Alaska Department of Revenue or ADF&G could collect the funds. ADF&G could also collect revenue from a state halibut surcharge stamp on sport fishing licenses, and deposit it into a special account within the Fish and Game Fund. A state halibut stamp would not conflict with federal regulations, since it would be a revenue-generating mechanism and not a management tool. A state halibut stamp does not violate the state's uniform application clause, equal access clause, or dedicated funds clause, but would need state legislation to authorize it.

The CATCH program could also raise revenue via a charter halibut tax, modeled after the state's Salmon Enhancement Tax, which would require special state legislation. The entity would have to form a special-interest non-profit corporation such as a Regional Non-Profit Association (RNPA) with the ability to self-tax. A charter halibut permit fee could be issued to permit holders, who could pass the fee on to their clients or absorb it as part of their operating expenses. The fee could also be based on charter halibut permit angler endorsements. This would require an amendment to the charter halibut permit program and would have to be approved through the NPFMC and NMFS regulatory process. A major issue would be the unequal benefits realized among active and less active permit holders. However, a fee on permits could help dissuade people from holding on to idle or minimally used permits. Another option is to base the fee on individual angler effort. Charter operators would pay fees based on charter logbook records of number of anglers involved in halibut fishing trips.

A challenge with charter operator fees, is that charter operators would be essentially paying for something that belongs to guided anglers. This would have to be clarified and legally documented. Some operations may have difficulty absorbing the increased expense. Consideration must be given to how taxes and fees would be reported, paid, and enforced.

## Termination of Revenue Stream

In its simplest form, the CATCH program would stop purchasing quota share once program goals were met (plus a reasonable buffer to account for annual fluctuations in angler demand). Funding programs (i.e., halibut stamp, charter assessment) would stop once all incurred debts were paid. Another option is to continue the revenue stream indefinitely, and once the CATCH program objectives (bag limits) were reached, the funds could be used for other purposes (e.g., research or extra administrative fees). If transfer and use restrictions are in place, then this should ease concerns that an open-ended funding stream would be used to purchase halibut quota share in perpetuity.

### RECOMMENDATIONS FOR FUNDING

- The CATCH program should pursue a diverse portfolio of funding, using a combination of financial tools to help finance the purchase of quota shares and to cover administrative costs. This will help during market downturns, make payments on debt service more manageable, and lower the risk for lenders.
- Priority should be given to pursuing a state halibut stamp for all guided halibut anglers who wish to fish and retain halibut. If possible, anglers should have to purchase this stamp prior to departing on a halibut trip. The CATCH program should secure a loan with debt service accomplished using revenues from this state halibut stamp.
- In the event that a state halibut stamp is not attainable, the program should pursue a charter halibut tax, or client based user fee, for those who wish to fish and retain halibut off a charter vessel. This fee could be modeled after the Salmon Enhancement Tax. All CHP holders could be levied a tax and/or fee based on charter logbook records on halibut landings or some other acceptable recording method. Each CHP holder would in turn collect fees from their clients to cover the expense of this tax. It must be made implicit that quota share purchased through this funding method belong to guided anglers in common and not charter businesses.

## CONCLUSIONS

The results show that the CATCH program is a feasible approach for increasing fishing opportunities in Alaska's guided halibut sport fishery. The NMFS has already set the precedent for adding a community of users to the IFQ program through the Community Quota Entity Program (CQE), which could be adapted for a Recreational Quota Entity (RQE). Funding through a halibut stamp would be sufficient to purchase the needed quota share. There are creative ways of holding guided anglers accountable to a catch limit that do not depend on in-season closures, which are devastating for charter businesses, and which the NPFMC opposes. An electronic reporting system for the guided sport sector would improve accountability. While a temporary relaxation of restrictions may increase the price of quota, it would also increase the long-term asset value for both the commercial and recreational fleets. By being flexible and adaptive, fisheries managers are supporting the objectives of catch share programs, and helping ensure that the best economic value is placed on fishery resources for coastal communities.