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A Non-Profit Organization since 1997

Pacific Fishery Management Council
7700 Ambassador Place. Ste 101
Portland, OR 97220-1384

Dear Briefing Book Reader,

The entire fishing industry, both commercial and recreational, is shocked by the decision to give initial allocation of harvesting quotas to processors. The rationale the Council used for their decision was influenced by volume organized public testimony in favor of initial allocation to processors. The volume of testimony in favor of initial allocation to processors was produced by a clinical psychologist fish processor who told his workers that if he didn’t get initial allocation of quota shares he would have to close his processing facilities. So much of that pivotal testimony came from the guts and hearts of people who believed their jobs were on the line over processor shares, jobs held, in some cases, for nearly thirty years were going to be terminated if processors didn’t get their desired outcome as initial quota holders. How could the council members not realize that these workers were being duped and were being used as pawns to gain the desired outcome wanted by the processing sector. Mr. Anderson, in his prelude to the motion, indicated that the balance of power had been grossly in the processor’s favor for decades and yet proceeded to take 20% of the pie from the fishermen who have undoubtably sacrificed the most for conservation and give it to those most responsible for deteriorating infrastructure up and down the entire coast.

A rationalization program that rewards processors for all the hard work fishermen do to conserve the resource is unconscionable and incredulous. There are several sound reasons for our position:

1. The fleet has been struggling for years to deal with the recovery of species that were considered fished down under management policy changing form F20 to F40 on some key species of our catch. This triggered a groundfish strategic plan that called for removal of capacity of the harvesting sector to better line up with the decreased ABCs as fish populations changed under el Nino conditions. The buy-back program was initiated to reduce the fleet by nearly 50% and the fleet continues to pay back millions of dollars in federal loans without any help from the processing sector. ARE THE PROCESSORS GOING TO SHARE THE BUY-BACK VESSEL TIQ PORTION? IS THE PROCESSING SECTOR GOING TO BE LIABLE TO PAY BACK 5% OF THE BUY-BACK RECOVERY FEE THE REST OF THE FLEET PAYS FOR THEIR 20% ALLOCATION? So where does the processor 20% come from, the entire pool or just the portion not from the buy-back vessels? If they don’t have to pay the buy-back assessment then another travesty will once again fall upon the harvesters.
2. Because the processing sector was allowed to consolidate to reduce expenses and competition at the same time to gain more control over the market, prices and the harvesting sector, for the last several years plants have had the fleet on plant limits and delivery schedules. Even though the processors were now only dealing with half the fleet, relatively small plant limits were established by the plants and very strict delivery schedules are enforced. Deliveries above the plant limits from non-plant owned vessels are discounted to nearly 50% of the current expected price. Fishermen are either forced to sell cheap fish creating animosity with fellow fishermen or they are encouraged to discard the resource in order to keep the market price firm and still have friends back at the dock. If weather or other circumstances prevent meeting the delivery date and time, then fishermen have to forgo the trip or if they were at sea, they may even have to discard their catch for the sake of quality. Vertical integrated processors don’t enforce the plant limit or delivery dates/time schedules on their own vessels. Processor owned vessels operate under the federal trip limit schedule and at questionable ex-vessel prices. There are also a number of boats that were built to fish mainly in Alaska waters, that are here as whiting catcher vessels and processors (both shoreside and at-sea). They land groundfish is huge volume between Alaskan pollock seasons without regard of price or quality so that they can quickly return to Alaska. Both the processor owned boats and these Alaskan boats help lower the ex-vessel price, and therefore, an encouraged practice by the processors is to create the situation that causes plant induced discards. Unfortunately, it is the fishermen that take all the negative PR and brutal relentless punishment from the environmental groups and the well meaning media.

3. The processors introduced split prices for species based on what the market could bare for weight and size, several years ago. This policy has caused high grading at sea, another category of plant induced discards. Unmeasurable amounts of fish are discarded at-sea in order to optimize the value of each landing. This policy combined with the discounted fish/delivery schedule policy mentioned above accounts for the majority of our discards. The processing sector has been isolated from the “burden of conservation” that the industry deals with everyday and conservation will continue to be of no interest to them unless it means less fish for them to process. When there are less fish, they are allowed to consolidate more, removing more competition because processors only deal with profit minded decisions while fishermen, with their big investments, are not allowed to stack permits to match their investment to the amount of fish allowed to be landed.

4. Essential fish habitat is another issue that has directly affected the trawl sector’s behavior but not that of the processing sector. The trawlers not only froze our footprint, we also gave up valuable grounds to help the Council meet a court order. The processors may have worried that they might not receive their customary amount of product to process but the trawl fishermen had to change major behavior patterns and practices that reach far into the future. This is another conservation issue that is a burden only on the harvesters.

5. The Rockfish Conservation Areas were established through a coordinated effort between management and harvesters. These heavy restrictions burdened only the harvesters and the magnitude of this conservation effort has added untold risk, increasing cost, worry and rethinking “normal practices” to the real American fishing fleet. The logistics and management of the RCAs has affected every fisherman’s operation, bottom line, and behavior, a burden not
6. VMS is paid and used on the entire trawl fleet. The initial feeling fishermen had, when we were forced to carry VMS, was that of a criminal with an ankle bracelet. “Big Brother” was now watching our every move and stealing what once was proprietary information. In order to make sure the RCA and EFH were truly being protected at only the fishermen’s expense, we had no choice except to concede to these electronic devises. Again, the processing sector was not effected by VMS in cost or behavior changes that were needed to assure protection of rebuilding stocks. Nor do processors face any kind of liability for a vessel drifting over the boundary line or misinterpretation of the complex matrix of arbitrary areas and differential limits like the fishermen do. *Again the burden of conservation is totally on the fishermen.*

7. Observers, another liability burden, are now on every trawl vessel at some time during the year. They are there to account for the total mortality of fishing. The TIQ program will require 100% observer coverage 100% of the time. Observers not only account for the total mortality but also verify the location of the vessel, gear used, direction of tows and other important information. It is the trawl fishermen that have to cope with this intruder on our vessels which increases our legal liability and costs and it isn’t always easy or possible to make the observer part of the boat crew. Again, the processors do not share the burden of conservation the observer program has brought to the fleet. *If the TIQ program is a conservation program, why does the Council believe that processors, who have nothing to do with at sea conservation, should receive a slice of the pie?*

The Council’s own Groundfish Allocation Committee in May 2008, voted to recommend “no initial allocation of quota shares for processors” with all but one abstention, voting in favor. The rational they gave at that time was as follows:

1. “An initial allocation of quota shares to processors may erode the personal accountability for bycatch that quota shares are supposed to provide. A major goal of the program is to maintain mortality of overfished species within the limits specified in the rebuilding plans. To achieve this we need to clearly put responsibility on the fishermen and give them incentives for innovations that will allow them to increase their catch of target species while decreasing overfished species bycatch rates. Starting out with initial allocation of quota shares to fishermen clearly puts the responsibility on the fishermen.

2. While quota shares may be transferred to processors after the initial allocation, the two are quite different. The initial allocation is a decision made by the government while the subsequent distribution among sectors will be driven by each person’s individual business decision to buy and sell. For an entity that is granted the quota share as part of the initial allocation, the incentives for optimal use, and hence for personal accountability, will be less than if they have to buy that allocation through the market place.

3. The bycatch rate reduction expected with an initial allocation to fishermen will result in increased landings of target species which will benefit the entire industry, including processors.
4. The language of the MSA indicates a strong intent to recognize harvesters.

5. Ultimately, both sides will benefit from the program and there is not a large disadvantage if processors are not given shares initially.

6. There is limited evidence on the need for an allocation to processors and the ramification of such an allocation is unclear. It does not appear that an allocation to processors will address concerns about the geographic distribution of harvest.
7. Consolidation is a concern and an initial allocation to processors may lead to greater consolidation.

8. The analysis indicates that currently there is not a level playing field between harvesters and processors and an initial allocation to processors may exacerbate that imbalance, especially given the degree of consolidation in the processing sector.

9. Long established relationships between processors and harvesters will continue to exist, there will not be widespread disintegration and relocation of these relationships.

10. The history of development of this program encompasses the identification of a continued harvester overcapacity problem and conception of the buyback program in 1996, the groundfish strategic plan, and the bycatch reduction amendment. The success of this long-term effort requires protection for those established in the fishery in order to increase the economic stability for all.”

In the analysis document it states in Appendix A (A-2.1.1.a) page A-73 under “Competitiveness’, processing sector’s interaction with harvesters, “that processors are in a strong position to exert market power under status quo and may have cheaper access to capital than harvesters; an IFQ program under which processors do not receive an initial allocation would weaken that position; even if weakened, processors could regain some strength through the acquisition of quota shares, but only up to accumulation limits; that an initial allocation of quota shares would give them a stronger negotiating position than if they not receive an initial allocation.”

“Specifically, an initial allocation of quota shares would:
1. Provide a capital infusion that may allow processors to employ one of a number of different strategies to grow and increase their efficiency (e.g., acquisition of additional shares, horizontal integration, etc)

2. Diminish the exit barrier (liquidation of quota shares would allow a firm to exit the industry with less debt or greater gains)

3. Initially provide processors with greater bargaining power (as compared to their initial situation under IFQs if they did not receive an initial allocation)

4. Create a greater barrier to new entry
5. Create an even greater barrier to entry if there is an accumulation limit grandfather clause

6. Decrease the cost of processor access to capital.”

There is a disjunction happening with this TIQ program when initial allocation is given to processors. The original goal of preserving the fleet characteristic and therefore our coastal communities’ characteristics can’t be accomplished if the Council desires fewer processors on the west coast. Is it the Council’s goal to only have factory trawlers and motherships working the harvest and running to Seattle with the money?

We believe the Council failed to look at processor shares from every view point. The conflicts that exist between the big domineering processors and the small processors, coupled with the lack of competition in the west coast processing sector, will put the smaller processor in jeopardy of staying in business. It seems that the Council prefers large processors over small processors and will eliminate the small processors with the required six (6) metric ton deliveries in three (3) of the six (6) years between 1998 and 2003. So these smaller processors will not receive any of the 20% allocation that the processors will get, putting the smaller processors in greater jeopardy. **We believe the Council action on this issue will reduce competition which will exacerbate and erode any gains fishermen may realize through the rationalization program.**

According to the analysis on Effect on Smaller Processors (Page A-74), “If there is not an initial allocation to processors, smaller processors will be at a disadvantage relative to larger processors. At this time, most of the limited entry permits that are owned by processors are owned by larger processors. Therefore, smaller processors would have to acquire QS (quota shares) or negotiate with harvesters without that leverage. Either way, they would be at a competitive disadvantage within the sector. Anecdotal information has indicated that those processors in the IFQ system in British Columbia who did not own vessels or were not closely partnered with vessels had a financially difficult time competing while also having to make payments on their QS acquisitions. This is consistent with reports from New Zealand that indicated lower economic satisfaction for later entrants who have to buy QS to enter the fishery (as compared to those receiving initial allocation).” So instead of giving QS to small processors so they have something to work with, they will be forced to acquire QS which will put them at a greater disadvantage. This could only have dire consequences for any new entrants and could collapse vessel prices even more than they are right now which is shameful when you compare ex-vessel prices over time to inflation. The analysis shows that smaller processors would use QS more effectively than large processors, the Council is choosing to put the small processors out of business, removing more competition and paving the way to line the big processors pockets with more wealth and privileges. Because the Council seems to have a need to eliminate the small processors and fishermen’s business by institutionalizing an unfair advantage to the most powerful, **we ask that the tightest accumulation/control caps be established to prevent further vertical integration which could also eliminate the fishermen sector in the long run.**

If the Council’s final decision includes giving harvesting shares to processors, it is important that the Council also consider permanent accumulation limits and no grandfather clause to try to preserve our coastal communities from massive takeovers and fleet migration that would occur if uncontrolled vertical integration is allowed.. The small amount of vertical integration that has
already occurred has affected the negotiating power of the fishermen. While operational costs have skyrocketed, vertical integration has virtually frozen the ex-vessel prices as explained in the number 2 section at the beginning of this letter.

Stability of supply will be improved under the TIFQ program. This will benefit both the harvesting sector and the processing sector with a better coordinated effort to have product available when it is most needed. Price competition may be influenced by many factors. As stated in the analysis Appendix A Excerpts on page A-75, “If the IFQ program results in west coast fish processing operations remaining smaller that might otherwise be optimal, higher costs could make their products somewhat less competitive in the wholesale market. This would likely mean the raw fish prices (exvessel) might have to be somewhat lower in order for the product to clear the market. An initial allocation to processors and accumulation limit grandfather clause would preserve the advantage of the large processors until the accumulation limit grandfather clause expires. After expiration of that clause, the likelihood that larger processing operations will continue to dominate the fishery will depend on the relative advantage that ownership of QS provides a processing operation. (QS ownership is not necessary for large operations but could improve their profits.)” With improved profits for the large processing operations, the likelihood of further consolidation, geographic shifts in catch and localized depletion of stocks is greater.

Any effects on raw product prices, either higher or lower at the start of the program “are expected to be short-run effects because over time processors are eligible to buy QS and over the long run they are likely to accumulate QS to improve their bargaining power.” So in other words competition in the wholesale market will not be effected if processors are not given initial allocation of QS.

It is stated in the Appendix A page A-80, “Relative to status quo, processors are not expected to lose returns on their investment to QS holders unless there is overcapacity in the processing sector and competition for raw fish deliveries from harvesters has been based at least partially on something other than price (e.g., competition based on ability to handle volume.)” We all know that the processing sector is not overcapitalized and ex-vessel prices attest to that fact.

“Allocation of QS to processors may:

- Strengthen their bargaining position vis a vis harvesters in the raw fish market (as compared to not receiving an allocation)
  - over the short run (via the initial grant of an asset and ability to hold QS in excess of accumulation limits)
  - over the long run, if they would not otherwise accumulate QS through purchase
- Possible strengthen large producers relative to small producers (if there is a grandfather clause)
- Strengthen small producers relative to large producers (if there is no grandfather clause and depending on relative efficiencies)
- Not likely affect wholesale prices or competitiveness of west coast product in the wholesale markets.
- Under certain circumstances compensate for partial losses of returns on investment (i.e. if the sector is overcapitalized, fully competitive (market power is not being exerted), and at least some of the competition for the raw product was on a basis other than price (e.g. the ability to handle a large volume of product in a timely manner)). It should be noted that in such circumstances the processors were likely already losing some of their return on
investment (to the degree that price was a factor in the competition for the raw product.) Also, the amount of profit that processors bid away in the price competition is unlikely to be the full amount that would otherwise go to return on investment.

- Reduce exit barriers by providing compensation for capital losses by those who might seek to leave the fishery.”

“As the allocation to processors increases; The capital infusion to harvesters decreases; The exit barriers increase lengthening the IFQ program transition period; Harvester competition in the raw fish market will increase reducing their bargaining power; The cost of harvester access to capital would increase; The likelihood of harvester bankruptcies would increase.”

“An IFQ program will likely cause at least some increase the potential for harvesters to exert market power or resist processor market power, independent of the amount of QS they are initially granted. Whoever receives an initial allocation is likely to be in a better position to exert market power and accumulate additional QS. As the amount of QS issued to processors increases, transaction costs will increase as QP issued to processors will be transferred to vessels each year in order to be used. As the amount of QS issued to processors increases, there is a greater mismatch between recent production by processors-permit associations and the QS distribution to those processor-permit association. Program administration costs increase with each additional group to which an allocation is made.”

Finally, in order to give processors harvesting quota, laws have to be changed. The Department of Justice cautioned the IQ Committee that issuing harvesting quota to processors could violate anti-trust laws. The harvesters have believed for many years that the processing sector has been in violation of the Sherman Act. Processors have been suspected of price fixing and collusion. Product has been dumped on the market to drive non-cooperating processors out of business. The harvesters have been sacrificing for years and have been the sole source of the burden of conservation. Harvesters have had to reduce maintenance, crew size and operation time in order to stay in business, while at the same time, fishermen watched the processors consolidate to lower costs, build new plants and improve existing facilities, buy small plants to close those operations, increase their employee benefits and fly around the country in private jets.

We believe giving initial allocation of QS to processors is the wrong thing to do and oppose this IFQ program if it contains initial allocation of QS to processors.

Sincerely,

Steve Bodner
October 11, 2008

Pacific Fishery Management Council
Don Hansen, Chairman
7700 NE Ambassador Place
Suite 101
Portland, OR 97220-1384

Re: Gear switching/conversion element of the Trawl IQ program

Dear Chairman Hansen,

The members of the Westport Charterboat Association are strongly concerned about the future prospect of gear switching or gear conversion. Our concern is related to the probable increase in by-catch impacts on certain overfished stocks that could result from switching from trawl to longline or other hook and line methods. Our specific concern relates to Yelloweye Rockfish.

Although trawling played a major role in fishing Yelloweye down to their recent biomass level, current trawl methods and regulations have minimal impacts. Longlines and vertical lines can have significant impacts on Yelloweye.

Currently, recreational fisheries and longstanding hook and line commercial fisheries are sharing an extremely small allowable by-catch coast wide in order to harvest healthy target stocks. Regulations have been draconian in many cases. The 09-10 OY for Yelloweye is the smallest it’s ever been. Ranges of OY from 10-20 mt could be the norm for decades to come. There is no room for the additional impacts that would be introduced by a growing hook and line fishery.

If gear switching is to be allowed in the future we ask that the rules would include provisions that in no way increase impacts on Yelloweye or any other overfished stock.

Respectfully yours,

[Signature]
Steve Westrick, President
September 24, 2008

Mr. Phil Anderson
Washington Dept. of Fish & Wildlife
600 Capitol Way North
Olympia, WA 98501

RE: Whiting co-op mothership/catcher vessel management

Dear Phil:

The suite of preferred alternatives that you presented to the PFMC on the whiting co-op proposal for the mothership/catcher vessel (MS/CV) sector overall captures industry intent and is well developed. Given further reflection, there is, however, one component of the program that has been, and continues to be, of concern and we believe deserving of an additional alternative.

You may recall that the original proposal developed by UCB and presented to PFMC by Steve Hughes and Brent Paine, reported industry agreement on the package with the stipulation that individuals could offer additional alternatives to PFMC for consideration. The following deals with the aligning of catcher boats with motherships in 2009 and the movement of CV’s between motherships in general. The below-signed would like to add an alternative that would provide more flexibility to catcher boats and to avoid CV’s going through open access to change MS markets. Specifically, the added alternative that we request be added would provide that in the first year of co-op formation, catcher boats are free to deliver to any processor or processors which they choose, and that this procedure would be followed each year, which eliminates the one year open access requirement for CV’s to change MS markets between years.

We thank you for your consideration of this additional alternative and we understand that it would be appropriate to discuss its inclusion in the co-op proposal during the October 8 and 9, 2008 Allocation Committee Meeting.

Sincerely,

[Signatures]
October 13, 2008

Mr. Donald K. Hansen, Chair
Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 101
Portland, OR 97220-1384

Re: Comments on the Shoreside Processor Allocation Preferred Alternative in the Groundfish Trawl Rationalization Decision Document

Dear Mr. Hansen:

The Fishermen’s Marketing Association ("FMA") hereby submits comments on the Pacific Fishery Management Council’s ("Council") Rationalization of the Pacific Coast Groundfish Limited Entry Trawl Fishery: Decision Document for the November 2008 Pacific Fishery Council Meeting ("Decision Document"). These comments are specific to the issue of initial allocation of harvest privileges to shoreside fish processors. We request that these comments be included in the briefing materials sent to Council members in advance of the upcoming meeting during the first week in November.

Executive Summary

The Decision Document raises substantial legal questions that the Council must address regarding the initial allocation of harvest privileges to shoreside processors, as follows:

- **The Council lacks statutory authority to issue harvest privileges to shoreside processors.** Shoreside processors do not “substantially participate in the fishery.”

- **The Council’s plan has the unlawful effect of allocating processing privileges.** Allocating harvest privileges to select processors has the same effect as establishing processing privileges and is beyond the Council’s authority.

- **The Council’s preferred alternatives raise substantial competitiveness issues for the fishery.** Allocating harvest privileges to processors will reduce competition and have anticompetitive impacts.

- **The proposed measures are inconsistent with National Standard 4.** The Decision Document concededly favors shoreside processors to the detriment of harvesters, and such measures are therefore not fair and equitable to fishermen.

These issues are discussed in more detail below.
Detailed Comments

I. The Magnuson-Stevens Act Does Not Provide For Initial Harvest Allocations Directly to Shoreside Processors.

One of the most controversial aspects of the Pacific Council’s Decision Document is the preliminary preferred alternative that would allocate 20% of the available harvest privileges (or quota share (“QS”)) to shoreside processors. While there has been substantial debate over the permissibility of such an initial allocation, no provision of the Magnuson-Stevens Fishery Conservation and Management Act (“MSA”) affirmatively provides authority for the Council to allocate harvest privileges to shoreside processors. In fact, a close analysis of the MSA demonstrates that shoreside processors are not eligible to receive an initial allocation of harvest privileges.

a. Shoreside Processors do not “Substantially Participate in the Fishery”

Under 16 U.S.C. § 1853a(c)(5)(E), a Council “shall authorize” limited access privileges to be issued to “persons who substantially participate in the fishery, including in a specific sector of such fishery, as specified by the Council.” (emphasis added). The term “fishery” is defined in the MSA, and does not include shoreside processing.

The term “fishery” is defined as “one or more stocks of fish which can be treated as a unit”, or “any fishing for such stocks.”1 The term “fishing,” in turn, is defined as the “catching, taking, or harvesting of fish,” the “attempted catching, taking or harvesting of fish”, “any other activity which can reasonably be expected to result in the catching, taking, or harvesting of fish,” and “any operations at sea in support of, or in preparation for” the catching, taking or harvesting of fish.2 Accordingly, the scope of the term “fishery” is limited by the definition of “fishing.” While “fishing” can include non-harvesting support activities at sea, the MSA expressly excludes onshore support activities like processing from the definition of “fishing.”

Legal analyses performed by the National Marine Fisheries Service (“NMFS”) going back to 1978 have repeatedly concluded that “shorebased processing is not “fishing” as that term is defined in the statute.”3 Therefore, since the definition of the term “fishery” is controlled by what constitutes “fishing,” and shorebased processing does not fall within the definition of “fishing,” then the term “fishery” does not cover

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1 16 U.S.C. §§ 1802(13)(A), (B) (emphasis added).
3 Letter to Council Chairman Donald K. Hansen from NMFS NW Regional Counsel Eileen M. Cooney (Oct. 30, 2007); see also Memorandum to the North Pacific Fishery Management Council from NOAA General Counsel Lisa L. Lindeman (Sept. 20, 1993) (“1993 Legal Memorandum”) at p. 2 (“On-shore processing is not “fishing.””), p. 7 (quoting 1978 legal opinion of the NOAA General Counsel) (“An activity on land which merely provides an incentive to catch fish is insufficiently related to the catching of fish to constitute fishing under [the MSA]. This conclusion is consistent with the legislative history of the FCMA which at no point indicates that the term “fishing” was intended to include on-shore processing.”).
shorebased processing. Accordingly, shoreside processors are by definition excluded from participating in the “fishery” as that term is defined by the MSA for purposes of 16 U.S.C. § 1853a(c)(5)(E). Legislative history of the 2006 amendments to the MSA supports this reading of the statute. Rep. Nick Rahall, then Ranking Member and now Chair of the House Resources Committee, stated these fishing “privileges are to be held by fishermen who are actively engaged and substantially participate in the fishery.”

To our knowledge, NMFS has not provided the Council with a detailed legal analysis specifically on the question of whether shoreside processors are eligible to receive an initial allocation of harvest privileges in light of the 2006 amendments to the MSA. The legal analyses NMFS has provided, to the extent they even address shoreside processing, do not address the explicit definition of “fishery” set forth in the MSA in conjunction with the 2006 MSA amendments and NMFS’s longstanding opinion that shoreside processing is not “fishing.” In 2007 NMFS stated that nothing in the 2006 amendments to the MSA changed its prior legal analyses. Yet the 2006 amendments specified for the first time which entities can be issued harvest privileges under the MSA (i.e., to those who “substantially participate in the fishery”). The Council needs prompt NMFS guidance on this issue.

The Council cannot simply ignore these statutory provisions and substitute its own definition for “fishery” in order to conclude that shoreside processors “substantially participate in the fishery.” Courts will not defer to Council or NMFS action that rewrites the rules that Congress has affirmatively and specifically enacted. See Schneider v. Chertoff, 450 F.3d 944, 958 (9th Cir. 2006), citing Lamie v. U.S. Trustee, 540 U.S. 526, 538 (2004).

b. Caselaw provides legal support for issuance of harvest shares to fishermen, but not to shoreside processors.

Before the MSA was amended in 2006, National Standard 4, 16 U.S.C. § 1851(a)(4), was the only MSA provision that referred to allocation of fishing privileges. National Standard 4 contemplates that fishing privileges will be allocated among “United States fishermen,” which is consistent with the definition of those who “substantially participate in the fishery.” The term “fishermen” is not defined in the MSA. However, Merriam-Webster’s dictionary defines “fisherman” as “one who engages in fishing.” Since the definition of “fishing” in the MSA excludes shore-based processing, then

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1 See id. at p. 5 n. 10 (noting the relationship between the definitions of “fishery” and “fishing” under the MSA).
3 Letter to Council Chairman Donald K. Hansen from NMFS NW Regional Counsel Eileen M. Cooney (Oct. 30, 2007); Letter to Council Chairman Donald K. Hansen from NMFS NW Regional Counsel Eileen M. Cooney (June 10, 2005); Memorandum to the North Pacific Fishery Management Council from NOAA General Counsel Lisa L. Lindeman (Sept. 20, 1993).
4 See Letter to Council Chairman Donald K. Hansen from NMFS NW Regional Counsel Eileen M. Cooney (Oct. 30, 2007).
5 http://www.merriam-webster.com/dictionary/fisherman
shore-based processors would not likely qualify as "fishermen," that could receive an allocation of harvest privileges.

The district court’s order in American Factory Trawler Association v. Baker,9 cited in NMFS’s 1993 Legal Memorandum, does not provide legal support for the Pacific Council to issue harvest privileges to shoreside processors. In that case, an intervening party argued that NMFS violated National Standard 4 by allocating pollock and cod harvest quota to the "onshore component" of the fishery, which included shoreside processors. The court rejected that argument, but not because it found that National Standard 4 permits allocations to shoreside processors. Instead, the court was simply not convinced that the regulations resulted in an allocation to processors:

the allocation in effect assigns fishing privileges among fishermen: those who process their catch at sea, and those who deliver their catch for processing on shore. The legitimate purpose of the allocation is to preserve a share of the resource for fishermen who deliver their catch for processing on shore. [Intervenor] AIF fails to persuade the court that the regulations are inconsistent with the requirements set forth in National Standard 4.10

The regulations at issue in AFTA v. Baker were much different than those the Council is proposing here. In that case, the regulations allocated harvest quota to fishermen who delivered to shoreside processors. Here, however, the Council is proposing a direct allocation to specific shoreside processors. Had the regulations at issue in AFTA v. Baker directly allocated harvest quota to specific shoreside processors, the outcome of that case would arguably have been much different. Moreover, Congress has since provided explicit guidance on who can be issued harvest quota that was not available when that case was decided. The court’s statement, therefore, that Congress had not expressed "clear congressional intent" to prohibit an allocation to the shoreside component is arguably mooted by 16 U.S.C. § 1853a(c)(5)(E), which provides that the Council shall allocate harvest privileges to those who "substantially participate in the fishery."

  \textit{c. Congress intended that shoreside processors could participate in a limited access privilege program only as part of a "fishing community" or a "regional fisheries association."}

In amending the MSA in 2006, Congress provided two methods by which shoreside processors could participate in a limited access privilege program: either as part of a "fishing community" or through a "regional fisheries association." A fishing community consists of residents that conduct fish harvesting or processing or fishery-dependent support businesses within the council’s management area and who must develop a community sustainability plan that addresses the social and economic needs of


\footnote{10 \textit{Id.} at 18.}
the community.\textsuperscript{11} Regional fisheries associations ("RFAs") are voluntary associations comprised of individuals who hold harvest privileges designated for use in a specific region.\textsuperscript{12} Of these two groups, only fishing communities are eligible to receive an initial allocation of harvest shares.\textsuperscript{13}

The legislative history confirms that Congress chose to address the concerns raised by shoreside processors about fisheries rationalization by providing for processor participation in fishing communities and RFAs. As a Senate report explains:

Section 106 of the bill would establish national guidelines for limited access privilege programs (LAPPs) for the harvesting of fish. These include individual fishing quotas (IFQs), but are expanded to allow allocation of harvesting privileges to fishing communities and creation of voluntary regional fishery associations (RFAs), in order to ensure inclusion of small vessel or entry-level participants, communities, and affected non-harvesters, such as processors, in any plan to rationalize a fishery . . . The bill would address concerns raised by harvesters, processors, crew, communities, and related businesses about impacts of harvester quota programs in a region or community, including quota consolidation or transfer out of the region, by allowing them to participate in RFAs.\textsuperscript{14}

The legislative history does not suggest that Congress intended for processors to receive allocations of harvest privileges directly, but rather to participate in a limited access privilege program through fishing communities and RFAs.

II. The Council’s Preferred Alternatives Would Have the Unlawful Effect of Allocating Shoreside Processing Privileges

Even if the Council had the authority to issue harvest privileges directly to shoreside processors, which it does not, the manner in which the Council has proposed

\textsuperscript{11} 16 U.S.C. § 1853a(c)(3). In order to participate in a limited access privilege program, the fishing community must “develop and submit a community sustainability plan to the Council” that demonstrates how the plan will “address the social and economic development needs of coastal communities, including those that have not historically had the resources to participate in the fishery . . .” The plan must be approved based on criteria developed by the Council and approved by the Secretary of Commerce after publication in the Federal Register. \textit{Id.} at § 1853a(c)(3)(A)(i)(IV).

\textsuperscript{12} 16 U.S.C. § 1853a(c)(4).

\textsuperscript{13} See 16 U.S.C. § 1853a(c)(4)(A)(v) (RFAs shall “not be eligible to receive an initial allocation of a limited access privilege . . .”).

\textsuperscript{14} S. Rep. No. 109-229 (Apr. 4, 2006) at 8 (emphasis added). In addition, in rejecting calls to establish processing privileges (akin to harvest privileges but for processing rights), the Senate report again confirms that the concerns of processors are mitigated by providing for processor participation in fishing communities and RFAs: “The Committee chose to take a broader, community-based view and allow allocation of harvesting privileges to communities, and inclusion of processors and other shore-based businesses in RFAs with LAPP holders which would allow for the designation or linkage of LAPPs to a region or community.” \textit{Id} at 25.
doing that here would have the unlawful effect of allocating shoreside processing privileges.

NMFS legal analyses are abundantly clear that the Council may not establish shoreside processing privileges, or enact any regulations that “have the effect of establishing shoreside processing privileges.”15 This is because, as noted above, shoreside processing does not constitute “fishing” and the Council and NMFS thus lack the authority to regulate it. Indeed, Congress explicitly rejected allowing processing privileges in the 2006 amendments to the MSA.16 During the development of alternatives for trawl rationalization, NMFS repeatedly informed the Council that certain measures under consideration were beyond its authority under the MSA because they regulated processing.17

The Council’s preferred alternatives, however, would have the effect of allocating shoreside processing privileges. Under the preferred alternatives, processors would receive harvest privileges based upon their processing history.18 That is, processors that have historically processed more fish would receive a greater share of the harvest privileges. On a going forward basis, processors that receive harvest privileges will be guaranteed access, indefinitely, to a certain portion of the available resource.

“It is an elementary rule of law, needing no citation of authorities, that what the law prohibits directly cannot be accomplished indirectly.”19 When NMFS informed the Council it was prohibited from allocating processing privileges, the Council then set up a system where processors would receive harvest privileges. Regardless of the name of the privilege, however, what processors would receive under the Council’s plan is guaranteed access to the resource. Whether a privilege to harvest or to process, even the processors acknowledge that resource access is what they seek.20 A system that guarantees a fixed percentage of the available harvest to certain, select processors, and not to others, is indistinguishable from a system of processing privileges. From the standpoint of the processor, the result is the same – the processor is guaranteed the option of receiving a fixed percentage of the total fish that will be caught. This is simply an indirect method of accomplishing shoreside processor privileges, and is similarly proscribed by the MSA.

13 See Letter to Council Chairman Donald K. Hansen from NMFS NW Regional Counsel Eileen M. Cooney (Oct. 30, 2007); Letter to Council Chairman Donald K. Hansen from NMFS NW Regional Counsel Eileen M. Cooney (June 10, 2005).
17 See Letter to Council Chairman Donald K. Hansen from NMFS NW Regional Counsel Eileen M. Cooney (Oct. 30, 2007); Letter to Council Chairman Donald K. Hansen from NMFS NW Regional Counsel Eileen M. Cooney (June 10, 2005).
19 See Letter to Council Chair Don Hansen from West Coast Seafood Processors Association (Nov. 1, 2007) (“Our concern has been our ability to preserve access to the resource once it is effectively placed into private hands. Access is fundamental to our ability to sustain a workforce, contribute to overhead that sustains other fisheries, and continue to supply markets we developed for groundfish and whiting.”).
The Council is prohibited from establishing processor privileges because regulating shoreside processing is beyond its authority. The MSA certainly requires the Council to “consider,” “evaluate,” and “take into account” the impacts to shoreside processors and other interests when establishing fishery management measures.\textsuperscript{21} Here, however, the Council has crossed the line from merely considering these impacts to regulating them directly. Under the Council’s plan, as with any regulatory scheme, there will be winners and losers. Yet the Council lacks the authority to establish from the outset which specific processors will benefit from the regulatory scheme. The Council is effectively regulating the shoreside processing industry.

III. The Council’s Preferred Alternatives May Produce Anticompetitive Results

Even if the Council had the authority to allocate harvest privileges to shoreside processors, which it does not, the Council’s proposed measures could have substantial anticompetitive effects. We strongly urge the Council to immediately consult with the Antitrust Division of the U.S. Department of Justice to address these issues.

\textit{a. Allocating harvest privileges to processors will reduce competition.}

When the North Pacific Fishery Management Council proposed rationalizing the crab fisheries in the Bering Sea and Aleutian Islands, the Department of Justice identified a number of antitrust issues relating to that Council’s proposal to establish processing privileges. Many of the antitrust problems the Justice Department identified with the crab rationalization program apply equally to the Pacific Council’s groundfish rationalization plan.

To begin with, the Justice Department found that simply allocating harvest privileges only to harvesters should eliminate the need for excess processing capacity and that prices would return to competitive levels once excess capacity was curtailed.\textsuperscript{22} The Justice Department advocated against establishing processing privileges and suggested that the North Pacific Council address processors’ concerns in other manners. According to the Justice Department, the major problem with processing privileges is that they would reduce competition. Less competition would, in turn, deter the development of new products, reduce incentives for processors to make efficient investment decisions and reduce welfare for consumers of processed products.\textsuperscript{23}

Regarding Pacific groundfish rationalization, allocating harvest privileges to shoreside processors similarly would reduce competition in the processing market and bring about the same ills identified by the Justice Department with respect to crab rationalization. The Decision Document establishes that the processing industry is

\textsuperscript{21} See, e.g., 16 U.S.C. §§ 1851(a)(8); 1853a(c)(5).

\textsuperscript{22} See Statement of J. Bruce McDonald, Deputy Assistant Attorney General, Antitrust Division, Department of Justice, before the U.S. Senate Committee on Commerce, Science, and Transportation (Feb. 25, 2004) at p.3.

\textsuperscript{23} Letter to NOAA General Counsel James R. Walpole from Assistant Attorney General R. Hewitt Pate (Aug. 27, 2003) at p. 2.
already concentrated. Three companies process 80% of the non-whiting catch and 85% of the whiting catch.\textsuperscript{24} The Decision Document notes that there are a limited number of buyers, barriers to entry due to the high cost of processing equipment, and concentration of production into a small number of processors.\textsuperscript{25} Allocating harvest privileges to shoreside processors would only further entrench the existing participants and raise barriers to entry, as the Decision Document recognizes.\textsuperscript{26} Existing participants will be shielded from competition and potential competitors will be thwarted from entering the market.\textsuperscript{27} This will reduce incentives to compete.\textsuperscript{28} In addition, there is no conservation benefit to allocating harvest privileges to processors, and the resulting consolidation and shifts in fishing effort and processing capacity may thwart certain socio-economic goals of the management plan.

In addition to being shielded from competition, however, existing processors have less incentive to promote efficiencies because they are guaranteed a share of the harvest. As the Justice Department noted:

If a processor were entitled to a fixed share of the harvest, then the processor would have less incentive to invest in new equipment or otherwise work to cut costs or improve quality, as those efforts would not be rewarded with greater market share.\textsuperscript{29}

The Council can mitigate potential harms to shoreside processors without allocating harvest privileges to them and thereby “constructing an artificial marketplace in which competition is inhibited.”\textsuperscript{30} Allocating harvest privileges to shoreside processors will only reduce competition and harm consumers.

\textit{b. Processor linkages may result in anticompetitive harms.}

The predominant shoreside processing trade association expressly stated that its members intend to use the harvest privileges allocated to them as a competitive tool:

Our intent is to use quota directly allocated to our processors as an \textit{enticement} to vessels to deliver to historical processors. In other words, we want to put our quota on boats that fish for our plants, \textit{so long as we are the purchaser of all fish caught by that vessel}.\textsuperscript{31}

\begin{itemize}
  \item \textsuperscript{24} Decision Document at pp. 285-286, 409.
  \item \textsuperscript{25} Id. at p. 286.
  \item \textsuperscript{26} Id. at 296.
  \item \textsuperscript{27} See, e.g., \textit{Western Parcel Exp. v. United Parcel Service of America, Inc.}, 190 F.3d 974, 975 (9th Cir. 1999) (noting various types of entry barriers, such as “additional long-run costs that were not incurred by incumbent firms but must be incurred by new entrants”; “factors in the market that deter entry while permitting incumbent firms to earn monopoly returns”; “control of an essential [] resource”).
  \item \textsuperscript{28} See Decision Document at p. 407.
  \item \textsuperscript{29} Statement of J. Bruce McDonald, Deputy Assistant Attorney General, Antitrust Division, Department of Justice, before the U.S. Senate Committee on Commerce, Science, and Transportation (Feb. 25, 2004) at p. 4.
  \item \textsuperscript{30} Id. at p. 3.
  \item \textsuperscript{31} Letter to Council Chair Don Hansen from West Coast Seafood Processors Association (Nov. 1, 2007).
\end{itemize}
It is unclear what this particular processor means by using quota as an “enticement” to harvesting vessels. Yet the Decision Document provides a clue:

For example, a processor could use QS to induce a harvester that is short of quota pounds for a particular species to make deliveries under specified conditions and prices.\textsuperscript{32}

The Decision Document thus seems to suggest that processors would use their control of harvest privileges to force harvesters to submit to lower prices or prevent harvesters from selling their catch to competing processors on competitive terms.

Such conduct could have antitrust implications. The shoreside processing industry is highly concentrated and there are high barriers to entry due to the capital costs required to enter the processing market.\textsuperscript{33} Allocating harvest privileges to certain existing processors will raise barriers to entry, because potential entrants would need to acquire harvest privileges to be competitive. In addition, the processing market is likely to become even more concentrated under the Council’s plan.\textsuperscript{34} Geographic limitations on where harvesters can deliver their catch may result in the creation of regional markets in which even fewer processors participate. On top of those conditions, the Decision Document notes that harvesters already generate “no economic profit” from the non-whiting fishery.\textsuperscript{35} Processors therefore have power to set ex-vessel prices at the level of the harvesters’ costs of catching them. The Decision Document also notes that allocating harvest privileges to processors would increase their bargaining power, although only certain processors would receive them.\textsuperscript{36} There is some danger that these processors would use their harvest privileges to drive prices below costs, using their market power in the shoreside processing markets to dictate ex-vessel prices paid for fish or to coerce harvesters into procuring harvest privileges on terms that are not competitive. Given these market characteristics and the potential for the Council’s plan to exacerbate these conditions, antitrust review by the Justice Department is critical.

IV. The Council’s Plan Is Not “Fair And Equitable To All Fishermen” As Required by National Standard 4

The Council’s plan puts U.S. fishermen in a difficult situation. First, since 20\% of the available harvest is taken off the top and allocated to processors, each harvester will have to recover 20\% of its catch just to be made whole and catch the same amount of fish it caught previously. Harvesters will have to negotiate with processors to make up these lost privileges. Second, harvesters also need to negotiate with processors on the ex-vessel value of the fish that harvesters will be paid. The processors thus hold all the

\textsuperscript{32} Decision Document at p. 410.
\textsuperscript{33} Id. at p. 285.
\textsuperscript{34} Id. at p. 416.
\textsuperscript{35} Id. at p. 293.
\textsuperscript{36} Id.
cards, particularly given how concentrated the processing industry is and how much more so it will become after rationalization.

Despite these inequalities, however, the Decision Document places great emphasis on enhancing the bargaining power of shoreside processors.\textsuperscript{37} The Council proposes measures to benefit the shoreside processing industry that would concededly disadvantage the harvesters for the benefit of the processors. For example, the Decision Document states that harvesters in the non-whiting sector “generate no economic profit from harvest activity” and implies that processors realize the benefits of any profits that might exist in that industry.\textsuperscript{38} The Decision Document further states that “harvesters lack much bargaining power in negotiations over ex-vessel prices with processors.”\textsuperscript{39} Under the Council’s preferred alternative, moreover, harvesters in the non-whiting sector would not increase their bargaining power because the existing system already facilitates the formation of bargaining groups (that have faced difficulties in achieving bargaining power).\textsuperscript{40} Yet the Council acknowledges that allocating 20% of the harvest privileges to processors would substantially enhance their bargaining power.\textsuperscript{41} The effect of the Council’s regulations, therefore, would be to further reduce the harvesters’ bargaining power in a sector of the industry where they realize “no economic profits” and the balance of the bargaining power already favors the processors.

The Council’s preferred alternatives would thus admittedly take a bad situation for the harvesters and make it worse. The Council has chosen regulations to benefit processors at the expense of harvesters when it has no authority to regulate the processing industry in the first instance. Not only are these measures outside the scope of the Council’s authority, they also are inconsistent with National Standard 4, which requires that allocations of fishing privileges “fair and equitable” to all “fishermen” – not to shoreside processors.\textsuperscript{42}

**Conclusion**

The Council should reevaluate its preferred alternatives. The Council simply lacks the authority to allocate harvest privileges to shoreside processors. Even if the Council had such authority, which it does not, it is difficult to issue harvest allocations to shoreside processors in a manner that does not have the effect of allocating processing privileges or producing anticompetitive results. There are substantial anticompetitive concerns with the Council’s plan, and it is inconsistent with National Standard 4.

FMA has long supported the Council’s process to rationalize the trawl fishery. We strongly urge the Council to reject its current preferred alternative to allocate 20% of the harvest privileges to processors. We recommend the Council change its preferred

\textsuperscript{38} Id. at 293.
\textsuperscript{39} Id.
\textsuperscript{40} Id. at 295.
\textsuperscript{41} Id. at 434.
\textsuperscript{42} 16 U.S.C. § 1851(a)(4).
alternative for Initial Allocation (A-2.1.1) to Option 1, and thereby allocate 100% of the harvest privileges to harvesters.

Thank you for considering our concerns.

Sincerely,

Pete Leipzig
Executive Director

cc: Dr. James Balsiger, Acting Assistant Administrator of Fisheries NOAA Fisheries
Jane Luxton, NOAA General Counsel
Thomas O. Barnett, Assistant Attorney General, Antitrust Division, U.S.
Department of Justice
The Honorable Ted Kulongoski
The Honorable Arnold Schwarzenegger
The Honorable Christine Gregoire
The Honorable Ron Wyden
The Honorable Gordon Smith
The Honorable Dianne Feinstein
The Honorable Barbara Boxer
The Honorable Patty Murray
The Honorable Maria Cantwell
The Honorable Peter DeFazio
The Honorable Earl Blumenauer
The Honorable Mike Thompson
The Honorable Brian Baird
The Honorable George Miller
The Honorable Lois Capps
The Honorable Sam Farr
The Honorable Rick Larsen
The Honorable Dave Reichert
The Honorable David Wu
The Honorable Darlene Hooley
The Honorable Greg Walden
The Honorable Jay Inslee
The Honorable Norman Dicks
The Honorable Jim McDermott
Dear Council members,

The entire fishing industry, both at the initial allocation of harvesting quota, was influenced by volume processors. The volume of testimony from a clinical psychologist, fish process of quota shares, he would have to place the testimony came from the guts and the processors who did not want to realize that the processors, whether or not they were indeed the desired outcome wanted by the motion, indicated that the balance was the most for the conservation and gave and down the entire coast.

A rationalization program that reconsiders the resource is unconscious and position:

1. The fleet has been struggling for considered fished down under management species of our catch. This triggered capacity of the harvesting sector to be changed under El Nino conditions. Nearly 50% and the fleet continues to help from the processing sector. All vessels (of which is to pay back 5% of the buy.)
Dear Council members,

The entire fishing industry, both commercial and recreational, is shocked by the decision to give initial allocation of harvesting quotas to processors. The rationale the Council used for their decision was influenced by volume organized public testimony in favor of initial allocation to processors. The volume of testimony in favor of initial allocation to processors was produced by a clinical psychologist fish processor who told his workers that if he didn’t get initial allocation of quota shares he would have to close his processing facilities. So much of that pivotal testimony came from the guts and hearts of people who believed their jobs were on the line over processor shares, jobs held, in some cases, for nearly thirty years were going to be terminated if processors didn’t get their desired outcome as initial quota holders. How could the council members not realize that these workers were being duped and were being used as pawns to gain the desired outcome wanted by the processing sector. Mr. Anderson, in his prelude to the motion, indicated that the balance of power had been grossly in the processor’s favor for decades and yet proceeded to take 20% of the pie from the fishermen who have undoubtably sacrificed the most for conservation and give it to those most responsible for deteriorating infrastructure up and down the entire coast.

A rationalization program that rewards processors for all the hard work fishermen do to conserve the resource is unconscionable and incredulous. There are several sound reasons for our position:

1. The fleet has been struggling for years to deal with the recovery of species that were considered fished down under management policy changing from F20 to F40 on some key species of our catch. This triggered a groundfish strategic plan that called for removal of capacity of the harvesting sector to better line up with the decreased ABCs as fish populations changed under El Nino conditions. The buy-back program was initiated to reduce the fleet by nearly 50% and the fleet continues to pay back millions of dollars in federal loans without any help from the processing sector. ARE THE PROCESSORS GOING TO SHARE THE BUY-BACK VESSEL TiQ PORTION? IS THE PROCESSING SECTOR GOING TO BE LIABLE TO PAY BACK 5% OF THE BUY-BACK RECOVERY FEE THE REST OF THE FLEET PAYS FOR THEIR 20% ALLOCATION? So where does the processor 20% come from, the entire pool or just the portion not from the buy-back vessels? If they don’t have to pay the buy-back assessment then another travesty will once again fall upon the harvesters.

2. Because the processing sector was allowed to consolidated to reduce expenses and competition at the same time to gain more control over the market, prices and the harvesting sector, for the last several years plants have had the fleet on plant limits and delivery schedules. Even though the processors were now only dealing with half the fleet, relatively small plant
limits were established by the plants and very strict delivery schedules are enforced. Deliveries above the plant limits from non-plant owned vessels are discounted to nearly 50% of the current expected price. Fishermen are either forced to sell cheap fish creating animosity with fellow fishermen or they are encouraged to discard the resource in order to keep the market price firm and still have friends back at the dock. If weather or other circumstances prevent meeting the delivery date and time, then fishermen have to forgo the trip or if they were at sea, they may even have to discard their catch for the sake of quality. Vertical integrated processors don’t enforce the plant limit or delivery dates/ time schedules on their own vessels. Processor owned vessels operate under the federal trip limit schedule and at questionable ex-vessel prices. There are also a number of boats that were built to fish mainly in Alaska waters, that are here as whiting catcher vessels and processors(both shoreside and at-sea). They land groundfish is huge volume between Alaskan pollock seasons without regard of price or quality so that they can quickly return to Alaska. Both the processor owned boats and these Alaskan boats help lower the ex-vessel price, and therefore, an encouraged practice by the processors is to create the situation that causes plant induced discards. Unfortunately, it is the fishermen that take all the negative PR and brutal relentless punishment from the environmental groups and the well meaning media.

3. The processors introduced split prices for species based on what the market could bare for weight and size, several years ago. This policy has caused high grading at sea, another category of plant induced discards. Unmeasurable amounts of fish are discarded at-sea in order to optimize the value of each landing. This policy combined with the discounted fish/delivery schedule policy mentioned above accounts for the majority of our discards. The processing sector has been isolated from the “burden of conservation” that the industry deals with everyday and conservation will continue to be of no interest to them unless it means less fish for them to process. When there are less fish, they are allowed to consolidate more, removing more competition because processors only deal with profit minded decisions while fishermen, with their big investments, are not allowed to stack permits to match their investment to the amount of fish allowed to be landed..

4. Essential fish habitat is another issue that has directly affected the trawl sector’s behavior but not that of the processing sector. The trawlers not only froze our footprint, we also gave up valuable grounds to help the Council meet a court order. The processors may have worried that they might not receive their customary amount of product to process but the trawl fishermen had to change major behavior patterns and practices that reach far into the future. This is another conservation issue that is a burden only on the harvesters.

5. The Rockfish Conservation Areas were established through a coordinated effort between management and harvesters. These heavy restrictions burdened only the harvesters and the magnitude of this conservation effort has added untold risk, increasing cost, worry and rethinking “normal practices” to the real American fishing fleet. *The logistics and management of the RCAs has affected every fisherman’s operation, bottom line, and behavior, a burden not shared by the processing sector.*

6. VMS is paid and used on the entire trawl fleet. The initial feeling fishermen had, when we were forced to carry VMS, was that of a criminal with an ankle bracelet. “Big Brother” was now watching our every move and stealing what once was proprietary information. In order to make
sure the RCA and EFH were truly being protected at only the fishermen’s expense, we had no choice except to concede to these electronic devices. Again, the processing sector was not effected by VMS in cost or behavior changes that were needed to assure protection of rebuilding stocks. Nor do processors face any kind of liability for a vessel drifting over the boundary line or misinterpretation of the complex matrix of arbitrary areas and differential limits like the fishermen do. **Again the burden of conservation is totally on the fishermen.**

7. Observers, another liability burden, are now on every trawl vessel at some time during the year. They are there to account for the total mortality of fishing. The TIQ program will require 100% observer coverage 100% of the time. Observers not only account for the total mortality but also verify the location of the vessel, gear used, direction of tows and other important information. It is the trawl fishermen that have to cope with this intruder on our vessels which increases our legal liability and costs and it isn’t always easy or possible to make the observer part of the boat crew. Again, the processors do not share the burden of conservation the observer program has brought to the fleet. **If the TIQ program is a conservation program, why does the Council believe that processors, who have nothing to do with at sea conservation, should receive a slice of the pie?**

The Council’s own Groundfish Allocation Committee in May 2008, voted to recommend “no initial allocation of quota shares for processors” with all but one abstention, voting in favor. The rational they gave at that time was as follows:

1. “An initial allocation of quota shares to processors may erode the personal accountability for bycatch that quota shares are supposed to provide. A major goal of the program is to maintain mortality of overfished species within the limits specified in the rebuilding plans. To achieve this we need to clearly put responsibility on the fishermen and give them incentives for innovations that will allow them to increase their catch of target species while decreasing overfished species bycatch rates. Starting out with initial allocation of quota shares to fishermen clearly puts the responsibility on the fishermen.

2. While quota shares may be transferred to processors after the initial allocation, the two are quite different. The initial allocation is a decision made by the government while the subsequent distribution among sectors will be driven by each person’s individual business decision to buy and sell. For an entity that is granted the quota share as part of the initial allocation, the incentives for optimal use, and hence for personal accountability, will be less than if they have to buy that allocation through the market place.

3. The bycatch rate reduction expected with an initial allocation to fishermen will result in increased landings of target species which will benefit the entire industry, including processors.

4. The language of the MSA indicates a strong intent to recognize harvesters.

5. Ultimately, both sides will benefit from the program and there is not a large disadvantage if processors are not given shares initially.

6. There is limited evidence on the need for an allocation to processors and the ramification of
such an allocation is unclear. It does not appear that an allocation to processors will address concerns about the geographic distribution of harvest.
7. Consolidation is a concern and an initial allocation to processors may lead to greater consolidation.

8. The analysis indicates that currently there is not a level playing field between harvesters and processors and an initial allocation to processors may exacerbate that imbalance, especially given the degree of consolidation in the processing sector.

9. Long established relationships between processors and harvesters will continue to exist, there will not be widespread disintegration and relocation of these relationships.

10. The history of development of this program encompasses the identification of a continued harvester overcapacity problem and conception of the buyback program in 1996, the groundfish strategic plan, and the bycatch reduction amendment. The success of this long-term effort requires protection for those established in the fishery in order to increase the economic stability for all.”

In the analysis document it states in Appendix A (A-2.1.1.a) page A-73 under “Competitiveness”, processing sector’s interaction with harvesters, “that processors are in a strong position to exert market power under status quo and may have cheaper access to capital than harvesters; an IFQ program under which processors do not receive an initial allocation would weaken that position; even if weakened, processors could regain some strength through the acquisition of quota shares, but only up to accumulation limits; that an initial allocation of quota shares would give them a stronger negotiating position than if they not receive an initial allocation.”

“Specifically, an initial allocation of quota shares would:
1. Provide a capital infusion that may allow processors to employ one of a number of different strategies to grow and increase their efficiency (e.g., acquisition of additional shares, horizontal integration, etc)

2. Diminish the exit barrier (liquidation of quota shares would allow a firm to exit the industry with less debt or greater gains)

3. Initially provide processors with greater bargaining power (as compared to their initial situation under IFQs if they did not receive an initial allocation)

4. Create a greater barrier to new entry

5. Create an even greater barrier to entry if there is an accumulation limit grandfather clause

6. Decrease the cost of processor access to capital.”

There is a disjunction happening with this TIQ program when initial allocation is given to processors. The original goal of preserving the fleet characteristic and therefore our coastal communities’ characteristics can’t be accomplished if the Council desires fewer processors on
the west coast. Is it the Council’s goal to only have factory trawlers and motherships working the harvest and running to Seattle with the money?

We believe the Council failed to look at processor shares from every view point. The conflicts that exist between the big domineering processors and the small processors, coupled with the lack of competition in the west coast processing sector, will put the smaller processor in jeopardy of staying in business. It seems that the Council prefers large processors over small processors and will eliminate the small processors with the required six (6) metric ton deliveries in three (3) of the six (6) years between 1998 and 2003. So these smaller processors will not receive any of the 20% allocation that the processors will get, putting the smaller processors in greater jeopardy. *We believe the Council action on this issue will reduce competition which will exacerbate and erode any gains fishermen may realize through the rationalization program.*

According to the analysis on Effect on Smaller Processors (Page A-74), “If there is not an initial allocation to processors, smaller processors will be at a disadvantage relative to larger processors. At this time, most of the limited entry permits that are owned by processors are owned by larger processors. Therefore, smaller processors would have to acquire QS (quota shares) or negotiate with harvesters without that leverage. Either way, they would be at a competitive disadvantage within the sector. Anecdotal information has indicated that those processors in the IFQ system in British Columbia who did not own vessels or were not closely partnered with vessels had a financially difficult time competing while also having to make payments on their QS acquisitions. This is consistent with reports from New Zealand that indicated lower economic satisfaction for later entrants who have to buy QS to enter the fishery (as compared to those receiving initial allocation).” So instead of giving QS to small processors so they have something to work with, they will be forced to acquire QS which will put them at a greater disadvantage. This could only have dire consequences for any new entrants and could collapse vessel prices even more than they are right now which is shameful when you compare ex-vessel prices over time to inflation. The analysis shows that smaller processors would use QS more effectively than large processors, the Council is choosing to put the small processors out of business, removing more competition and paving the way to line the big processors pockets with more wealth and privileges. Because the Council seems to have a need to eliminate the small processors and fishermen’s business by institutionalizing an unfair advantage to the most powerful, *we ask that the tightest accumulation/control caps be established to prevent further vertical integration which could also eliminate the fishermen sector in the long run.*

If the Council’s final decision includes giving harvesting shares to processors, it is important that the Council also consider permanent accumulation limits and no grandfather clause to try to preserve our coastal communities from massive takeovers and fleet migration that would occur if uncontrolled vertical integration is allowed. The small amount of vertical integration that has already occurred has affected the negotiating power of the fishermen. While operational costs have skyrocketed, vertical integration has virtually frozen the ex-vessel prices as explained in the number 2 section at the beginning of this letter.

Stability of supply will be improved under the TIFQ program. This will benefit both the harvesting sector and the processing sector with a better coordinated effort to have product available when it is most needed. Price competition may be influenced by many factors. As stated in the analysis Appendix A Excerpts on page A-75, “If the IFQ program results in west
coast fish processing operations remaining smaller that might otherwise be optimal, higher costs could make their products somewhat less competitive in the wholesale market. This would likely mean the raw fish prices (ex-vessel) might have to be somewhat lower in order for the product to clear the market. An initial allocation to processors and accumulation limit grandfather clause would preserve the advantage of the large processors until the accumulation limit grandfather clause expires. After expiration of that clause, the likelihood that larger processing operations will continue to dominate the fishery will depend on the relative advantage that ownership of QS provides a processing operation. (QS ownership is not necessary for large operations but could improve their profits.) With improved profits for the large processing operations, the likelihood of further consolidation, geographic shifts in catch and localized depletion of stocks is greater. Any effects on raw product prices, either higher or lower at the start of the program “are expected to be short-run effects because over time processors are eligible to buy QS and over the long run they are likely to accumulate QS to improve their bargaining power.” So in other words competition in the wholesale market will not be effected if processors are not given initial allocation of QS.

It is stated in the Appendix A page A-80, “Relative to status quo, processors are not expected to lose returns on their investment to QS holders unless there is overcapacity in the processing sector and competition for raw fish deliveries from harvesters has been based at least partially on something other than price (e.g., competition based on ability to handle volume.)” We all know that the processing sector is not overcapitalized and ex-vessel prices attest to that fact. “Allocation of QS to processors may:
- Strengthen their bargaining position vis a vis harvesters in the raw fish market (as compared to not receiving an allocation)
  * over the short run (via the initial grant of an asset and ability to hold QS in excess of accumulation limits)
  * over the long run, if they would not otherwise accumulate QS through purchase
- Possible strengthen large producers relative to small producers (if there is a grandfather clause)
- Strengthen small producers relative to large producers (if there is no grandfather clause and depending on relative efficiencies)
- Not likely affect wholesale prices or competitiveness of west coast product in the wholesale markets.
- Under certain circumstances compensate for partial losses of returns on investment (i.e. if the sector is overcapitalized, fully competitive (market power is not being exerted), and at least some of the competition for the raw product was on a basis other than price (e.g. the ability to handle a large volume of product in a timely manner)). It should be noted that in such circumstances the processors were likely already losing some of their return on investment (to the degree that price was a factor in the competition for the raw product.) Also, the amount of profit that processors bid away in the price competition is unlikely to be the full amount that would otherwise go to return on investment.
- Reduce exit barriers by providing compensation for capital losses by those who might seek to leave the fishery."

“As the allocation to processors increases; The capital infusion to harvesters decreases; The exit barriers increase lengthening the IFQ program transition period; Harvester competition in the raw fish market will increase reducing their bargaining power; The cost of harvester access to capital
would increase; The likelihood of harvester bankruptcies would increase."

"An IFQ program will likely cause at least some increase the potential for harvesters to exert market power or resist processor market power, independent of the amount of QS they are initially granted. Whoever receives an initial allocation is likely to be in a better position to exert market power and accumulate additional QS. As the amount of QS issued to processors increases, transaction costs will increase as QP issued to processors will be transferred to vessels each year in order to be used. As the amount of QS issued to processors increases, there is a greater mismatch between recent production by processors-permit associations and the QS distribution to those processor-permit association. Program administration costs increase with each additional group to which an allocation is made."

Finally, in order to give processors harvesting quota, laws have to be changed. The Department of Justice cautioned the IQ Committee that issuing harvesting quota to processors could violate anti-trust laws. The harvesters have believed for many years that the processing sector has been in violation of the Sherman Act. Processors have been suspected of price fixing and collusion. Product has been dumped on the market to drive non-cooperating processors out of business. The harvesters have been sacrificing for years and have been the sole source of the burden of conservation. Harvester have had to reduce maintenance, crew size and operation time in order to stay in business, while at the same time, fishermen watched the processors consolidate to lower costs, build new plants and improve existing facilities, buy small plants to close those operations, increase their employee benefits and fly around the country in private jets.

We believe giving initial allocation of QS to processors is the wrong thing to do and oppose this IFQ program if it contains initial allocation of QS to processors.

Sincerely,

[Signature]

Mrs. Julie Inc.

This will Kill my Business
One Processor will own All the boats And All the Fish in the Pacific

Thanx Again
Dear Mr. Hansen,

Traps and hook and line gear are sustainable ways to catch rock cod. Don't let the trawl quota program push small boats out of business. Please allow trawl boats to switch to cleaner gears, stop processor quota, and set some quota aside for communities and adaptive management. Our fishing communities provide local fish for local consumers -- give fixed gear boats the chance to fish.

Sincerely,

Vincent Cheek

Mr. Don Hansen, Chairman
Pacific Fishery Management Council
7700 NE Ambassador Place,
Ste. 101
Portland, OR
97220-1384

191 POSTCARDS RECEIVED
October 15, 2008

Donald Hansen, Chairman
Pacific Fishery Management Council
770 Northeast Ambassador Place, Suite 101
Portland, Oregon 97220-1384

RE: West Coast Groundfish Rationalization Program

Dear Chairman Hansen and Council Members:

On behalf of Starbound, LLC and Aleutian Spray Fisheries, Inc., I write to provide comments on the Pacific Fishery Management Council’s proposed West Coast Groundfish rationalization Program.

Starbound, LLC and Aleutian Spray Fisheries, Inc, are participants in the Pacific whiting fishery. Our four Pacific Groundfish permits owned through West Coast Fishery Investments, LLC each harvested a significant amount of whiting during the 2008 Pacific whiting season. Alone, these four permits represent as much as 10% of the harvesting history in the mothership sector within the proposed rationalization qualifying period, in addition to significant shoreside landings. Unlike other participants, we do not have an interest in any of the motherships or shoreside processors. In general, we support the concept of a rationalization program and urge the Council to adopt a plan that ensures maximum flexibility to quota holders to utilize their quota in the most efficient manner available, including allowing harvesting and processing on board.

We are very concerned that certain components of the proposed alternatives do not meet the primary goals and underlying fairness that a rationalization program should reflect. Specifically, we oppose awarding harvesting shares to processors and requiring any type of linkage between harvesters and processors. We strongly believe that these components would severely limit competition and negatively impact already struggling fishermen.

The prospect of effectively “gifting” 20% of the HARVESTING shares to certain processors is unprecedented in any fishery management plan or amendment. It is unsupported under current law and contrary to the National Standards identified in the Magnuson-Stevens Fishery Management Act. Awarding harvesting shares to processors that have no actual harvesting history will result in further consolidation in the fishery and increase the marketing power within the processing sector, all while failing to meet the goals of rationalization and protecting coastal communities.

Aleutian Spray Fisheries, Inc.
Starbound LLC
In fact, those processors in the Pacific whiting fishery who would be the primary beneficiaries of any processor harvesting shares already dominate the shoreside sector by purchasing more than 75% of shoreside whiting, not to mention their ownership and direct control of a significant number of the shoreside harvesting vessels. As a result, those fishermen who are not directly affiliated with a processor will suffer twice – once by losing harvesting quota that they have worked their lives to develop, and again because the same large companies that they are forced to sell to will enjoy the proposed windfall by increasing their dominance of the Pacific whiting fishery.

Furthermore, the processors’ unprecedented consolidation and control of the fishery will be expanded through proposed linkages and other penalty provisions, which would effectively limit a fisherman’s ability to freely market their catch. Any proposal that seeks to penalize quota holders who wish to change markets or pursue opportunities that could allow more efficient or effective prosecution of the fishery is unacceptable. Accordingly, we strongly oppose linkages to processors and any mandatory open access penalties. Instead, we urge the Council to support free and uninhibited marketing and harvesting policies – quota holders should not be restricted or limited in their ability to move between eligible markets.

In conclusion, the draft components described above would be for the sole benefit of already dominant processors and will only have the effect of limiting a harvester’s ability to support our crews and their families, who rely on these permits – as they will rely on the resulting rationalization – for their livelihood. For these reasons, we strenuously oppose awarding harvesting shares to processors, any required linkage between any vessel or permit and a specific processor, and any other similarly punitive or restrictive proposals.

Thank you for the opportunity to provide comments on the draft rationalization program.

Sincerely,

Craig Cross

Craig Cross
October 15, 2008

Don McIsaac, Executive Director
Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 101
Portland, OR 97220-1384 via email: pfmc.comments@noaa.gov

Subject: Rationalization of the Pacific Coast Groundfish Limited Entry Trawl Fishery
Preliminary DEIS

Summary: Available economic information and modeling results prepared to meet the 2006 MSRA requirements are not included in the preliminary DEIS. Decision making should be delayed until this economic information is available to the public and Council.

Dear Don:

I read the preliminary DEIS and supporting documentation. I was dismayed to find that an economic quantitative analysis of the alternatives was not included. There is a lot of discussion of potential effects, but no measurements at the national or community level that would show magnitudes and directions of efficiencies, impacts, and decision tradeoffs. I noticed it was also not included in the evaluation of alternatives for the Council's June meeting, and thought for sure it would be included in the analysis showing impacts for alternatives when there was an identified preferred alternative.

Coastal communities need to know economic effect measures for this new program, which according to UC Davis economist Jim Wilen, will generate a private sector windfall of $100 to $150 million in asset value. The trawl buyout program had severe economic distributional effects to our coastal communities and this program has the potential to accelerate the effects through industry concentration and consolidation.

The 2006 MSRA emphasized that economic analysis be provided under National Standard 5 and 8, e.g. management measures must "consider" economic efficiency and community impacts. The requirement does not mandate that the alternative with the lowest cost and least impacts be selected. Rather, it is meant to provide guidance that efficient utilization of resources is a way to achieve benefits for the nation, while limiting the costs to society. The Standards also say that decision making must take into account the adverse impacts to communities. In order that the
public and Council members are informed, it is expected there will be available estimates of the relative benefits and costs as well as estimates for positive and adverse community level impacts.

The preliminary DEIS begins with a premise that the trawl fishery is inefficient and an IFQ and/or cooperative approach will make it more efficient. I don't find any economic assessment other than case example references to other programs that have been modeled, anecdotal data about the West Coast cost and earnings, and unsubstantiated findings about net benefits that show a change in efficiency will occur. There are some quite interesting theoretical economic descriptions of efficiency in the appendices, but there is no modeling application to the fleet's current situation and how it is expected to change in the future from the alternatives.

The only regional economic impact analysis I find is a qualitative comparative advantage model based on questionable factors (Table 2-7). One factor is related to a determination of optimal vessel length thereby relating efficiency to vessel size. Then ports are at a disadvantage if moored vessels do not adhere to this size. There have been past studies by the PFMC about area fisheries that suggest that size of a vessel is not a major indication of total ex-vessel revenue within a fishery, meaning that efficiency may also not be a factor of size. The fisheries and management that determined fleet size we have today cannot be relied upon to determine the platform and financial performance under the program. There are confounding statements about vessel size on page 280 that undermine the model's efficient size determination. In some proportion, trawler sizes are remnants of foreign joint venture fisheries. Others are converted vessels originally used in the Gulf shrimp fisheries. Still others are participants in distant water fisheries where weather demands a larger vessel and participation in any one of the West Coast groundfish fisheries sectors is only one revenue generator. In regards to their home-port, there are many examples for a vessel's operations and landings being made at one port but are moored elsewhere because of owner residency or even lower moorage rates. Such behavior is unrelated to length. The above examples are only several of many perturbations that make a length predictor unreliable.

While there are some qualitative descriptions about community impacts (Table 4-61), it is almost impossible to even discern whether conclusions point to the direction of impacts. I found some assessment information about expected landings that could be interpreted for modeling inputs. However, the analysis did not carry through on showing economic effects to the nation nor affected communities. The public and the Council deserve to know the likely magnitude and direction of impacts in a particular community that now supports a trawl fleet, processors, and support businesses. I would have expected some quantitative results from a modeling effort.

It is my opinion that scientific data and models exist and have been sufficiently reviewed to be utilized in such an analyses. The Council has used the FEAM model in the past, and results in terms of expected changes in regional personal income by areas should be part of the information provided in the EIS. The FEAM modeling has been reviewed by the SSC in the past. While the FEAM is not a dynamic model, there can be assumptions applied about reactive behavior in order to develop NEV and REI estimates. Other modeling possibilities are to take advantage of
existing expertise and research completed by the NMFS Northwest Science Center. Dr. Edward Waters, former staff member and present consultant to the PFMC, is one of the U.S. leading experts in CGE (Computable General Equilibrium) modeling. This modeling can be combined with the information from the FEAM to provide regional and community impact information. One of the motivations for the NMFS Northwest Science Center to expand their economic research capabilities was because of the specific need for more information about a LAPP program. The trawl fleet's economic survey may not have been as thorough as originally hoped, but it did extend the information envelope about the fleet's costs, revenue opportunities, and risk position. As a fall back, the most recent FEAM update has similar credible information.

The LAPP process initially included an independent economic advisory group. The members were very respected economists, familiar with the PFMC fishery governance. The group was dismissed from the process, but was later asked by the PFMC Executive Director to continue working with PFMC staff on a individual basis. This group advised the PFMC that without the group's ability to review information and analyses, they could not provide guidance. They concluded that without group review, unrefereed economic information might be utilized in an unacceptable manner.

The decision on releasing the preliminary DEIS should be deferred until such time that a proper economic quantitative analysis is prepared.

Sincerely,

Hans D. Radtke, Ph.D.

HDR:kco
October 15, 2008

Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 101
Portland, OR 97220

RE: Introduction, Ben Bowman Food and Water Watch

Dear Pacific Fishery Management Council members,

My name is Ben Bowman. I have recently assumed the role of Policy Analyst with Food & Water Watch. I will be concentrating on IFQ issues for the current time and look forward to offering my perspectives.

Katherine Smith, my predecessor, has resigned from the organization. To fulfill professional commitments of her husband, an American serviceman, her family has relocated to Canada. She sends her regards, and will no doubt continue to follow the progress of IFQ issues.

By way of my personal background, prior to joining Food & Water Watch, I worked for the state government of Victoria, Australia, as the Principal Strategic Analyst, Fisheries.

I look forward to meeting the Council, and in the service of Food & Water Watch, assisting to promote sustainable fisheries in the Pacific.

Regards,

Ben Bowman
Policy Analyst
Food & Water Watch
bbowman@fwwatch.org
October 15, 2008

Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 101
Portland, OR 97220

RE: Rationalization of the Pacific Coast Groundfish Limited Entry Trawl Fishery

Dear Pacific Fishery Management Council members,

On behalf of Food & Water Watch (FWW), please accept these comments on Groundfish Fishery Management Plan, Amendment 20, titled Rationalization of the Pacific Coast Groundfish Limited Entry Trawl Fishery (the Program).

FWW is a national consumer organization that defends community access to and effective management of essential public resources including fish.

In accord with FWW’s public interest mission and the values of our members, we strongly recommend that Pacific Fishery Management Council (Council) members, in respect to the Program, forsake the Preliminary Preferred Alternative and actively support status quo management at the upcoming November 2008 meeting.

Further, Council should then ‘go back to the drawing board’ and develop a fishery management program that strategically moves the groundfish fishery towards durable and sustainable positive social, economic, and environmental outcomes that benefit both the relevant fishing communities and the general public.

In addition to our support for status quo management and the subsequent development of a better management regime proposal, the following are specific comments regarding the content of the proposed Program:

Point 1: The goal of the Rationalization Program is to create quasi-monopolies on groundfish.

The proposed Program’s stated goal is to:

‘Create and implement a capacity rationalization plan that increases net economic benefits, creates individual economic stability, provides for full utilization of the trawl sector allocation, considers environmental impacts, and achieves individual accountability for catch and bycatch.’
In effect, the goal of the Program, when boiled down to basics, is simply to:

*Create quasi-monopolies on groundfish.*

All the hundreds of pages of dressing in the decision documentation, including the few environmental aspects, merely serve the purpose of supporting this once obfuscated, but now apparent policy goal.

**Point 2: There is a clear disconnect between the policy problem and the policy goal**

The decision document - 1.2.2 Need for Action (Problem Resolution) - characterizes the policy problem neatly:

> In summary, management of the fishery is challenged with the competing goals of: minimizing bycatch, taking advantage of the available allowable harvest of more abundant stocks, increasing management efficiency, and responding to community interest. ‘Taking advantage of the allowable harvests’ includes conducting safe and efficient harvest activities in a manner that optimizes net benefits over both the short and long term.

How this policy problem leads to the development of the policy goal - to ‘create quasi-monopolies on groundfish’ - is not clear. From a public policy, or common sense perspective, there is no logical connection.

A disconnect between the policy problem and the policy goal has somehow emerged during the policy development cycle (most likely through political maneuverings). This policy cycle disconnect is, and can only be, a grave problem for the proposed Program.

The extent to which this disconnection has been obscured and roughly patched over is now tangible in over one thousand pages of decision documentation. Decision documents that include: a) questionable economic theories and terminology, b) false representations of property laws and terminology, and c) errant claims about the environmental stewardship credentials of business interests.

**Point 3: Rationalization is best understood as ‘the provision of self-justifying explanations for irrational behavior’**

Rationalization is unfortunately an apt title for the proposed Program. Whilst interpreted in the decision documentation as ‘to increase economic efficiency within the fishery’, in psychoanalytic theory, rationalization is considered: a defense mechanism whereby people attempt to hide their true motivations and emotions by providing reasonable or self-justifying explanations for irrational or unacceptable behavior.
The true motivations behind the patching over of the policy disconnect is clear - allowing exclusive use of public resources for private gain.

The very design of the Preliminary Preferred Alternative for Program implementation lends to its outcome - a take-over of public resources, in the end, by a few entities for private gains. The outline: propose gifting an economic windfall to everyone meeting constrained eligibility criteria. In turn, beneficiaries will most likely choose financial security over any other values, and support the plan. Many of those with conflicted values will not have the stomach to see the fishery ‘rationalized’, so they will sell out to the proponents of the Program. The proponents, (mostly corporations) know that as the fishery consolidates, they stand to benefit immensely. For example:

1. They fish for free - no compensation to the general public for exclusive use of resources
2. They extract quasi-monopoly profits by excluding participation and vertically integrating to the extent possible (lobbying for grandfathering of accumulation caps at the start, and the relaxation or circumvention of accumulation restrictions over time)
3. They are able to lease their quota or that of others for further private gain
4. Through cross-subsidization of management costs the taxpayer pays for the overwhelming bulk of asset security costs (enforcement, research, and monitoring) - with only the marginal cost of the Program management (likely not even that) coming back to quota shareholders
5. They can buy quota share, or sell their gift at any time and seek abnormal profits with the windfall elsewhere

Point 4: ‘Rationalization’ will harm marine wildlife and historic fishing communities

The Preliminary Preferred Alternative, through consolidation, seeks to privatize profit and socialize loss.

These losses will be experienced primarily by smaller fishers, captains and crews, fishing communities, treaty tribe harvesters, groundfish and related fish stocks, protected species including ESA-listed salmon, ecosystems, and the general public who are deprived of a fiscal return from their resource.

At a time when small communities are struggling and threatened by straining economics, and big business has proven continually fevered in pursuit of profit regardless of impacts on people or the environment – the choice is clear: stick with the status quo management regime. Then work to develop ecosystem and community-based fishery management models and value chains that deliver sustainable benefits.
In summary:

The Program, despite the reams of documentation and years of discussion is no closer to being upfront about its goal, that is: to shift from the status quo to create a quasi-monopoly of fishing businesses that can extract abnormal profits from a public resource, in a highly secure and difficult to reverse context. When an industry is allowed to set its own conditions for economic competition, serious long-term problems result.

If clarity around the true goal of the Program was placed front and center before the public, there would be no way they, or anyone truly representing the public interest, could support the Program, or the proposed implementation mechanism, the Preliminary Preferred Alternative. We urge you not to as well.

Further, Council should ‘go back to the drawing board’ and develop a fishery management program that strategically moves the groundfish fishery towards durable and sustainable positive social, economic, and environmental outcomes.

FWW appreciates the opportunity to provide comments on this matter.

Sincerely,

Ben Bowman
Policy Analyst
Food & Water Watch
bbowman@fwwatch.org
October 13, 2008

Mr. Donald K. Hansen, Chair
Pacific Fisheries Management Council
7700 NE Ambassador Place, Suite 101
Portland OR 97220-1384

Re: Comment on Trawl Limited Access Privileges (LAPP)

Dear Mr. Hansen:

I have been a fisherman for over 35 years, participating in the salmon, crab and for the last 30 years, in the groundfish fishery. I now own and manage the fishing vessel Ocean Hunter which delivers groundfish to Bornstein Seafoods in Bellingham Washington and Ocean Gold in Westport, Washington.

The Pacific Council is about to take action on a management plan which, if properly crafted, will be of great benefit to the conservation of the groundfish resource, improve the economic return for fishermen, processors and the public alike.

The road to this decision point has been a long and arduous one, with many pitfalls. The Council has listened to all stakeholders and attempted to address their concerns. Whether to allocate harvesting shares to processors of groundfish remains divisive and contentious. It is important we ‘get it right’! Fishermen of all stripes believe this would be the wrong decision and have far-reaching consequences. I am in agreement with that position and adamantly oppose the granting of harvesting shares to processor.

This allocation is *unprecedented in the world*. Fisheries managers world-wide have seen no need for allocation of harvesting rights to processors. But to the contrary, they have spoken out against it. For the U.S to take such an action would be very dangerous and unprecedented.

*The need to allocate shares to processors is unfounded.* There has not been established a benefit to the environment, marine habitat, selectivity of harvest of stock, or the fostering of personal responsibility and accountability by fishermen, all of which are the justification for fisheries rationalization.

*It is purely an economic allocation!* To grant processors, who are the customers of the fishermen, harvesting rights will have grave adverse economic impacts. Fishermen
operate in an environment of "take it or leave it" with respect to price negotiations. You may recall the fleet tie up two years ago. Processors continued to supply their markets with imported fish from Canada as well as fish delivered by vessels they own. We went back fishing with no gain after most processors on the coast refused to negotiate other than on a port by port basis. This experience demonstrated our present plight with little or no market power. To allocate to processors will further undermine the fisherman’s very week position.

Processors will not go broke because of rationalization as was testified to in June of 2008. They will have another problem – how to market the increased amount of fish which will be make available to them to purchase, process and market. It is estimated up to 40% more groundfish can be landed under rationalization. Processors have not been able to market the fish of all species now available for harvest. Processors have constrained harvest through vessel trip bag limits due to their inability to market, on a timely basis, species such as dover sole, petrale, and English sole. This has resulted in large amounts of waste of discarded fish, not because they are too small, or poor quality but because there is not enough market capacity to warrant their landing and utilization. Status quo marketing has been a failure. New methods, product forms and markets must be developed if we are to utilize the increased volume of groundfish which may result from the efficiencies of rationalization. They should not be concerned about supply, it will be there; they should rather be concerned of how they will fulfill their role in processing, marketing and distribution of the nations bounty.

We have heard in public testimony processors would use harvesting shares owned by them to attract vessels to fish for them. While that may be the case in some instances, I believe a different scenario will play out.

Processors who own boats will receive quota because of that ownership. After initial allocation there is no distinction between shares derived either from harvesting or from being a processor. At that point they are merely shares, shares which came from other fishermen. Processor harvesting shares will be placed on processor owned vessels, as a first priority, to supplement shares derived from harvesting history. Any shares which do end up on vessels not owned by processors will extract a rent from the harvester, further increasing the benefit to the processor and increasing the overhead to the lessee.

This results in a large portion of the resource being controlled by vertically integrated companies. Their cost of fish is lowered: 1) fixed overhead is covered with more product produced by their vessels, 2) less product will be purchased from non-company fishermen and 3), and they will benefit from rent from shares leased out. This lowers the cost of harvest for the processor and thereby establishes a lower ex-vessel price paid to other fishermen. This flies in the face of free, open market forces, undermines the price paid to non-company boats and tips the balance of marketing power decidedly in the processors favor.

Under this brave, new world of rationalization where 100% accountability is necessary and required, fishermen on the vessels will have to change the way they catch fish to
survive. Those who don’t will need job training. We can anticipate fishermen will be forced to fish where and when (seasonal) fish can be harvested with minimum by-catch. This requires planning and advanced marketing of fish products. Any quota allocated to processors will fill markets during seasons where demand is greatest ensuring maximum profit to the processors thereby ensuring fishermen will get less for their fish and be further marginalized.

Small processors who don’t own boats and thereby do not receive harvesting allocation as a result will receive such a small allocation it will not protect them from predatory marketing by the larger processors. With approximately 80% of groundfish processed by 5 or fewer processors, allocation based on processing history will further concentrate marketing power with the large processors as they will receive the bulk of any processor harvesting allocation.

We have also heard small communities will benefit from allocation of harvesting shares to processors. I do not believe this benefit will be realized. First, the EIS anticipates further reduction in the number of vessels harvesting. Fewer boats do not facilitate a return to small operations in small communities. Fewer boats means more quota harvested on each boat. There is no requirement or mandate as to how shares given to processors will be used. We have seen consolidation of processing along the coast with most groundfish delivered into a few major ports. Unless we anticipate the current marketing system will be changed, there is no economic force which will return processing to ports which have lost it. Centralized processing close to markets and distribution centers lowers costs to processing and will continue to be the order of the day.

However, the Adaptive Management program could be used toward that end. I support this program with the following recommendations:

1. Ten percent (10%) should be considered a maximum allocation, not a set aside which would be fully subscribed to each year. Only after applicants, through an annual process, have shown need and justification for allocation should the allocation toward Adaptive Management be made. Any unsubscribed quota should be returned to all quota holders.

2. The program must be more clearly defined with goals, prioritized uses, and limitations outlined. Goals and objectives must limit use to entities affected by Trawl Rationalization which should include but not be limited to communities, processors, and fishermen.

3. The program should be reviewed with the goal in mind to ultimately terminate it. This process adds to the management burden and complexity and should sunset as soon as possible. The annual specs can deal with most issues at some future time. This program must not result in a pool of fish with unspecified goals and uses but must be directed toward dealing with short term unanticipated outcomes due to rationalization.

4. The program should be sector specific.

5. Management must be aware there is a cost to this program. The benefit derived goes to those who participate, whether they are affected entities or fishermen who
are involved. Fishermen who do not participate in an Adaptive Management scheme pay the cost in reduced quota pounds each year.

6. The program should attempt to spread the benefit along the coast and perhaps state by state.

An important component of a good rationalization program is to ensure there are strict, enforceable controls on accumulation of harvesting shares. The Council took a step in that direction by selecting as a preferred option “No Grandfather” beyond the caps established for control and ownership. The limit must be restrictive enough to produce a fleet in the future of the size which will meet management goals of spreading the benefit coastwide, maintaining a free market, competitive environment in the sale and marketing of fish. Excessive control of harvesting and processing is a danger which is real and must be prevented. No grandfather right is the correct choice for the Council to make.

And finally, in closing, I advise the Council to be mindful of the cost of the program, selecting the alternative, when possible, which will lessen the burden of management, and minimize the cost of the program to the nation and all stakeholders. The simplest program will be the least burdensome to manage and enforce.

Sincerely;

Marion J. Larkin
19737 Trophy Lane
Mount Vernon WA 98274
October 14, 2008

BY EMAIL and U.S. MAIL

Mr. Donald Hansen and Members of the Pacific Fishery Management Council
Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 101
Portland, OR 97220-1384

Re: Comments on Proposed Amendment 20: Trawl Rationalization

Dear Mr. Hansen and Members of the Pacific Fishery Management Council:

On behalf of our 1.2 million members and activists, the Natural Resources Defense Council submits the following recommendations concerning the selection of a final Preferred Alternative for the Trawl Rationalization program.

A.1.1 Gear Switching: Support adoption of an option that allows gear switching under the same conditions as trawling (e.g. 100% observer coverage) but also provides incentives for permanent conversion to lower impact gears.

The preliminary preferred alternative allows limited entry (LE) trawl vessels to switch between trawl and nontrawl groundfish gears. It also allows a nontrawl vessel to acquire a trawl permit and catch a limited entry trawl allocation using nontrawl gear (Appendix A, p. A-14). We support these provisions, but we urge the Council to include, in addition, incentives for permanent conversion from trawl vessels to lower impact gears.

Rationale

Gear switching has wide appeal. Permanent gear conversion may appeal to some trawlers, particularly those who target sablefish, for reasons as varied as the need to avoid constraining stocks in traditional trawl grounds to consumer demand and higher prices paid for high quality fixed-gear-caught fish (see Trawl Rationalization DEIS, Appendix A, pp. A-25 to 26 for price differential for sablefish). However, those reasons alone may not be enough to overcome the perceived advantages of trawl gear, such as the ability to target flatfish and catch large quantities of fish.

Unlike indiscriminate switching, which is unlikely to produce long-term environmental benefits and do little to reduce the bottom impacts of trawling, permanent gear
conversion has the potential to help shift the gear make up of the groundfish fishery, making long-term reductions in the bycatch and habitat impacts of the trawl fleet as the intensity of trawling is reduced. It also provides greater predictability for adaptive management in case of adverse impacts, such as increased use of fixed gears in vulnerable habitats. A recent study found that the fixed gear sablefish fleet lands about the same amount of sablefish as the trawl fleet with far less bycatch and likely with less impact on bottom habitat.¹

Encouraging permanent conversion to lower-bycatch gears as a means of reducing the intensity of trawl effort would help meet the objectives of the ITQ program, such as those related to minimizing ecological effects (objective 3) and adverse impacts on other fisheries (objective 5). It would also be consistent with the Magnuson-Stevens Act requirement that LAPPs promote fishery conservation and management.

**Specific Recommendation**
Allow gear switching for quota holders under the same conditions as trawling (100% observer coverage, etc.), per A-1.1, and provide incentives for permanent switching of quota share to lower impact gears. The specific incentives could be worked out over the next few months but could include, for example: (1) provide supplemental quota pounds (e.g. from the adaptive management provision) to those who convert for the first two years after making a permanent conversion; and (2) allow those who convert to use a combination of electronic monitoring and partial observer coverage if pilot projects and analysis demonstrate the adequacy of such practices.²

**A-1.2 IFQ Management Units:** Support option to subdivide quota geographically, including use of latitudinal management units.

**Rationale**
Subdividing quota geographically at the 40 10 line will help prevent depletion in one region due to shifting fishing patterns. We see this as a foundation for more fine-grained regional management for species with limited ranges in the future.

**A.2.1.3 Allocation Formula:** Support Option 2 for overfished species

Option 1 would reward those who contributed most heavily to the poor condition of the overfished species. Option 2 avoids this outcome by instead allocating overfished species quota on an industry-average basis.

**A.2.2.1 Permit/IFQ holding requirement:** Remove the option (#6) to allow a vessel to resume fishing after 2 years in deficit


² It may be appropriate to restrict this option to traps. Observer data reveal that the sablefish trap fishery has no bycatch of overfished species. Jenkins, Lekelia, 2008. Gear Conversion as a Means of Reducing Bycatch and Habitat Damage in the U.S. Westcoast Sablefish Fishery.
Rationale
The level of quota overage that would result in two year’s deficit is extremely high, likely to be the result of repeated tows of depleted stock. We believe that individual incentive to stay within quota limits is essential to a properly functioning IFQ system. Fishermen who engage in risky fishing behavior should not be excused from individual responsibility.

A.2.2.3.e Grandfather Clause: Support no grandfather clause

Allowing everyone to reach the same level of quota ownership, without permitting a favored few to exceed that, is a fairer system. It also helps prevent too much consolidation of quota ownership.

A.2.3.1 Tracking and Monitoring: Support Option 3 –100% observer coverage with cameras if effective and feasible. No small vessel exception

100% observer coverage is necessary to achieve the conservation objective of reducing bycatch as well as improving accountability. Excusing small vessels from this requirement would create a gap in these features of the IFQ program.

A-3 Adaptive Management Provision: Support having this option for the following potential uses:
- Achieving conservation results, such as rewarding clean fishing and encouraging permanent gear conversion
- Stabilizing vulnerable communities
- Compensating processors for demonstrated injury (e.g., economic evidence of stranded capital). This use should be limited to 3 years
- Managing unforeseen consequences

Having the flexibility to do adaptive management as the program unfolds could be a highly important tool for obtaining the objectives sought and mitigating against unforeseen impacts.

B.1.3.1 Non-coop fishery

While we have no reason to believe that coops are problematic, we are very concerned about the impact fishermen who may find themselves in the non-coop fishery could have. Such fishermen would be operating under a sector TAC and would have none of the conservation incentives an ITQ system is supposed to provide.

A-6 Fixed-Term Auctions: Support a combination of fixed-term quotas and auctions

We support a fixed-term allocation of quota share because the oceans and the life found in them are a public trust resource. The allocation method can best acknowledge that if it provides the quota for a fixed term, with eligibility for a future allocation based on good
conservation performance. We also want to see a good portion of the increased value of the fishery stay in the fishery, to be used for sound management of the resource. A fixed term can slow the rise in the value of the fishery, making it more accessible for new entrants.

An auction system can help accomplish these objectives and has been used successfully for other public resources. The 15 or 16 years before rolling auctions for a portion of the total quota would be implemented provides not only free use of the resource for this time, but also gives ample time to devise an appropriate system for implementation of auctions.

Auctions are a method worthy of serious consideration for some portion of the allowable catch of overfished species. We believe some portion of the overfished species OY should be allocated through a “market basket” approach based on the average catch rate per target species. But it makes sense to hold back a portion of the total for auction, because an established auction helps create liquidity and transparency that is necessary for a trading system to reach its full potential. Without the auction, there is a significant likelihood that fishermen will hoard these high value fish in case they need them, or that buyers and sellers will have trouble finding each other. The amount one can buy per permit could be capped to help ensure broad and fair access.

An analysis by John Ledyard demonstrates that a fixed term makes no difference in the stewardship incentive as long as the fisherman has a means of reentering the fishery (e.g. via bidding) after the term has expired. Furthermore, reentry can be made contingent on good conservation practices. Full observer coverage would help ensure that fishermen stay within quotas and bycatch limits. In addition, we note that the alternative to this option (outright grants of quota share) are subject to the same potential for loss of stewardship incentive behavior (if any) if that quota is leased out, a common occurrence in many fisheries.

Thank you very much for your consideration of these comments.

Sincerely,

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3 Ledyard, John O.  Market Design for Fishery IFQ Programs, Oct 2008
cc: Frank Lockhart
IFQs in the West Coast Groundfish Fishery:
Economic Confusion and Bogus Reasons

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The advocacy of IFQs as a management tool rests on six erroneous views of economic theory and the law of property. Under normal circumstances these conceptual confusions ought to be sufficient to disqualify IFQs as a coherent policy option for fisheries.

Unfortunately, the confusions have been repeated so often that the truth about IFQs lies buried under an accumulation of deceits.

In light of this situation, if the Pacific Fishery Management Council nonetheless decides to proceed with the introduction of IFQs for the West Coast groundfish fishery it is essential that members of the Council understand the full extent to which they have been misled, indeed duped, by bogus claims made by advocates for IFQs.

Before proceeding it must be noted that the term “IFQ” is generally used to connote a particular set of attributes and so my comments that follow are focused on this common understanding. In particular, when we talk of an IFQ fishery we mean all of the following attributes:

1. Catch shares—portions of a fixed TAC—are given away to members of a fishery based on certified catch history;
2. This is a gift in perpetuity and the gift may be sold to others;
3. Holders of IFQs do not pay for the fish they land and so there is no capture of the resource rent in a fishery.

I will first spell out the six confusions about IFQs because it is these confusions that erroneously underwrite advocacy for an IFQ fishery. I will then offer a brief overview of a superior alternative to an IFQ fishery.

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1 Testimony submitted to the Pacific Fishery Management Council, Portland, Oregon, October 14, 2008.
I. The Six Confusions

1. Overfishing occurs because no one owns the fish until they are captured by a vessel;
2. Private property rights (also known as full ownership) conduce to the stewardship of assets—but especially of natural resources;
3. IFQs are private property rights;
4. IFQs conduce to stewardship of fishery resources;
5. Efficiency occurs when resource rents in a fishery are maximized;
6. IFQs must be of infinite duration and tradable to bring about efficiency.

Confusion #1: Overfishing occurs because no one owns the fish until they are captured by a vessel.

The fish in the EEZ are already owned by the citizens of the United States.

The National Marine Fisheries Service (NMFS) has been assigned the task of managing those fish stocks for the benefit of the citizens of the United States. If fish in the EEZ were NOT already owned—and managed by the United States government under its public-trust role on behalf of all of us—it would be legally and logically impossible for the NMFS to carry out its Congressional mandate.

Overfishing is caused by the inability of the regional fishery management councils, advising the Administrator of the NMFS, to set biologically credible landings limits and then to have the NMFS enforce those limits. Too often, politicians are able to make “end runs” around this process.

Rights to fish cannot solve overfishing since the “rights” in question are bogus. The Magnuson-Stevens Act is clear that those who fish do not have—and cannot have—a property interest in the fish or the habitat in which fish reside. The language is clear and IFQs cannot change that basic legal fact.

Confusion #2: Private property rights (also known as full ownership) conduce to the stewardship of assets—but especially of natural resources;

Private property rights create no such incentive.

The State of Washington, in 1945, passed the Forest Practice Act to require that private landowners re-plant trees on land from which they had harvested trees, or leave a certain number of trees per acre to enhance regeneration of the stock. If private property
were so salubrious for stewardship this law in the State of Washington would, quite obviously, be unnecessary. The Soil Conservation Service was created in the USDA following the Dust Bowl because farmers—obviously the owners of the land they farmed—were destroying their top soil by practices giving rise to soil loss in the neighborhood of 15 tons per acre per year. If private owners of land were always good stewards, the Soil Conservation Service would be redundant. Virtually every city in America has local ordinances requiring that private dwellings (and surrounding landscaping) be kept in some plausible state of repair. Owners who ignore such ordinances are subject to fines. If owning private property were a sure guarantee that an asset—a house and a yard—would be kept neat and tidy then such laws would be redundant.

If “privatization” does not assure good outcomes for forests, for top soil, and the appearance of urban neighborhoods, why has it become an article of faith that privatization will work for fugacious resources such as fish?


Confusion #3: IFQs are private property rights.

As above (Confusion #2), American law is clear that an IFQ is a not a property right and it represents no rights or interests in anything.

The fact that IFQs can be sold does not make them a property right. The fact that they can be (and have been) contested in divorce proceedings does not make them a property right. The fact that bankers will loan money to purchase IFQs does not make IFQs a property right.

American bankers have shown themselves quite eager, over the recent past, to lend money on a wide variety of instruments of dubious credibility and provenance.

Confusion #4: IFQs conduce to stewardship of fishery resources.

IFQ proponents are now encouraged by a recent Science paper by Costello, et al. claiming that IFQs prevent overfishing. The Costello research shows nothing of the sort.
A careful reading reveals that Costello failed to make a distinction between the effects of a hard TAC as distinct from the effects of IFQs. This can be seen by the fact that Costello defined an IFQ as a share of a TAC. ALL of Costello’s IFQ cases are, in fact TAC cases.

If one wishes to test the stewardship properties of IFQs, the careful researcher must analyze a large number of IFQ fisheries—some with a hard TAC and some without a hard TAC. Only in that way can the researcher be sure whether the claim of stewardship is correctly attributed to IFQs and not to the existence of a firm TAC.

Interestingly, it will be difficult to find IFQ fisheries without TAC limits. That ought to tell us something about the trust that fisheries managers place in the alleged stewardship properties of IFQs.

Indeed we see here the full magnitude of the deceit about IFQs. After all, if IFQs were such a powerful force for stewardship why is it necessary for a management authority to set any TAC at all? If the cheerleaders for IFQs are to be believed, it ought to be sufficient to achieve efficiency and stewardship by the simple act of handing out IFQs. But of course no one seriously believes such fictions, so why, we must ask, does the deceit persist?

Confusion #5: Resource rents must be maximized in a fishery.

Appendix F entitled: ECONOMIC AND POLICY ANALYSIS OF A FIXED TERM AUCTION-BASED INDIVIDUAL FISHING QUOTAS PROPOSAL FOR THE WEST COAST LIMITED ENTRY GROUNDFISH TRAWL FISHERY (authored by Gilbert Sylvia, Michael Harte, and Chris Cusack) seeks to establish the case for maximizing resource rents in a fishery. The report claims:

“3.0 HOW IS RESOURCE RENT CREATED?

To explain how sustainable and economically desirable resource rents arise it is useful to look at a simple fishery model (Figure 1) that includes: fishing effort; revenue and costs; and a biological optimum called maximum sustainable yield (MSY). MSY is a standard reference point for the biologically optimum level of catch. In Figure 1 MSY is reached at point E2 -- beyond this point revenue begins to fall as catches fall and costs continue to rise due to the increased effort needed to catch fewer fish. Resource rent is the vertical difference between the revenue curve R and cost line, C. The difference is largest at point E1. This point is referred to as the Maximum Economic Yield (MEY). At MEY the resource rent is greatest, the fishing effort is at its lowest, and the total catch at E1 is equal to that at E3, the point at which revenue equals cost, only normal profits are earned, and a depletion of fish stocks results. MEY is therefore a desirable ecological and economic goal for the management of a sustainable fishery. The resource rent
accrued at MEY would generate the highest net revenue and result in the largest return to society.

Most fisheries do not operate at E1 and fail to maximize rents. They operate at E3. This is because the cost line C includes an allowance for normal profits. New entrants will continue to enter an unrestricted fishery until E3 is reached and a profit can no longer be made. At E3 all rent has been dissipated and the stock is being over-fished by the difference between E3 and E2. Even if regulations restrict fishing to MSY and some rents are generated this is still economically inefficient compared to E1. Over time rents can be increased through incentives and entrepreneurial behavior by improving output markets (increasing the height of the revenue curve) or improving technologies (decreasing the angle of the cost line).” [Attachment B, pages 2-3].

We see here the standard confusion—in fact we see two common confusions.

First, the “vertical distance” in Figure 1 is referred to as “resource rent” and the usual catechism—repeated here—claims that this magnitude must be maximized to produce the “largest return to society.” It is from this confusion that magic enters the picture.

The “resource rent” so much in need of maximization is nothing but quasi-monopoly profits accruing to the lucky firms NOT excluded from the fishery in order to reduce effort from E3 or E2 back to the happy level of effort—E1. This particular model, so central to all of the incoherence in fishery policy, is dishonest about the nature of the “revenue” being maximized. Indeed the language above makes it seem as if all of us (“society”) are suddenly made better off when effort is driven back to E1. After all, “resource rent is maximized” at E1.

However, notice that fishing firms pay nothing for the fish they catch. I elsewhere spell out in greater detail the long-standing confusion and deceit in the fisheries literature about this fundamental matter of resource rent [Bromley 2008].

The lucky firms NOT excluded continue to be able to fish for free (they do not pay the owners for the fish they catch and sell), and they are twice lucky because they get to keep the quasi-monopoly profits made possible by the absence of most of their erstwhile colleagues.

Now, consider the second confusion. We see in the second paragraph quoted above that: “New entrants will continue to enter an unrestricted fishery until E3 is reached and a profit can no longer be made.” This is misleading nonsense.

What the authors of the report should have said is that at effort level E3 there are no extra-normal profits being made. It seems strange indeed to use—for public policy purposes—a model indicating that firms enter an industry where there is no profit to be
made. And it is on the basis of such bogus models that some fisheries analysts appear
eager to excite sympathy for those who fish for a living. The reader is invited to think:
“Gee, the poor souls are fishing and they are not making any profit. Surely they would
be better off if they were evicted from the fishery so that they can become carpenters and
begin to make a profit.”

Apparently, in the eyes of those who deploy such models, those who wish to fish
cannot be trusted with their own occupational choices.

But the authors of the above quote are confused. Effort level E3 is the
competitive market equilibrium level of effort in the industry—and it is an effort level at
which each entrant is at least covering all necessary costs, and also realizing enough of a
net return (“profit”) to make fishing the preferred occupational choice.

We see how confusion over profit, rent, and extra-normal profit can contaminate
the coherence of fisheries policy models. If the “experts” are confused about profit, rent,
and extra-normal profit we must pity the members of a fishery management council who
are fed a steady diet of such confusion and deceit.

Notice that if there were no (normal) profits for vessels comprising aggregate
effort E3 we might wish to ask the owners of such vessels why they continue to fish
while actually losing money?

Since I have asked that question I might as well advance a plausible answer.
They are fishing because they enjoy it and because they are covering their variable costs
and making as much net income (profit) fishing as they would if they were to pursue
another line of work.

Unfortunately there is a less noble reason why they might be fishing. Perhaps
they are betting on the “come.” That is, they are fishing (and racing) for history so that
when regional fishery management councils finally become overwhelmed by the deceits
about the salutary effects of IFQs, they (those who fished and raced) will be at the head
of the line to receive a massive gift of free IFQs.

There can be no solace for the owners of fish (we the citizens) by the mere fact
that once IFQs have been handed out for free, some firms will then purchase additional
quota shares. There is no joy because none of that necessary financial outlay for
additional quota will come to the owners of the resource. The revenue will go, instead, to
others who were similarly gifted but who now wish to cash out and do something besides
fish for a living. Notice that the owners (the citizenry) of those gifted fish receive
nothing.

I have searched the sacred texts of my discipline in vain for any language that
would allow the free gifting of millions (billions?) of dollars of public natural resources
to the commercial sector to be regarded as consistent with “letting the market work.” I
am not aware that oil resources are given away free to BP and ExxonMobil. I am not aware that timber on federal land is given away free to sawmills and paper companies.

If the commercial fishing industry can somehow manage to receive a free gift into perpetuity of valuable fish then that is a matter worth serious discussion among the public. But this fortuitous gift cannot possibly be considered sound economics—nor is it coherent public policy. It is only possible because of the deceptions and confusions surrounding IFQs. If the lies and confusions are repeated often enough this marvelous gift might even come to acquire that wonderful term “rationalization.” It is rationalization to be sure—with the deceptions surrounding IFQs providing the necessary rationalization.

**Confusion #6: IFQs must be of infinite duration and tradable to bring about efficiency.**

Since IFQs are not a property right, and since they cannot induce stewardship, there is no basis for the claim that they must have an infinite life.

It will be claimed that an IFQ allows the lucky recipient to make money two ways—either by fishing or by selling the bundle of gifted IFQs. Since the IFQ is for a share of an unknown future TAC we see immediately that this is rather similar to the search for the underlying value of obscure derivatives (re-bundled mortgages, credit default swaps) recently offered up by the commercial banking and investment houses. What exactly IS the value in 10 years of a share of an unknown TAC if the buyer has no idea whether or not the fish stock will crash in year 8 because of increased ocean temperatures?

In theory it is clear that most assets have a plausible salvage value—but the underlying (fundamental) value of that asset must be knowable. Unlike regular productive assets, people are not buying IFQs for the long-run investment value of them. There is no known salvage value. This means that the argument about perpetuity is a herring of some bright color.

Moreover, there is not a banker in the world who is interested in a time horizon in excess of 10-15 years. If one is to be found it is reasonable to assume that a business loan of that duration would need to be collateralized. Can anyone produce evidence that IFQs have been used to collateralize a 30-year loan?

Does “tradability” matter for long-run efficiency? It cannot matter for the reasons above. The only situation in which trades among holders of IFQs might conduce to efficiency is within a single fishing season.
Summary

Coherence in West Coast groundfish policy starts with recognition that the resources in question (the fish) are already owned by the citizens of the United States. The fishery is a publicly owned natural asset. On this there can be no doubt.

Economic efficiency and equity cannot possibly be served by giving away (free gifting) billions of dollars of the public’s assets.

Honesty requires that stewardship of the West Coast fishery be situated precisely where the law insists that it belongs—with the Pacific Fishery Management Council and the Administrator of the NMFS. Responsibility for stewardship cannot logically or legally be handed over to the industry whose short-term economic profitability depends on extracting biomass. All of the utopian claims about IFQs and stewardship are fanciful wishes, eagerly repeated by those innocent of economic theory in the hope that those confusions and deceits will come to be thought true.

Unfortunately, these deceits have had a corrosive effect on the members of various fishery management councils. The appeal is obvious. Managing a fishery is a most difficult undertaking. When a solution is on offer that claims to solve the stewardship problem by shifting responsibility to the users who are alleged to have resolute long-run stewardship commitments, some council members may see this as a magical gift. Like so much that is magical, this claim would be dangerous if actually acted upon.

Recent news out of Alaska suggests that the Bering Sea pollock fishery, often held up as the paragon of good IFQ-based “cooperative” management and stewardship, is experiencing extraordinary problems with declines in pollock regeneration—and bycatch problems are severe.

II. Getting Fisheries Policy Right

The following observations are advanced in full awareness that they were not asked for.

However, the problem that a commentator faces is that when we are asked to comment on a specific proposal we have only two options: (1) we speak in praise of the proposal; or (2) we object to it (or parts of it). If the second route is followed, we leave ourselves open to the charge that we were critical and failed to offer any positive suggestions for fixing what is wrong with the mooted proposal.

The published record will reveal that I have been a consistent critic of the bogus claims advanced on behalf of IFQs (as the bibliography below will show). But my
abundant writings also contain suggestions for how to get fisheries policy right. I have also, in collaboration with Professor Seth Macinko of the University of Rhode, prepared a report for the Commissioner of the Alaska Department of Fish and Game in which we offer a comprehensive review of the experience with IFQs in Alaska, and we set out a number of suggestions for creating a new and innovative fishery policy in Alaska [Bromley and Macinko 2007].

I have here criticized the report by Sylvia, et al. for its misleading conclusions about fisheries policy in general, and resource rent (and profit) in particular. The reader of that flawed report, possibly innocent of its confusions, might be left with the impression that the “preferred alternative” (an IFQ fishery) is better than any alternative. While the authors of the report appear open to the suitability of auctions for fixed-term permits, it is my experience that auctions represent a serious shift in deeply entrenched mental models of fishery management. And so comparing auctions with the “preferred alternative” of an IFQ fishery is really no comparison at all. The IFQ fishery will win that comparison because the industry will be opposed to auctions, and will make its opposition known.

But there is an option that has not been discussed. And so to protect myself against the charge that I have only criticized and have failed to offer constructive comments, I ask forbearance of the few paragraphs below.

Consider the following principles for a new West Coast groundfish fishery. That new policy must:

a. Recognize and honor history in the fishery;
b. Capture resource rent for the benefit of the owners of the resource;
c. Reduce the tendency for racing (derbies);
d. Simplify management and protect the fish stock;
e. Not create a quasi-monopoly (closed class of vessels) fishery;
f. Provide economic benefits for fishing communities;
g. Provide fresh product to benefit consumers and the tourism sector.

These principles can be realized as follows:

1. The first step must be to realize resource rent for the owners of the fish. I suggest that there must be an immediate introduction of a 3% royalty payable at the time of landing fish. This is an ad valorem fee—paid on the value of total groundfish landings. Why 3%? I offer it as a possibility—and it matches administrative fees levied in some fisheries.

2. The new policy must create a catch-share fishery in which permits are issued entitling the holder to catch and sell an assigned share of the annual TAC.

3. Fishing history would be honored by issuing three-year permits entitling the holder to land 75%, in each of the three years, of this history.
4. This three-year period is one of dynamic consolidation. The royalty will alter the economic calculation of harvesters. The existence of the royalty will induce some fishers with history to exit the fishery. In addition, the allocation of 75% of historic landings will further cause some to exit. This reduction of interest in continuing to fish represents the source of consolidation and it will reduce fishing pressure on stocks.

5. During the three-year consolidation period, the historic allocation received in step #3 above could be reassigned by a recipient to any other individual who had also received an allocation. This re-assignment could not be sold but only transferred to another. This process of willing re-assignment of history would be officially recorded and would form the data base that would be used to allocate compensation payments to those who decide to exit the fishery. This three-year period is one of willing re-assignments among all who received a history-based allocation at the beginning of the consolidation period. There could be no buying or selling for the simple reason that there is nothing to buy or sell. All that is being reassigned is fishing history.

6. During this three-year period all landings are subject to the royalty fee and so the fishery will begin to accumulate resource rent. The NMFS would create an escrow account to receive all landings royalties.

7. At the end of the three-year consolidation fishery there would be a group of vessels (harvesters) holding history-based permits—their own history plus the reassigned history. Recall that these holdings, in the aggregate, authorize total annual catch at 75% of their historic average. As an aside, the 75% number is simply a guess at the extent of the required reduction (25%) in landings required to rebuild stocks. The actual discount on history would need to be geared to the biological requirements to accomplish rebuilding of stocks and persistence of re-built stocks into the future. This fleet of newly re-authorized vessels would represent a reduced level of total fishing effort in the fishery. The presumption, following consolidation, is that those vessels (harvesters) wish to remain active in the fishery, while those who have relinquished and reassigned their history apparently wish to leave and receive compensation.

8. Each re-authorized vessel (harvester) would receive a ten-year permit to land the catch share embodied in the permit. All landings would be subject to a 3% royalty.

9. Once the new catch-share fishery is underway the NMFS would activate a loan to be used to buy-out those who had relinquished (and reassigned) their history to others. This loan would be amortized over 30 years by the revenue generated from the royalty. Indeed, during the three-year consolidation fishery, those who relinquished their history could be immediately eligible to receive some percentage of their historic landings revenue to ease their transition out of the fishery.

10. The presumption is that those re-authorized vessels would remain in the fishery for the duration of their permit (10 years). The plan would allow these original permit holders to renew (during year 8) their 10-year permit if they wished. Obviously their record of fishing—clean fishing, no violations—would figure in the approval of this
routine renewal. In reality some permit holders will wish to leave or to adjust the level of their permitted landings. These periodic adjustments provide the necessary means by which new entrants could come into the fishery as replacements but not as net additions to current fishing power. That is, all relinquished permits would revert to the government to be re-allocated as seen fit by the managers. These new allocations could be by a lottery or by a multi-unit single-price auction. Regardless of the allocation mechanism, the permit being acquired would expire when all other permits were set to retire.

**Summary**

There are obviously many refinements and elaborations that could be built into the catch-share fishery—two classes of permits (five-year, ten-year), staggered terms for permits so that a portion of them come up for renewal each year, etc. I have not spelled out these possible elaborations because they represent mere refinements of the basic structure of a catch-share fishery.

The essential point here is to demonstrate that the choices facing the PFMC are not restricted to picking between a full-blown IFQ fishery and an auction of fixed-term permits. History can be accorded prominence, those who wish to leave the fishery can be compensated, and the new sustainable fishery can begin to earn resource rent for the owners of the fish. A firm TAC will assure sustainability.

**III. Bibliography**


October 14, 2008

BY EMAIL and U.S. MAIL

Mr. Donald Hansen and Members of the Pacific Fishery Management Council
Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 101
Portland, OR 97220-1384

Re: Comments on Trawl Rationalization: Fixed-Term and Auctions

Dear Mr. Chairman and Members of the Pacific Fishery Management Council:

On behalf of our 1.2 million members and activists, NRDC submits the attached analysis of fixed-term quota allocations combined with auctions.

This analysis makes several points we’d like to bring to your attention. As you know, in a cap-and-trade system like the Individual Tradable Quota program under consideration here, having a cap (or quota) alone does not guarantee positive outcomes. This paper underscores that how the trade happens also matters.

A mixture of fixed-term grants of quota and rolling auctions can create greater ecological and economic benefits than would occur in a system that makes permanent grants of the entire quota. There are two reasons for that finding. First, an auction helps raise money that can help address community impacts and fund incentives to make environmental improvements, in recognition of the fact that oceans belong to the public. Second, creation of an auction promotes price discovery and a more transparent and liquid market, which can lead to improved efficiency and profitability. A partial-grant, partial-auction system for overfished species quota pounds, for example, could help avoid hoarding problems and create more transparent and active trading.

The paper also shows that a fixed-term system does not lead to appreciable reductions in stewardship at the end of the term as long as fishermen can bid for quota share when theirs expires.
We appreciate your consideration of this paper.

Sincerely,

Karen Garrison
Market Design for Fishery IFQ Programs*
DRAFT†

John O. Ledyard‡

October 14, 2008

Abstract

I examine the impact of two aspects of market design on the performance of a cap-and-trade program of Individual Fishing Quotas. I consider the term of the quota, limited term or permanent, and the method of initial allocation, granting or selling. I find that, in equilibrium, neither the term of the quota, the number of years for which it is valid, nor the method of initial allocation has any differential effect on either the profitability of the fishery or the quality of the environment. However, the term of the quota and the method of initialization can have a big impact on the price discovery process and whether equilibrium is attained. Because of this, both the fishery and the environment can be significantly better off with a mixture of grandfathering and auctions with some form of limited term quotas. I also discuss some additional benefits from an initialization process that generates some revenue for the public.

Section 5 contains a summary which can serve as an executive summary for those in a hurry.

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*This paper was prepared with the financial support of the Natural Resources Defense Council and Ecotrust. Ed Backus, Karen Garrison, and Astrid Scholz provided valuable intellectual assistance.
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1 Introduction

A Cap-and-Trade program with Individual Fishing Tradable Quotas (IFQs) is an efficient and cost-effective method for managing a fishery. Once IFQs are created and allocated, the total catch is controlled through the cap. This control provides benefits both to fishermen, who care about the economic viability of the fishery, and to environmentalists, who care about the biological viability of the fishery. The benefits to the environment come in a more sustainable fish population. The benefits to the fishermen come in the increase in profits due to solving their commons problem. In many respects, the interests of the fishermen and those of the environmentalists are aligned.

There are many choices that must be made when a new IFQ program is initiated. Two of these fall under the purview of market design: the structure of the quota, the quota that is created to control the catch, and the method by which the initial allocation of quotas is made. Both of these choices potentially affect the economics of the fishery and the sustainability of the environment. In this paper, I look at limited term quotas as an alternative to permanent quotas. I also evaluate the differential effects on fishery and environment of an initial grant of quotas versus an initial sale.

The findings are straightforward if sometimes counterintuitive. (1) In equilibrium, neither the term structure of the quotas nor the method of initial allocation affect the profitability of the fishery or the sustainability of the environment. All choices of the fishermen (effort, gear choice, entry or exit, etc.) are the same in all variations. (2) The structure of the quotas and the method of initial allocation can affect the extent to which market equilibrium is attained. Some limited term structure on the quotas and some auctioning will lead to more transparent and liquid trading which in turn will lead to higher profitability for the fishermen and a higher value for the environment. This does require some of the potential increase in wealth to be allocated to the operation of the program, but all will be better off if that is done. (3) Even if the IFQ program is run in a way that attains its highest level of performance for both the fishery and the environment, there remain opportunities for further improvement. If some of the wealth created by the IFQ program is put towards solving these problems, both the fishery and the environment can be made better off together.

The rest of this paper is organized as follows. In Section 2, I present a model of the fishery that includes both economic and environmental components. I analyze the equilibrium impact of two methods of initial allocation:
granting and selling. I also analyze the equilibrium impact of limited term quotas. The material in this section is somewhat technical. The reader who wants to avoid that can jump straight to Section 2.5 for a non-technical discussion of the model and results. In Section 3, I look at the price discovery process - how the market equilibrium of Section 2 might be attained. I look at the impact of grandfathering, auctioning, and limited terms in this context. In Section 4, I look at some of the remaining economic and environmental problems that are not solved by an IFQ program even if it functions at full efficiency. A summary with conclusions is provided Section 5.

2 Equilibrium Analysis

I begin with a fairly standard model of the fishery.\(^1\) I try to capture both the economic and environmental aspects of the situation.

The fishery The stock of fish in year \(t\) is \(b_t\). The annual rate of change of this stock is given by:

\[
b_{t+1} = b_t + f(b_t, e_t) - Q_t
\]  

where \(e_t\) is the quality of the environment, including the carrying capacity, and \(Q_t\) is the total catch that period. \(f(b_t, e_t)/b_t\) is the natural growth rate of the population. The exact form of \(f\) will be different for different species, but the market design results in this paper do not change if \(f\) changes.

The environment The environment can replenish itself if left alone but can also be damaged if fishermen use inappropriate technology or participate in extensive discarding.\(^2\) There are \(I\) fishermen labeled \(i = 1, \ldots, I\). Let \(\tau^i\) be the level of technology used by fisherman \(i\), how they fish, where higher values of \(\tau^i\) are good for the environment but cost the fisherman more to

\(^1\) Equations (1) and (3) can be found in early models of the fishery. More recent references include Neher (1990) and Perman, et. al. (2003). Equation (2) is one of many ways of getting the externality to the environment into the model. The results in this paper do not depend on this particular form.

\(^2\) By environment I generally mean habitat quality, those things that provide the carrying capacity for the biomass in equation (1).
The annual rate of improvement (or decline) in the environment is given by

\[ e_{t+1} = e_t + g(e_t, \tau_1, ..., \tau_I). \] (2)

It should be noted that the form of (2) provides a commons problem that an IFQ program does not directly solve. That is, a fisherman’s choice of the way they fish affects all of the fishermen in the fishery. Choosing a good method conveys benefits to all, but, in choosing one’s methods of fishing, one generally considers only the benefits to oneself. Thus fishermen will generally choose too little of the good method. We will return to this issue in Section 4.

The fishermen The final piece of the model is the profit, \( \pi^i \), of a fisherman in any one year. I assume that

\[ \pi^i = pQ^i - c^i(Q^i, \tau^i, b_t). \] (3)

Fishermen may differ in their type of equipment, boat size, capabilities, marginal value of leisure, outside opportunities, etc. In this model they are not homogeneous.\(^5\)

2.1 An IFQ program

A tradable IFQ program is implemented by choosing a maximum limit on the total catch in each year, called the total available catch (TAC), and then allocating a percentage of the quota to each fisherman. Let \( \alpha^i \) be the percent

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\(^3\)It is assumed here that the choice of technology can be made anew in each period with no switching costs. This is undoubtedly unrealistic, but it only strengthens our conclusions. If desired, transition costs and irreversible effects could be added at a cost of complexity.

\(^4\)I write this in the standard way, assuming perfect competition in the output market with the competitive price of \( p \). This is not necessary for the conclusions of the paper. The results would still obtain if \( p \) depended on \( Q \), as it would in a non-competitive marketplace. The results would also still obtain if demand can shift over time. For sake of simplicity, I leave out all of these complexities.

\(^5\)If all fishermen are homogeneous, then the problem is really trivial. Allocate the quota evenly among them. There will be no need for trading. The results to follow still hold and are significantly easier to obtain.
of the TAC that fisherman \( i \) is allocated where \( \sum \alpha^i = 1 \). If the TAC in year \( t \) is \( A_t \) then he can catch a maximum of \( \alpha^i A_t \) fish in that year.

Accompanying the allocation is a policy to choose the TAC for each year \( t \), indicated by \( A_t \). That policy is given by

\[
A_t = A(b_t, e_t). \tag{4}
\]

Here I am assuming that the TAC is set each year in a way that depends predictably on the biomass \( b_t \) and the environmental quality, \( e_t \). This does not require that biomass or environmental quality be predictable. The equation subsumes a lot of processes whose specific forms are not necessary for this paper. For example, the stock assessment part of determining the TAC is included in equation (4). It is required that each fisherman’s catch in year \( t \), \( Q_t^i \), be no greater than their quota for that year which is \( \alpha^i \) times the TAC.

For this paper, I will assume that all fishermen always use all of their quota. That is,

\[
Q_t^i = \alpha^i A(b_t, e_t). \tag{5}
\]

I assume there is a sufficiently accurate monitoring and strong penalty system in place to deter over-running one’s quota.

**Summary** Given a fishery policy, determined by (4) and (5), and a quota allocation, \( \alpha^i \), a fisherman at time \( t \) will choose an amount of catch \( Q_t^i \) and a method of fishing \( \tau_t^i \). This in turn will determine the next period’s stock of fish and environmental quality through equations (1) and (2). This process repeats itself into the future.

### 2.2 Permanent Quota

The purpose of this paper is to evaluate the effect of two market design alternatives on the choices of fishermen and, thus, on the biomass and environmental quality. I begin the comparative analysis by considering a base case on which I can build. I begin with the case in which fishermen have an allocation of permanent quota.

\(^6\) The only time this will not be true is if the TAC is not binding on the fleet; that is, there was no need for a quota. Otherwise, if there is trading, any fisherman with excess quota will sell it to another.
The situation is made a bit more complex than the standard model because of the availability of trading at every point in time. At the beginning of each period $t$, a fisherman holds an amount of quota $\alpha_{t-1}$. In period $t$, they can buy or sell quota which will determine how large their catch can be, they must choose their technology, how they fish, and they must do this taking into account the future. We model this as follows.

Suppose there are going to be a series of spot markets, one for each $t$, in which fishermen can buy and sell quota at that time. It is easiest to see what happens in such a setup by considering a Rational Expectations Equilibrium.\(^7\) In the Rational Expectations Equilibrium model, there is a price $q_t$, for quota bought or sold in time $t$. The price $q_t$ clears the market for quota in period $t$. Finally, at any time $t^*$, the price at $t$ is correctly anticipated by all fishermen for all times $t \geq t^*$.

At time $t$, a fisherman owns an amount of quota, $\alpha_{t-1}$, carried over from the previous period. She needs to choose, for each $t$, a level of desired quotas for $t, \alpha_t$, and a level of technology for $t, \tau_t$. She faces a dynamic programming problem where the solution is found recursively by solving for all $t \geq 0$:

\[
v_t(\alpha_{t-1}, b_t, e_t) = \max_{\alpha, \tau} \{ p\alpha A(b_t, e_t) - c(\alpha A(b_t, e_t), \tau, b_t, e_t) - q_t(\alpha - \alpha_{t-1}) \\
+ \delta v_{t+1}(\alpha, b_{t+1}, e_{t+1}) \}.
\]

On the left hand side of the equality is the present discounted value to the fisherman of holding $\alpha_{t-1}$ when the biomass is $b_t$ and the state of the environment is $e_t$. On the right hand side are her revenue in this period minus her costs in this period minus her financial costs of trading plus the discounted value of where she ends up at the end of $t$ (which is the beginning of $t+1$). The values of $b_{t+1}$ and $e_{t+1}$ come from equations (1) and (2). She has two choices to make in each $t$: how much to fish, $\alpha_t$, and how to fish, $\tau_t$.

We can greatly simplify the equations to make it easier to derive some results. Let

\[
W_t(\alpha_{t-1}, b_t, e_t) = v_t(\alpha_{t-1}, b_t, e_t) - q_t \alpha_{t-1}.
\]

\(^7\)There are many ways to model a complete set of markets, including allowing a full set of futures markets at each time $t$ for both leases and quota. One can also introduce uncertainty about prices, etc. But these generalizations mostly introduce unnecessary complexities into the analysis.

\(^8\)I leave off the index $i$ from expressions when it is clear what is going on to avoid excessive notation.
I can then re-write (6) as

\[ W_t(\alpha_{t-1}, b_t, e_t) + q_t \alpha_{t-1} = \max_{\alpha, \tau} \left\{ p\alpha A(b_t, e_t) - c(\alpha A(b_t, e_t), \tau, b_t, e_t) - q_t (\alpha - \alpha_{t-1}) + \delta [W_{t+1}(\alpha, b_{t+1}, e_{t+1}) + q_{t+1} \alpha] \right\} \]

or in more compact form, subtracting \( q_t \alpha_{t-1} \) from each side

\[ W_t(\alpha_{t-1}, b_t, e_t) = \max_{\alpha, \tau} \left\{ p\alpha A(b_t, e_t) - c(\alpha A(b_t, e_t), \tau, b_t, e_t) - q_t \alpha + \delta q_{t+1} \alpha + \delta W_{t+1}(\alpha, b_{t+1}, e_{t+1}) \right\}. \]

(8)

It is straight-forward to verify that \( \partial W_t/\partial \alpha_{t-1} = 0 \) for all \( t \), so we can write \( W_t \) as \( W_t(b_t, e_t) \). We can come to a number of conclusions about the choices of the fishermen from this.

First, the choice of quota, \( \alpha_t \), solves

\[ \max_{\alpha} \left\{ p\alpha A(b_t, e_t) - c(\alpha A(b_t, e_t), \tau_t, b_t, e_t) - (q_t - \delta q_{t+1}) \alpha \right\}. \]

(9)

and is entirely independent of the value of \( \alpha_{t-1} \). That is, in a fully functioning marketplace, the optimal choice by a fisherman of quotas needed in any period does not depend on their previous period holdings. Further, in a fully functioning market, the fisherman’s choice of \( \alpha_t \) is entirely independent of the future value to the fisherman. The value \( W_{t+1}(b_{t+1}, e_{t+1}) \) does not show up in equation (9). The only future thing that is important in the choice of \( \alpha \) is the price for quota in \( t + 1 \), \( q_{t+1} \). If markets are working correctly then \( q_t - \delta q_{t+1} \) is just the leasing price for 1 year for 1 unit of quota - the price to buy 1 unit less the discounted price from selling it in the next period.\(^9\)

Second, the choice of technology, \( \tau_t \), solves\(^10\)

\[ \max_{\tau} \left\{ -c(\alpha_t A(b_t, e_t), \tau, b_t, e_t) + \delta W_{t+1}(b_t + f(b_t, e_t) - A(b_t, e_t), e_t + g(e_t, (\tau_1, ..., \tau_I / \tau)) \right\} \]

(10)

\(^9\)If the leasing price were higher than this, one would be better off buying and re-selling than leasing. The opposite would be true if the leasing price were smaller than this. This is the natural result in liquid and transparent markets where all buyers and sellers have access to frictionless capital markets. That is, they can easily borrow or lend money. This is undoubtedly not true in reality which creates market frictions. I will address these frictions later.

\(^10\)I use the standard notation \((\tau_1, ..., \tau_I / \tau)\) to represent the vector \((\tau_1, ..., \tau_I)\) with the \(i\)th entry replaced by \(\tau\). I am assuming a Nash Equilibrium in \(\tau\).
This choice is also independent of $\alpha_{t-1}$. It does depend on the future, through $W_{t+1}(b_{t+1}, e_{t+1})$. It does not depend directly on the price of quota although it does depend on the choice of $\alpha_t$ which does.

Equations (9) and (10) determine a demand function for $\alpha^i_t$, independent of $\alpha_{t-1}$, where

$$\alpha^i_t = \alpha^i_t(b_t, e_t, q_t - \delta q_{t+1}).$$

(11)

These demands determine an equilibrium set of prices $\hat{q}_1, \hat{q}_2, ..., \hat{q}_t, ...$ where

$$\sum_i \alpha^i_t(b_t, e_t, \hat{q}_t - \delta \hat{q}_{t+1}) = 1, \text{ for all } t.$$  

(12)

If the fishery is in a steady state then $b_t = b, e_t = e, \tau^i_t = \tau^i$ and $q_t = q$ for all $t$. So, in particular, if $\delta = 1/(1 + r)$ where $r$ is the interest rate, then at time $t$ the lease price of quota $(\hat{q}_t - \delta \hat{q}_{t+1}) = [r/(1 + r)]q$.

I have not explicitly let the fisherman contemplate the possibility of exit from or entry into the fishery. To do so would not change any of the comparative results, but would only further complicate the notation. I do show in the Appendix how to include entry and exit in the model.

2.3 The Effect of the Process of Initial Allocation under Permanent Quota

In this section, I look at the effect of two initial allocation schemes: granting and selling. An example of a grant is grandfathering which involves a one-time allocation based on historical performance in the fishery. An example of a sale is auctioning, a one-time sale of quotas. I do this in the context of permanent quota with full trading in fully functioning markets.

2.3.1 Grant

Suppose the IFQ program is initiated with a one time grant of permanent quota to each fisherman. At time 0, each fisherman is given a gift of $\alpha^i_0$ of the quota where $\sum \alpha^i_0 = 1$. For now, it is not particularly important how this allocation is determined, just that it is free.\footnote{\textmd{If it is known or anticipated that grandfathering is the way that the initial allocation of the quota is to be done, then a very bad unintended consequence occurs. Fishermen find}} From the preceding analysis, the value to $i$ of $\alpha^i_0$ is found in equation (6), where $v^i_1(\alpha^i_0, b_1, e_1)$. This can also
be written as in equation (7) and following: \( W_i^T(b_1, e_1) + q_1 \alpha_0 \). In equilibrium the marginal value of \( \alpha \) is simply, \( q_1 \), the price at which this quota could be sold in period 1. Alternatively, it is the value to the fisherman of not having to buy \( \alpha \) in period 1. So if the fisherman is granted an amount \( \alpha_0 \), at \( t = 1 \) that gift is worth \( q_1 \alpha_0 \) to him. If, on the other hand, he buys \( \alpha_0 \) at a price \( q_0 \), then at \( t = 1 \) it is worth \((q_1 - q_0)\alpha_0\) to him.

In a fully functioning market equilibrium, the present discounted value of the quota program is the value of the grant. It is entirely capitalized in the initial price, \( q_1 \).

2.3.2 Sale

Suppose the IFQ program is initiated with a one time sale of permanent quota to each fisherman. There are many ways to implement such a sale. Here, I assume it to be done with a uniform price clock auction.\(^{12}\) Although the proceeds from the sale can be distributed in many ways through many processes, including ones which involve participation of the fishermen themselves, I will assume for now that the proceeds go to the public, to be distributed later.

Invoking the revelation principle from mechanism design, it is easy to show that, with liquid and transparent markets, the allocation and price outcome of the sale with a uniform price clock auction will be the same as that of a demand-supply market.\(^{13}\) If \( q^A \) is the price per unit quota that must be paid at the auction at the beginning of period 1, then at that price, fisherman \( i \) will want to buy the amount of quota \( \hat{\alpha}_i(q) \) that solves (from (9)):

\[
\max_{\alpha} \left\{ p \alpha A(b_1, e_1) - c(\alpha A(b_1, e_1), \tau_1, b_1, e_1) - (q^A - \delta q_2)\alpha \right\}. \tag{13}
\]

The solution to this problem is exactly the same for every \( q^A \) as the solution to (9). How much quota a fisherman starts with has no bearing on how it now in their interest to to focus their investments and efforts on things that raise their catch levels so as to, hopefully, increase their share of quota at the time it is allocated. Over-fishing can be significantly increased in anticipation of the quota and can actually lead to a lower stock for a long period of time, even after the IFQ program begins. For the rest of this paper, I will ignore this effect.

\(^{12}\)What is crucial here is that it is a one-price equilibrium. For the curious, I describe the uniform price clock auction in more detail in Appendix III

\(^{13}\)See Szakaly and Ledyard (1994) for more on the theoretical and experimental background for this claim of equivalence.
much quota he wants to end up with.\textsuperscript{14} It follows that the auction price will be exactly the same as the equilibrium price, $\hat{q}$, that solved (12). That is, $q^A = q_1$. The price paid in the auction is exactly the same as the price that would arise in period 1 if the quota were granted and then trade occurred. Further, even if trading were to be opened after the auction, none would occur since the auction already has allocated the quota to those who value it the most.

The value to $i$ of the sale is $W_i(b_1, e_1)$ since $\alpha_0 = 0$.

### 2.3.3 Comparing Grant and Sale

Because the optimal decisions for the fishermen in each period are independent of their quota holdings in previous periods, the comparison between grants and sales at $t = 0$ is straightforward. All choices, those of $(\alpha_t, \tau_t)$ for all $t$, are the same whether there is an sale or grant. This means that $W_i(b_1, e_1)$ is the same in both cases. The only difference is in the distribution of the present discounted value of the quota program capitalized in the price, $q_1$. Under the grant, the fishermen get $q_1$, the public gets 0. Under the sale, the public gets $q_1$, the fishermen get 0.\textsuperscript{15} The value at time 1 to our fisherman of the quota, $\alpha_0$, is $v_1(\alpha_0, b_1, e_1) = W_1(b_1, e_1) + q_1 \alpha_0$. He is better off with the gift by an amount $q_0 \alpha_0$. We can summarize this in

**Theorem 1** With permanent quota and fully functioning markets, in equilibrium, the path over time of $Q_t, b_t$, and $e_t$ will be exactly the same under a regime in which quota is granted as under a regime in which quota is sold. Quota prices will also be the same under either regime. Under the grant the fishermen capture the full value, $q_1$, of the quota program. Under the sale the public captures the full value, $q_1$, of the quota program.

As before, efficiency and environmental impact are the same under grant and sale. Only the distribution of wealth differs.

\textsuperscript{14}In a well-functioning market without frictions, the opportunity cost of using his holdings is exactly the same as his cost of buying quota in the market place.

\textsuperscript{15}Actually, the fishermen also get something else under both grant and sale - $W_1(b_1, e_1)$. This will be higher than what they would have had without a quota program. So the fishermen receive some benefit from the program, under any initial allocation process.
2.4 Quota with Limited Terms

It is not necessary to make an all or nothing decision with respect to the initial allocation of the quota. One does not need to choose between granting all of the quota in period 1 or selling all of the quota in period 1. There are policies that avoid either the outright gift of all value to the incumbents, through a grant of permanent quota, or the outright grant of all value to the public, through the sale of permanent quota. One such approach is to grant quota with a limited term. Under this policy one allocates quota originally, as in a grant, but makes the original quota good only for $T$ years. At the end of the $T$th year, those quotas are no longer valid and new ones, which are now permanent, are then sold.

In this section, I look at the impact of a policy of limited term quota and how this compares with a grant or sale of permanent quota at time 0. I work backwards for three periods because the answer reveals itself at that point.

Grant of Permanent Quota  Remember how the problem looks at time $T-1$, $T$, and $T+1$ to someone who received permanent quota in period 0. At the beginning of year $T+1$, a fisherman’s value is (I use the superscript $G$ to denote that this is the grant solution):

$$W^G_{T+1}(b_{T+1}, e_{T+1}) + q^G_{T+1} \alpha_T$$

(14)

Moving back to $T$, we know that

$$W^G_T(b_T, e_T) + q^G_T \alpha_{T-1} = \max_{\alpha, \tau}\{p \alpha A(b_T, e_T) - c(\alpha A(b_T, e_T), \tau, b_T, e_T)$$

$$-q^G_T(\alpha - \alpha_{T-1}) + \delta[W^G_{T+1}(b_{T+1}, e_{T+1}) + q^G_{T+1} \alpha]\}.$$  

(15)

Finally, for $T-1$, we know that

$$W^G_{T-1}(b_{T-1}, e_{T-1}) + q^G_{T-1} \alpha_{T-2} = \max_{\alpha, \tau}\{p \alpha A(b_{T-1}, e_{T-1})$$

$$-c(\alpha A(b_{T-1}, e_{T-1}), \tau, b_{T-1}, e_{T-1}) - q^G_{T-1}(\alpha - \alpha_{T-2})$$

$$+ \delta[W^G_T(b_T, e_T) + q^G_T \alpha]\}.$$  

(16)

Grant of Limited Term quota followed by Sale of Permanent Quota  Now let’s consider someone who receives the same amount of quota in period 0 but where that quota expires at the end of period $T$. To continue fishing
after $T$, they will have to buy newly available permanent quota from the sale between $T$ and $T + 1$.

At time $T + 1$ the difference between the fisherman who receives a permanent quota at time 0 and the fisherman whose quota lasts only $T$ years is minimal. For the fisherman with the limited term quota, their value at $T$ is (using the superscript $L$ to denote the limited term solution):

$$W_{T+1}^L(b_{T+1}, e_{T+1}) = W_{T+1}^G(b_{T+1}, e_{T+1})$$

(17)

Compare this to (14) for the person with permanent quota. Looking forward, the value to both is the same. The only difference at $T + 1$ is that the fixed term quota holder loses the value of $\alpha_T$.

But this loss carries back to $T$. In period $T$, the value of the limited term quota holder is:

$$W_T^L(b_T, e_T) + q_T^L\alpha_{T-1} = \max_{\alpha, \tau} \{ \alpha, A(b_T, e_T) - c(\alpha, A(b_T, e_T), \tau, b_T, e_T)$$

$$-q_T^L(\alpha - \alpha_{T-1}) + \delta W_{T+1}^L(b_{T+1}, e_{T+1}) \}$$

(18)

Because the scenarios are different and, thus, the equilibrium prices could be different, we use $q_T^L$. Suppose $q_T^L = q_T^G - \delta q_{T+1}^G$. Then I can re-write (18) as

$$W_T^L(b_T, e_T) + q_T^G\alpha_{T-1} = \max_{\alpha, \tau} \{ \alpha, A(b_T, e_T) - c(\alpha, A(b_T, e_T), \tau, b_T, e_T)$$

$$-q_T^G(\alpha - \alpha_{T-1}) + \delta [W_{T+1}^G(b_{T+1}, e_{T+1}) + q_{T+1}^G\alpha] \}$$

(19)

Comparing this to (15) we can see that the optimal choices for $\alpha_T$ and $\tau_T$ are exactly the same in G and L. It follows that $W_T^L(b, e) = W_T^G(b, e)$.

To see that this is not all an accident, let us move back one more period to $T - 1$ where the value for the limited term is:

$$W_{T-1}^L(b_{T-1}, e_{T-1}) + q_{T-1}^L\alpha_{T-2} = \max_{\alpha, \tau} \{ \alpha, A(b_{T-1}, e_{T-1})$$

$$-c(\alpha, A(b_{T-1}, e_{T-1}), \tau, b_{T-1}, e_{T-1}) - q_{T-1}^L(\alpha - \alpha_{T-2})$$

$$+\delta [W_{T}^L(b_T, e_T) + q_T^L\alpha] \}$$

(20)

Because $W_T^L(b, e) = W_T^G(b, e)$, if I let $q_{T-1}^L = q_{T-1}^G - \delta^2 q_{T+1}^G$, then I can rewrite (20) as

$$W_{T-1}^L(b_{T-1}, e_{T-1}) + q_{T-1}^G\alpha_{T-2} = \max_{\alpha, \tau} \{ \alpha, A(b_{T-1}, e_{T-1})$$

$$-c(\alpha, A(b_{T-1}, e_{T-1}), \tau, b_{T-1}, e_{T-1}) - q_{T-1}^G(\alpha - \alpha_{T-2})$$

$$+\delta [W_{T}^G(b_T, e_T) + q_T^G\alpha] \}$$

(21)
Again it is true that for these prices, that the optimal choices for $\alpha_{T-1}$ and $\tau_{T-1}$ are the same in both G and L and $W^L_{T-1}(b,e) = W^G_{T-1}(b,e)$.

I can continue this back to $t = 0$. In the end what we learn is

**Theorem 2** Let $q^G_t$ be the equilibrium prices and $\alpha^G_t, \tau^G_t$ be the equilibrium choices when permanent quotas are granted at $t = 0$. Define the prices $q^L_t = q^G_t$ for all $t > T$ and $q^L_t = q^G_t - \delta^{T+1-t}q^G_{T+1}$ for all $t \leq T$. Then the prices $q^L_t$ are equilibrium prices for the limited term quota policy. Further, let $\alpha^L_t = \alpha^G_t$ and $\tau^L_t = \tau^G_t$. Then $\alpha^L_t$ and $\tau^L_t$ are equilibrium choices for the limited term quota policy.

Behavior is exactly the same under a grant of permanent quota or a grant of limited term quota followed by an auction. It relatively easy to understand intuitively what is happening. All holders of the quotas at $T$ suffer a loss of $q_{T+1}\alpha_T$ when their quota expires. In equilibrium, the price of the quota $\alpha_t$ is adjusted in each period $t$ up to $T$ for the present discounted value of this coming capital loss. The present discounted value at time $t$ of this per-unit loss in period $T+1$ is $\delta^{T+1-t}q_{T+1}$. The loss is capitalized into the price of the quota.

The effect of the limited term policy is simply a lump-sum transfer out of the system at time $T$. But it also shares the benefits of the quota program. The fishermen get $q_1 - \delta^{T+1-t}q_{T+1}$. The public gets $\delta^{T+1-t}q_{T+1}$.

**Sale of Permanent Quota at $T = 0$** To finish this section, let us compare the grant of limited term quota with the sale of permanent quota at $T = 0$. Remember that, from Section 2.3.3, the difference between the grant and the sale of permanent quota at $T = 0$, is that under the grant the fishermen get $q_1$ more and the public gets $q_1$ less than under the sale. Now consider the grant of quota with life $T$ followed by the sale of permanent quota. From the previous section, the value at $t = 0$ to the fishermen of the difference between this and a grant of permanent quota is $\delta^{T+1}q_{T+1}$.

If $T = 0$, then, the value of the difference at $t = 1$ is $\delta q_1$, exactly the same as the sale of permanent quota at 0. The difference to the fishermen between a sale at 0 and a sale at $T$ is $q_1 - \delta^{T+1}q_{T+1}$. If the fishery were in a steady-state situation, then $q_t = q^*$ for all $t$ and the difference to the fishermen is $(1 - \delta^{T+1})$, the amount they gain by postponing the transfer of wealth from period 0 to period $T$. 

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A Mixed Bag  One can accommodate into our analysis any number of term lengths and any variety of grant and sale. For example, suppose one wants to allocate 78% of the quota through grandfathering with 22% to be allocated by auctions over the next 10 years. The management could reserve 2% for an initial auction. the rest, 20%, would be allocated to the fishermen. Each fisherman would be given a portfolio of quotas that consists of 10% of 1 year quotas, 10% of 2 year quotas, and so on up to 10 year quotas. This would mean that the management would have 2% of the original quota to sell at auction for each of the next 10 years. When sold at auction, the quotas would be permanent. As before, nothing changes in the equilibrium choices of the amount of fishing, \( \alpha_t \), or the style of fishing, \( \tau_t \). The market prices of quota will be different to reflect the flow out of the system of the proceeds from each of the 10 auctions.\(^{16}\) If the prices of quota would be \( q_t^E \) under a grant of permanent quota, then we can determine the price of quota at \( t \) with a remaining life of \( L \) as \( q_t^E \) \( \delta^{L+1} q_{t+L+1}^E \). The present discounted value of the auction proceeds will be \( S = (0.02)[q_1 + \delta q_2 + \ldots + \delta^{10} q_{11}] \). So the public gets \( S \) and the fishermen get \( q_1 - S \).

### Adaptive Management

A proposal exists in the West Coast Fisheries to hold back 10% of the quota to be used to solve various social and environmental side effects of the fishery. One idea is that each year, 10% of the quota for that year, would be sold to generate a flow of income for the program. In a fully functioning marketplace, the sale of 10% of quota in year \( t \) is equivalent to leasing the quota for 1 year. The leasing price is \( q_t - \delta q_{t+1} \). Thus, the sale will yield \( I_t = .1(q_t - \delta q_{t+1}) \). The present discounted value of this is \( .1(\delta^{t-1} I_t) = .1(\delta^{t-1} q_t - \delta^t q_{t+1}) \). Adding these up over time gives us the present discounted value of the leases which is \( \sum_{t=0}^{\infty} I_t = .1q_1 \), the discounted value of the 10% of the grant of quota for adaptive management. The fishermen get \(.9q_1 \) and the public gets \(.1q_1 \).

### 2.5 Summary

In this section, I have provided a fairly standard equilibrium model of the fishery that includes its effect on the environment. In the model, fishermen are heterogeneous with possibly different costs of fishing, labor-leisure pref-

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\(^{16}\) There will also be more markets since the price of quota with 2 years left will be different from the price of quota with 3 years left.
erences, size of boat, etc. They choose the level at which they fish: the size of the catch. They also choose how they fish, the technology they use: gear choice, location, high-grading, etc. A simple cap-and-trade IFQ program is included in the model. If there are well-functioning, transparent and liquid markets for the quota quotas, then a Rational Expectations Equilibrium will occur. So I look at what happens in this equilibrium. In the context of this model, I analyze two fundamental features of the market design for an IFQ program: the initialization process and the term of the quotas. I evaluate three policies of initialization and term: the grant of permanent quota, the sale of permanent quota, and the grant of limited term quota followed by a sale of permanent quota. The results are very easy to state. In equilibrium, the behavior of the fishermen, with respect to both the level of fishing and the method of fishing is no different under any of the three policies. Therefore, the effect of the policies on the fishery and the environment is identical. Only the distribution of wealth is different.

These conclusions are also true for any combination of limited term quota, sales, or grants. That means that it is possible to fix the amount and timing of any split between the fishermen and the auctioneer by choosing the appropriate initialization policy. I give one example above under ”a mixed bag”.

3 Getting to Equilibrium

An IFQ program that hands out quotas and does nothing further leaves a lot of important problems unsolved. One of these is incomplete trading. If a cap-and-trade IFQ program is to attain its full potential for profitability and environmental health, the cap is not enough. There must be trade. All the possible gains from trade must be found and captured. Indeed, market equilibrium will not be found without this; in equilibrium, there are no more gains from trade. But equilibrium does not happen magically. Getting there requires a well-functioning, transparent, and liquid market place.

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17 In the next section, I take up what happens if markets have significant frictions and are neither transparent nor liquid.

18 There are gains from trade if at least two people can gain from reallocating quota between them. That is, if A can make more profit with the quota than B, then the quota can be transferred to A and A can compensate B in a way that makes them both better off. Such a trade is voluntary and improves the welfare of both.
In this section, I explore the impact of the quota structure and the initialization policies on the process of getting to equilibrium, a process often referred to as price discovery. We will see that in disequilibrium, as opposed to equilibrium, market design does matter.\textsuperscript{19}

**Grants and laissez faire** Consider an initialization policy in which a permanent quota is granted based on historical performance with trade presumed to follow. For now, let us assume that nothing else is done as part of the IFQ program. In particular, there are no organized markets or brokers. I refer to this situation as ”laissez faire” since traders are on their own to find counter parties willing to trade with them. Will the level of trade necessary for efficient utilization of the fishery, higher profits, and better environmental health naturally occur? Unfortunately the answer seems to be that it is not likely. Let us examine why.

With the traders on their own, this is a market place that is fraught with frictions. The only way a trade can occur is if two fishermen put in the effort to search, find each other, and negotiate a trade. Search costs interfere with the finding process and asymmetric information interferes with the negotiation process. Together, these frictions will prevent fishermen from taking advantage of much of the potential gains from trade.\textsuperscript{20} Each individual knows only about their own little piece of the marketplace. They know nothing of other negotiations and other trades. There is little transparency. Consequently there will be only sporadic trades. There is little liquidity.

Forget for a moment the process of finding one another. Consider the negotiation process where there is bilateral asymmetric information. Neither fisherman knows for sure the price at which the other is willing to buy or sell and each would like to make the best possible deal. It has been well understood since 1983.\textsuperscript{21} that the incentives created by asymmetric information lead bidders to shade their bids when involved in bilateral negotiations. Even if there are gains to be had, there is a significant probability that trade will not occur. So, even if all possible pairs of fishermen meet and negotiate, an

\textsuperscript{19}Because the state of economic modeling of price discovery is significantly poorer than of equilibrium, I will rely on intuitive arguments in this section. Much of what I will say can be supported with economic theory and experiments. We are working on those now.

\textsuperscript{20}These frictions are sometimes called transactions costs and are well recognized for inhibiting trade in other cap-and-trade programs, such as those for air pollution control. See Tietenberg (2006).

\textsuperscript{21}See Myerson-Satterthwaite (1983) for a full explication of this theoretical result.
unlikely occurrence, many of those gains from trade will still be foregone. But that fact, in turn, reduces the intensity with which they will search. Since the expected gains from search are reduced by the negotiation frictions, the return to searching is reduced. Lower returns means fewer will search.

An initialization policy of granting with a laissez faire approach to trading is not enough. Asymmetric information and search costs impose significant frictions and prevent traders from finding and sharing the gains from trade. The market place lacks transparency and liquidity. Incomplete trading is the result. The potential profits achievable with complete trading will not materialize.

3.1 Can brokers help?

The naturally occurring response to search and negotiation frictions is brokers. Indeed, some argue that brokers are the complete solution to the inefficiency of bilateral trading. The argument is that the broker is a central clearing house for information about all possible trades: who the buyers and sellers are and the prices at which they are willing to transact. With that information, the broker can facilitate all trades and ensure complete processing of all gains from trade.

But there are at least two problems with this argument. First, brokers cannot by themselves mitigate the asymmetric information problems. Just as a seller knows that she can gain by not revealing the true price at which she is willing to sell to a buyer, she can gain by not revealing the true price at which she is willing to sell to a broker. The reason is not complicated and is a variation of the revelation principle. Basically, it is in the interest of the broker to complete trades. If the seller were to tell the broker her true willingness to sell and a buyer were to, instead, tell the broker a lower willingness to buy than is truly the case, then even if the broker treated them fairly and priced the transaction halfway between the two offers, the seller would lose out since the price would be closer to her true willingness to accept than to the buyer’s true willingness to pay. The seller avoids this by increasing her report to the broker. Second, brokers are not altruists: they do this for the income and they get income by charging commissions on trades. Those commissions further lead to incomplete trading for the same reason any transactions costs do. Brokers may reduce search costs but they impose costs of their own.

Although brokers won’t solve the asymmetric information problems, they
could provide information about who is proposing a trade and at what prices trades are occurring. But, a single broker would not reveal this information, unless required to by the individuals managing the IFQ system. If there are multiple brokers, or easy entry into the broker business, competitive pressures will force the information out. But most cap-and-trade programs do not have the volume of trading required to support many brokers. For example, in the RECLAIM program market of Los Angeles for pollution control, there is a single broker handling most trades. Price information is secret, as are the size and composition of most trades. Thus transparency is not realized. It is not in the nature of naturally occurring brokers to create transparency.

Relying on naturally occurring brokers is not enough. Although search costs are reduced, asymmetric information and broker’s fees continue to impose significant frictions and prevent traders from finding and sharing the gains from trade. The market place still lacks transparency and liquidity. Incomplete trading is the result. The potential profits achievable with complete trading will not materialize.

3.2 Improving transparency

It is possible to improve transparency for traders of IFQs. But it does require proactive work on the part of the management of the IFQ program. A simple improvement over laissez faire would be to require publication in an easily accessible place of the prices and fees involved in all trades. But that is not enough. That only provides information about past trades. Traders also need information about possible future trades. An alternative that provides such information is a central market site, such as a web-based marketplace. With modern information technology, it is really easy and fairly inexpensive to set up and manage such a market. It is also possible to do this in a way that is simple for people to understand and use. At such a website, fishermen could easily see current bids and offers as well as historical information on prices and quantities of previous trades. They could also easily make bids or offers and complete profitable trades.²²

Creating transparency is desirable, easy, and inexpensive. But is it enough? If there is sufficient liquidity, then the answer is yes. Liquidity mitigates the asymmetric information problem through competition. Holding out for a

²²A by-product of such a market is that, through the clearance and settlement process, a very current and precise database of ownership of all quota can be easily maintained. More on this later.
better trade is less likely to work if others can jump in and replace you. Therefore, a trader’s bid will be closer to his true willingness to trade.\textsuperscript{23}

Unfortunately in most cap-and-trade programs, liquidity is very low. In cap-and-trade markets there are relatively few external events which can cause a significant shift in the value to the quota, the tradable quota. Thus, as opposed to equity markets, a trader, who constantly monitors the quota marketplace in search of capital gains from price movements can anticipate only low returns. Since the costs of paying constant attention are very high, traders will only occasionally and intermittently check the market for information on market history and for possible trades. This aggravates the liquidity problem. In such a situation, individuals who do want to buy or sell will only post their bids or offers for a short time.\textsuperscript{24} Bids and offers will not be posted often, and when they are posted they will not be viewed often. It will require a lot of luck for a buyer who is only posting a bid for a short time to meet a seller who is only occasionally monitoring the market. And, even if they happen to meet online, it is highly likely they will be the only buyer and seller at that time which means that the bilateral asymmetric information problem is back again.

Creating transparency by providing a web based marketplace is not enough. Asymmetric information and costs of attention will lead to low liquidity. Without both transparency and liquidity, trading will be incomplete. The promise of the cap-and-trade IFQ program will not be achieved.

3.3 Improving liquidity

It is possible to improve liquidity for traders of IFQs. But it does require proactive work on the part of the management of the IFQ program. The key to getting sufficient liquidity is to recognize that the market need not be completely liquid all the time. In a cap-and-trade marketplace, where events that cause significant value changes rarely happen, to accomplish the price discovery necessary for the attainment of equilibrium and to capture all of

\textsuperscript{23}The theoretical basis for this can be found in Gresik and Satterthwaite (1989). There is also ample experimental evidence that it doesn’t take many participants to eliminate the adverse selection problem. Sometimes just two or three on each side is enough.

\textsuperscript{24}If I do not constantly monitor my offer, I risk the possibility that I may lose potential capital gains. Something might cause the quota value to increase by a lot and, if someone else knows that before I do, they might accept my offer before I had a chance to raise it. They will resell and achieve the capital gains that I missed through my inattention.
the gains from trade, it is sufficient to ensure that liquidity is high for only a small number of brief times each year. But, during those times, traders must be serious and something must happen. If not, then in the future these liquidity moments will just disappear.

The best way to guarantee active liquidity moments is with auctions that require the attention of all incumbents in the IFQ program. Well-designed auctions provide very efficient price discovery. And they are very transparent. An excellent example of an auction that would improve liquidity in a cap-and-trade program is the uniform price, clock auction.\footnote{I describe the design of this auction in some detail in Appendix III.} Such auctions can be two-sided with both buyers and sellers bidding. If everyone actively participates in such an auction, good things happen. At the end of the auction, those buyers who value the IFQs the most will have received them. Those sellers with the lowest value for the IFQs will have sold them. And since this is a uniform price auction, every transaction is at the same price. This means there is no need for further trading after the auction stops. The auction exhausts all gains from trade and the efficient allocation is found. The price discovery process has found the equilibrium price and allocation.

One of the assumptions above was that everyone actively participates. How can we guarantee participation by all incumbents? It is not enough to just announce an auction. Participation occurs only if one feels that they have something at stake. There may be those who, correctly or not, assume they have little to gain from participation and so they don’t even pay attention. For example, if buyers think few sellers will participate then the buyers may not bother. This has the force of a self-fulfilling prophecy. If buyers don’t show then seller won’t. How do we avoid this? If the auctioneer has quota that will be put up for sale at any price then buyers will show. That in turn will lead sellers to show.

How does the auctioneer get the quota to sell? Through the initialization policy. As I summarized in section 2.5, it is possible to implement any combination of grant and auction without affecting, in equilibrium, either the profitability of the fishery or the health of the environment. So it is certainly possible to design an initialization policy that provides some quota at points in time when liquidity events are desired.

An initialization policy which combines granting some portion of the quota directly to the fishermen and selling the rest in strategically timed auctions is enough. Grants provide some guarantee that incumbent fish-
ermen will not be seriously hurt with the introduction of a cap-and-trade IFQ program. Auctions will provide the means to create the liquidity and transparency so vital to the full realization of the potential of the program. There may be resistance to this since, according to the analysis in Section 2, it involves a transfer of wealth from the fishermen to the public. But the increase in profit that will occur because of the increase in transparency and liquidity should more than pay for the initial loss of quota. The net effect is that all fishermen will be better off.

A regular series of uniform price clock auctions with the required participation of all owners of quotas will improve the liquidity. This leads to complete trading with all gains from trade realized. The quota to be auctioned can be planned with a complete initialization policy. Since the gains from these trades are sufficient to fund the auctions and still leave incumbents protected, all can be better off with this policy. The promise of the cap-and-trade IFQ program can be achieved.

3.4 Summary

To fully attain the promise of an IFQ cap-and-trade program, trading must occur in a way that exhausts all potential gains from trade. This requires a transparent and liquid marketplace. Under a policy in which a grant of permanent quota is made and nothing further is done, there will be significant search and negotiation frictions. The naturally occurring market place will be neither naturally transparent nor liquid.

The management of the IFQ program must be more proactive. Policies which require public posting of all trading information can increase transparency somewhat but only with lags so that the information is not as relevant as it should be. The operation of a simple web based market can significantly improve the transparency and relevance of information in the marketplace. But that market will still be illiquid.

With a web based market place and regularly scheduled uniform price clock auctions with full articulation, an IFQ cap-and-trade program can achieve a high level of fishery profits and environmental health.

3.5 An Application: Overfished Species

One place where the issue of getting to equilibrium is particularly crucial is in new IFQ programs in species that are seriously overfished. Here the
initial TAC is going to be very small. It is highly unlikely that allocating on
the basis of historical catch will leave anyone with sufficient quota to make
fishing profitable.26 A lot of buying and selling will be necessary to have the
quota used in the most efficient manner. If there are only brokers without
the transparency or liquidity of markets, gross misallocations will result.

This is a situation that calls for a program of mixed grants and auctions.
Some grants based on historical catch can provide some support for the
incumbent fishermen, even if they sell their quota and exit. Auctions can
provide a clear and transparent signal as to the clearing price for quota.
Initial auctions can also be designed so that those fishermen with granted
quota who want to sell can participate and be sure that they will receive a fair
price. Fishermen who want to buy quota will also be able to do so in a way
that does not take advantage of them. The auction provides a level playing
field and a transparent and liquid method for getting the limited quota into
the hands of those that can best use it. All others profit somewhat by that
sales.

4 Other Opportunities

If the IFQ program decides, as it should, to implement an initialization pro-
gram that provides for regularly scheduled auctions, then there is a question
as to what to do with the revenue from such auctions. It could be given to
the incumbents but that would ignore a number of opportunities where its
use could either further increase the efficiency of the fishery or the fairness
of the final benefits created by the IFQ program. In this section, I provide
some examples of those opportunities.

4.1 Other Commons Problems

An IFQ program solves the commons problem of over-fishing of target pop-
ulations. The reduction in the number of fish caught leads to increases in
biomass overtime which leads to a reduction in the costs of fishing. The total
net present discounted value of profits in this fishery go up. This increase
is shared by all fishermen in this fishery. But the benefit to any one fish-
erman is less than the costs to that fisherman if he were to unilaterally cut
back. Thus, it is only through the collective action implementation of an IFQ

26 It will also be very contentious since there is so little to go around.
program that the net gains can be realized. But over-fishing is not the only commons problem of the fishery. There are other dimensions where collective action can improve both the profitability of the fishery and the health of the environment. In this section I look briefly at a few of these.

Management and Operation  To achieve a significant increase in profitability for a fishery by the implementation of an IFQ system requires two things: good management and good markets. Without either of these, the potential gains will be seriously dissipated. Neither is naturally provided. The reason is obvious - there is a free rider problem. I would rather have others pay for this than me, since I will get the benefit anyway. The implementation of an IFQ program is a recognition that sometimes group agreement on a quota can make everyone better off. Funding and supporting good management and markets is another examples where this can happen.

We have seen that to get good markets one needs an active web based marketplace and regularly scheduled auctions of existing quota. This requires funds. It is also important to have good management. Some organization must be in place to monitor and measure each fisherman’s catch. Then that catch must be compared to the IFQs owned by that fisherman to assess compliance. To do that, ownership of the IFQs must be tracked and recorded, much as is done with title to real property.

Good management also requires cash to pay for the needed personnel and processes. With good management and markets, profits will be high. Without good management, all of the profits and biological gains of an IFQ program will eventually be eroded away by the same forces that required the creation of the program in the first place. It is not unreasonable to take some of the gains to create the gain. The higher profitability from good management and good markets can be self-supporting and leave fishermen and the environment better off than under a grant of permanent quota and a laissez faire marketplace.

By-catch  There are also problems that affect fishermen outside a particular fishery, particularly by-catch. Some reduction in unintended by-catch may occur with the reduction in effort that occurs with IFQs. In many current U.S. fisheries, a target fishery can be shut down when the by-catch becomes excessive, the by-catch of one fisherman now affects all. This is another commons problem that can be addressed by the use of market meth-
ods. The standard command and control approach is to allocate portions of a total allowable bycatch amount and/or put in place more monitoring and enforcement penalties. Some of the revenue from the auctions could certainly justifiably be used to support monitoring or enforcement. But there is a better way.

A more incentive compatible approach would expand the IFQ program to multiple species. Those who trawl species beyond their permitted types or levels would then have to buy IFQs of the type they caught. The market approaches using the cap and trade auctions and fixed term methods as described in this paper can be applied directly and similarly to the management of by-catch. This provides both a natural form of compensation to the fishermen of the by-catch species as well as an incentive to find and adopt avoidance methods against further by-catch. In this process a separate or integrated market is created as well as spot trading with similar characteristics of transparency and liquidity as described.

4.2 Transitional Fairness

With the introduction of an IFQ program, the increase in economic efficiency from reducing the commons incentives means that, in the aggregate, the system is better off. Total profits will be higher. But, there will be winners and losers. The increase in efficiency means that winners should be able to compensate the losers. After the compensation everyone is better off than without the IFQ program. One justification for an initialization program which grants a significant amount of the quota on an historical basis is the protection of the incumbents who lose in the reorganization that follow the beginning of the IFQ program. The argument is simple. The grandfathering of quota in proportion to past fishing history means that each fisherman’s allocation is roughly about what their quota would be under a command-and-control system with no IFQs and no trading. Therefore, all incumbents can continue fishing at that level and be no worse off than they would be under command-and-control. But they can do much better by trading and, since trading is voluntary, anyone who trades will be better off including those that leave the industry. They were potential losers under the IFQ program but they are compensated with their grant of initial quota.

But usually the mechanism for providing the compensation to anyone who is not an incumbent fisherman is not included as part of an IFQ program. Those who are uncompensated losers often includes the communities and
businesses that have supported the inefficiently high level of fishing activity in the past. With the IFQ program their income will drop. It is not unreasonable to allocate some of the funds from the regularly scheduled auctions to help compensate those hurt by the increase in efficiency.

There can also be those who, while they are ultimately winners, face temporary transitional difficulties as the fishery and others who rely on it shift to different, and usually lower, levels of economic activity. Some use of auction revenues could help make the distribution of final winners more fair.

5 Summary

I have considered several aspects of market design for fishery IFQ programs. In particular I have looked at the implications for fishery profitability and environmental health of alternative initialization policies and of the term of the quotas.

In Section 2, I focus on market equilibrium. I have provided a fairly standard equilibrium model of the fishery that includes its effect on the environment. In the model, fishermen are heterogeneous with possibly different costs of fishing, labor-leisure preferences, size of boat, etc. They choose the level at which they fish: the size of the catch. They also choose the technology they use: gear choice, location, high-grading, etc. A simple cap-and-trade IFQ program is included in the model. If there are well-functioning, transparent and liquid markets for the quota quotas, then a rational expectations equilibrium will occur. So I look at what happens in this equilibrium. I evaluate three policies of initialization and term: the grant of permanent quota, the sale of permanent quota, and the grant of limited term quota followed by a sale of permanent quota. The results are very easy to state. In equilibrium, the behavior of the fishermen, with respect to both the level of fishing and the method of fishing is no different under any of the three policies. Therefore, the effect of the policies on the fishery and the environment is identical. Only the distribution is different.

These conclusions are also true for any combination of limited term quota, sales, or grants. That means that it is possible to fix the amount and timing of any split between the fishermen and the auctioneer by choosing the appropriate initialization policy.

In section 3, I look at price discovery, the process of finding equilibrium. To fully attain the promise of an IFQ cap-and-trade program, trading must
occur in a way that exhausts all potential gains from trade. This requires a transparent and liquid marketplace. Under a policy in which a grant of permanent quota is made and nothing further is done, there will be significant search and negotiation frictions. The naturally occurring market place will be neither naturally transparent nor liquid. The management of the IFQ program must be more proactive. Policies which require public posting of all trading information can increase transparency somewhat but only with lags so that the information is not as relevant as it should be. The operation of a simple web based market can significantly improve the transparency and relevance of information in the marketplace. But that market will still be illiquid.

Regularly scheduled uniform price clock auctions with the required participation of all owners of quotas will improve the liquidity. They lead to complete trading with all gains from trade realized. The quota to be auctioned can be planned with a complete initialization policy without affecting the equilibrium fishing or environmental choices. Since the gains from these trades are sufficient to fund the auctions and still leave incumbents protected, all can be better off with this policy. The promise of the cap-and-trade IFQ program can be achieved.

The revenue generated by regularly scheduled auctions provides an opportunity to solve other commons and fairness problems in the fishery. In Section 4, I discuss these very briefly. The commons problems are management, gear switching, high-grading, and by-catch. The fairness problems are compensation for losers outside of the fishery incumbents and for those bearing unusual transition costs.

6 Recommendation

Full realization of all the potential benefits from an IFQ program require both the cap and the trade. The cap comes with the IFQ program. The trade depends on market design. My recommendations are to develop an initialization policy which is a mixture of grandfathering and auctions. The revenue from the auctions can be used for a number of programs that would be of benefit to all in the fishery: good management with strong enforcement, accurate record keeping, well run auctions, good markets with a web based marketplace, subsidies for gear switching, and minimizing high-grading, and a strong by-catch program.
References


Appendix I: Other Initialization Policies

It is not necessary to choose between granting all quota with permanent terms, selling all quota with permanent terms, or granting all quota for a limited term and then selling it at the expiration of the term. It is possible to mix granting and selling in any proportion desired. It is also possible to mix terms. Examples of alternatives to either fully grandfathering or fully auctioning are easy to find.

**Overlapping term quotas**  Issue quotas of 10 years in length with differing start dates. In year 1 there would be 10 tranches of quotas. One tranche would have a life of 1 year, one would have a life of 2 years, etc. Each incumbent would get their grandfathered share of each of these tranches. When each tranche expired it would revert to the Management who would then auction it off. This would generate a cash flow of approximately 10% of the total available in each of the first 10 years.

**Annual auctions**  Grant all of the quotas initially. Each year, 5% percent of each person’s holdings as of December 31 would revert to the management to be auctioned off in, say, January.\(^{27}\) One has to be careful with this type of scheme since it would be easy for enough to be transferred from fishermen to management so that the value to the fishermen of the quota at time 0 could be negative. If x% is taken each year then the value in year 0 of the amount taken in year t is \(x \delta^{t+1} q_{t+1}\). So the present discounted value of taking x% each year is \(x \sum_{t=1}^{\infty} \delta^t q_t\). In steady state, this is \(xq / (1 - \delta)\). So if \(x > (1 - \delta)\) then the value of the quota at time 0 to the fishermen will be negative.\(^{28}\) If this were the case, they would certainly be loathe to participate.

There are many variations of these schemes. Which is preferred depends on the desired timing and amounts of the cash flow between the initial holders of the quotas and the Management.

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\(^{27}\)One could also do 2.5% on each of June 30 and December 31.

\(^{28}\)Usually the relationship between the discount rate \(\delta\) and the interest rate \(r\) is \(\delta = 1/(1 + r)\), so \((1 - \delta) = r / (1 + r)\). If the interest rate is 5% then \(x\) would have to be less than about 4.75% in order for this program to leave the fishermen with a positive valuation of quota at time 0.
Appendix II: Entry and Exit

Adding in the possibility for a fisherman to enter or exit does not change any of the conclusions on differential impact in this paper. To see that remember equation (6).

\[ v_t(\alpha_{t-1}, b_t, e_t) = \max_{\alpha, \tau} \left\{ p \alpha A(b_t, e_t) - c(\alpha A(b_t, e_t), \tau, b_t, e_t) - q_t(\alpha - \alpha_{t-1}) + \delta v_{t+1}(\alpha, b_{t+1}, e_{t+1}) \right\} \]

Suppose that the fisherman can choose once to exit, sell his boat and equipment, and sell any quota he may have. When would he do that and how would that affect the decisions? We rewrite (6) to

\[ v_t(\alpha_{t-1}, b_t, e_t) = \max\{K_t + q_t \alpha_{t-1}, \max_{\alpha, \tau} \left\{ p \alpha A(b_t, e_t) - c(\alpha A(b_t, e_t), \tau, b_t, e_t) - q_t(\alpha - \alpha_{t-1}) + \delta v_{t+1}(\alpha, b_{t+1}, e_{t+1}) \right\} \} \]  

(22)

where \( K \) is the market value of his boat and equipment at this time. This leads to the equivalent of equation (8)

\[ W_t(b_t, e_t) = \max_{\alpha, \tau} \left\{ K, \max_{\alpha, \tau} \left\{ p \alpha A(b_t, e_t) - c(\alpha A(b_t, e_t), \tau, b_t, e_t) - q_t(\alpha + \delta q_{t+1} \alpha) + \delta W_{t+1}(\alpha, b_{t+1}, e_{t+1}) \right\} \right\} \]  

(23)

The fisherman exits if \( \max_{\alpha, \tau} \left\{ p \alpha A(b_t, e_t) - c(\alpha A(b_t, e_t), \tau, b_t, e_t) - q_t(\alpha + \delta q_{t+1} \alpha) + \delta W_{t+1}(\alpha, b_{t+1}, e_{t+1}) \right\} > K_t \). This exit decision is independent of the holdings \( \alpha_{t-1}^i \). As before, the decisions as to quota and technology are also independent of the holdings of quota from the previous period.

Suppose that the fisherman can decide each period whether to exit or enter. Then we need to consider two situations - when she is in and when she is out. When she is in the value calculation looks just like the above except for the continuation value. It is

\[ v_t(in, \alpha_{t-1}, b_t, e_t) = \max\{K_t + q_t \alpha_{t-1} + \delta v_{t+q}(out, \alpha_t, b_{t+1}, e_{t+q}), \max_{\alpha, \tau} \left\{ p \alpha A(b_t, e_t) - c(\alpha A(b_t, e_t), \tau, b_t, e_t) - q_t(\alpha - \alpha_{t-1}) + \delta v_{t+1}(in, \alpha, b_{t+1}, e_{t+1}) \right\} \} \]  

(24)

When she is out it is

\[ v_t(out, \alpha_{t-1}, b_t, e_t) = \max\{q_t \alpha_{t-1} + \delta v_{t+q}(out, \alpha_t, b_{t+1}, e_{t+q}), \max_{\alpha, \tau} \left\{ p \alpha A(b_t, e_t) - c(\alpha A(b_t, e_t), \tau, b_t, e_t) - q_t(\alpha - \alpha_{t-1}) + \delta v_{t+1}(in, \alpha, b_{t+1}, e_{t+1}) \right\} - K_t \} \]  

(25)
It is true that \( v_t(out, \alpha_{t-1}, b_t, e_t) = v_t(in, \alpha_{t-1}, b_t, e_t) - K_t \). It is also true, as before, that the entry and exit decisions as well as the fishing and technology decisions at time \( t \) are all independent of the quota holdings, \( \alpha_{t-1} \) at time \( t - 1 \).

The entry and exit decisions do not change any of the differential results in the main body of this paper.
Appendix III Uniform Price Clock Auction

The uniform price, clock auction is one of the easiest auctions to run and to participate in. It is an iterative auction that proceeds in rounds. I will describe how it would work for an IFQ quota marketplace.29

In the beginning the auctioneer lets everyone know the quantity of quota available and an opening price. Then all bidders are given a period of time to submit a bid.30 Their bid is simply a quantity: how much they would like to buy at this price.31 Bidders do this without seeing each other’s bids. At the end of the bidding period the auctioneer adds up the bids. If the aggregate bid is larger than the quantity available, the price is raised by one increment.32 This is the origin of the name ”clock auction”. The price ticks up one increment per bidding period, in clock-work precision, until the auction ends. The new price is posted and a new bidding period is opened.33 Bidders are asked to submit new bids.34 After re-submission, the auctioneer again adds up the quantities. If the aggregate quantity is larger than the amount available, the auction continues. If not, the auction stops.

At this point there is a final design choice. One could just accept the result of the auction. That is, one could give each buyer who bid in the last round the quantity they bid at the price for that round. However, it

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29 The auction I describe here is a particularly simple version of that proposed by Smith et. al. (2003). Ours is simpler since we are only auctioning off a single homogeneous commodity, the quota.

30 The bid submission time period is a design choice. It is usually somewhere between 10 minutes and an hour. Short periods move the auction along at a fast rate. Slow periods give bidders more time to contemplate and compute their bidding strategy.

31 It is possible to allow sellers, other than the auctioneer, enter bids also. That would simply be a negative quantity: how much they were willing to sell at the current price. This is often referred to as a two-sided auction and is similar to a call market.

32 The size of the increment is a design choice. High increments move the auction along at a fast rate. Slow increments allow more gains to be captured.

33 There is a design choice that can be made here as to whether the bidders should be informed about what each of them bid. The answer is no for the individual bids if one is worried about collusion. The answer is no for the aggregate if one wants to encourage active participation by all in every round.

34 There is still another design choice at this point. Should bidders be allowed to withdraw their previous bid? If they did so they could then either forego bidding or bid something totally different. Some argue that buyers should only be able to lower their quantity demanded. This is called an activity rule. Some say it does not matter. Activity rules move the auction along at a fast rate. But activity rules limit the options of bidders and can cause inefficient outcomes.
is possible that this does not fully exhaust the amount of quotas that are available. The drop in the aggregate bids can be more than the excess in the previous round. If these auctions are held often enough, this is not a problem. The excess supply can simply be inventoried and made available at the next auction. But if the auctions are infrequent and inventoring quota can cause difficulties in the IFQ process, then the auction needs to continue into another “phase.” In this second phase, past bids are ”re-submitted” into the auction along with the bids from the last round and the collection that maximizes the gains from trade are provisionally accepted.\textsuperscript{35} If that collection displaces one of the bidders in the last period then the price is increased by one increment and the auction continues as in the first phase. If no one is displaced in the second phase, the auction stops.

The first phase is really easy for both auctioneer and bidder. The auctioneer has a very simple calculation. Does the quantity bid exceed the amount supplied? The incumbents have a simple calculation. They only need decide at any price whether (a) they want more quota because they expect their costs to be lower than that price or (b) they want to sell quota because they expect their costs to be higher than that price. Potential entrants are on a level playing field since they can see the price and decide whether they are willing to pay that much in order to enter the fishery.

The second phase may seem complicated but bidders need not even know that it happened. Bidders need only know that the price has increased and bidding has resumed. Also, there is ample evidence from both laboratory trials with this auction as well as commercial applications, that it is relatively easy to learn how to bid.

With straight-forward bidding, the auction will exhaust all gains from trade. That is, the buyers with the highest value for the items will win them. The sellers with the lowest value for the items will sell them. The final price will be the equilibrium price. This is a completely transparent process which encourages liquidity.

\textsuperscript{35}This is a simple optimization program which I will not present here.
October 15, 2008

Mr. Donald K. Hansen  
Chairman  
Pacific Fishery Management Council  
7700 NE Ambassador Place, Suite 101  
Portland, Oregon 97220-1384

Re: West Coast Groundfish Trawl Rationalization

Dear Chairman Hansen:

Pacific Marine Conservation Council (PMCC) offers these preliminary comments on the West Coast Groundfish Trawl Rationalization. PMCC is supportive of fishery management measures and systems that enhance conservation while providing equitable fishing opportunities. We believe that carefully crafted limited access privilege programs (LAPPs) can offer market-based incentives for effective conservation. A well-designed LAPP can also protect coastal communities and preserve a diverse and adaptable fishing fleet.

We congratulate the authors and analysts who have prepared the preliminary environmental impact statement (EIS) released this month. Based on this document, we will make observations and raise a few questions. Our intent is to highlight ways to create a responsible and responsive LAPP where we see a superior choice, and to ask for explanation or guidance where we see problems without a mitigated balance.

You will continue to receive comments and hear extensive testimony regarding issuing harvest quota shares to processors. To be perfectly clear, PMCC opposes this feature.

Our other primary areas of interest in this LAPP are:

1. Ensuring conservation benefits for the public resource.
2. Ensuring that coastal fishing communities are not harmed.
3. Ensuring that adjacent fisheries are not harmed.
4. Ensuring that the LAPP is designed with appropriate scales of spatial management.
Ensuring conservation benefits for the public resource.

Improved accountability (100% observer coverage) and closer to real time tracking are features that could be expected to yield conservation benefits, as long as these are linked to strong incentives to avoid overfished species. Individual accountability for effective conservation that leads to fuller utilization of healthy fish populations is fundamental to this program’s intent.

It is essential to anticipate and plan to accommodate future rationalizations, including arrangements within the fixed gear fleet, community-held quota and Regional Fishery Associations. Ultimately, comprehensive program design, potentially integrating the entire fishery, should provide positive incentives for superior conservation performance, including avoiding bycatch and protecting habitat.

All involved should understand that this LAPP could be modified or eliminated if it does not achieve positive biological and social benefits. As we continue to move toward ecosystem-based management, the LAPP needs to be adaptive, to facilitate rather than hinder emerging ecosystem based approaches.

Ensuring that coastal fishing communities are not harmed.

This is a basic issue that has demanded attention from the inception of this process. It is essential to design this rationalization so as not to harm coastal communities in Washington, Oregon and California. There are potential adverse impacts on communities without trawl landings as well as on the major trawl ports. These adverse impacts must be clearly mitigated with appropriate design elements.

Section 4.14 of the EIS lists a number of expected and potential impacts:

• Fleet and processor consolidation could result in the concentration of vessels and commercial infrastructure in fewer ports, disadvantaging communities that lose vessels and infrastructure.
• Limits on the amount of QS an entity can control will reduce ownership consolidation and increase the number and types of businesses involved in the fishery, contributing to diversity and stability.
• Isolated communities, where there are few alternative employment opportunities, could be adversely affected by the loss of fishing-related jobs.
• Processors are expected to consolidate and possibly move, affecting processor labor and municipal revenue.
• Fishing, in all its diversity, is culturally important to coastal communities. As a consequence, communities seeing a decline in fishing activity due to trawl rationalization will be adversely affected.
• Family fishing businesses will have to deal with the implications of the asset value associated with IFQs (or co-op shares). This can complicate fishery entry and exit, and lead to intra-family strife.
• Tourism could be adversely affected in communities that lose a “working waterfront,” to the degree it is important to the tourist identity of the community.
• Non-trawl communities could be affected by rationalization through increased competition, gear conflicts, impacts on the support sector, infrastructure impacts, and competition in the marketplace.
Ensuring that adjacent fisheries are not harmed.

Section 4.8 of the EIS discusses expected spillover into the pink shrimp. Dungeness crab and other fisheries. There is also discussion of increased competition for grounds. We appreciate this analysis and PMCC has raised these issues for several years. How will these impacts be mitigated?

It’s unclear what design features will avoid harm to non-trawl commercial fisheries. The Council has a duty to act in a fair and equitable manner, and this challenge must be addressed.

Ensuring that the LAPP is designed with appropriate scales of spatial management.

PMCC will be providing more detail on this subject in the supplemental briefing materials. We have a strong interest in management that employs spatial scales appropriate for fish populations and the natural ecosystem. We are also interested in management at scales that make sense for fishing communities, such as using area management to reduce the risk of coastwide fishery closures due to overfishing in a discrete geographic range.

The EIS generally does a good job discussing possible spatial management scenarios. We just need more time to look at this analysis relative to the most current science dealing with the subject. We then plan to offer constructive and realistic recommendations.

Thank you for considering our comments.

Respectfully submitted,

Peter Huhtala
Director of Governmental Affairs
October 15, 2008

Chairman Donald Hansen
Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 101
Portland, OR 97220-1384

Subject: Agenda Item F.3., Amendment 20 – Trawl Rationalization

Chairman Hansen:

Please accept these comments on behalf of the Pacific Whiting Conservation Cooperative (PWCC), the harvest cooperative formed by the participants of the catcher-processor (CP) sector of the Pacific whiting fishery. Primarily, our comments focus on Alternative B-1.2., Annual Whiting Rollovers. We also briefly comment on our support for the alternative to end length endorsement requirements for vessels using limited entry (LE) trawl gear (that is, Alternative A-1.6., Groundfish Permit Length Endorsements).

Annual Whiting Rollovers (B-1.2.)

The Pacific Fishery Management Council (Council) identified Option 1 (no rollovers) as the Preliminary Preferred Alternative (PPA) under B-1.2. The analysis of this issue in Appendix B provides a comprehensive and accurate description of the rollover process. However, it provides no information about the merits of Option 1 or support for its selection as the final preferred alternative. In fact, the clearest analytical finding suggests Option 1 may harm the fishery; that is, “Not allowing a rollover may mean that the available harvest is not realized in some years, potentially reducing economic activity.” We recommend the Council adopt Option 2 (status quo) as the final preferred alternative, for the following reasons:

- There are no problems identified in the analysis or in current practice with the status quo process for rollovers of unharvested whiting from one sector to another. The rollover process has been in regulations for over 10 years and used several times. To the best of our knowledge, there has never been a complaint registered to the Council or National Marine Fisheries Service (NMFS) about the rollover of unharvested whiting.

The current procedure states: “That portion of a sector's allocation that the Regional Administrator determines will not be used by the end of the fishing year shall be made available for harvest by the other sectors, if needed, in proportion to their initial allocations, on September 15 or as soon as practicable thereafter. NMFS may release whiting again at a later date to ensure full utilization of the resource.” (660.323(c))
Under status quo, no one is forced to give up unharvested whiting. In practical terms, if a participant in any sector tells NMFS that they are interested in harvesting remaining amounts of that sector’s whiting allocation, and they have the capacity to do so, then no one is forced to forfeit any unharvested whiting. The only stated reason we recall provided to the Council in support of Option 1 (no rollover) relies on hypothetical scenarios that fishery participants will game the system. This has not occurred under the status quo and is even less likely under a rationalized fishery where transparency and accountability at the individual and fishery cooperative levels will be paramount.

- One of the arguments posed for why a rollover provision is not necessary is that with rationalization of the whiting fishery there would never again be any unharvested whiting by any sector. It is unclear if this is a realistic expectation. The Bering Sea pollock fishery, for example, was rationalized between 1999 and 2000. Co-operative-based management has been in effect for over eight years; providing sufficient time for each sector to fine tune their harvesting operations, refine fishing schedules, and coordinate harvesting activities. However, in 2004, 11,609 mt of pollock went unharvested; in 2005, two sectors left a combined 11,001 mt unharvested; in 2006, 14,712 mt of pollock was not harvested; and in 2007, 38,229 mt of pollock was left unharvested by one sector. This experience lends credence to our belief that unharvested whiting will remain a distinct possibility after rationalization.

- National Standard 1 states (emphasis added) “Conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery for the United States fishing industry.” Option 1 could potentially impede achievement of National Standard 1. Appendix B clearly states (emphasis added): “A roll-over mechanism is intended to facilitate the attainment of the Pacific whiting OY if one or more sector does not intend to harvest the full allocation of Pacific whiting. If a rollover mechanism is not established, harvestable amounts of the whiting OY are likely to be foregone, resulting in less revenue than would otherwise be the case.” It seems imprudent to remove a discretionary provision designed to ensure compliance with National Standard 1, especially when no documented evidence is provided that indicates the action is warranted.

In summary, we find no objective reason for the Council to support Option 1, but we do find demonstrated and compelling reasons in support of the status quo rollover provisions. Therefore, we recommend the Council adopt Option 2 as your preferred Annual Whiting Rollover alternative.

Limited Entry Permit Length Endorsement (A-1.6.)

The PWCC fully supports the PPA that specifies the “LE permit length endorsement will not apply to vessels using LE trawl.” Our expectation is that the Council intends for this change to apply to all LE trawl permits, including those that receive a CP endorsement under Amendment 20. This intent is implied on page B-106 of Appendix B (October 2008, GAC meeting version), which states (emphasis added): “If the permit length endorsement is retained, a catcher-processor would need to acquire an additional permit in order to increase vessel size.” We take
this qualifying statement (i.e., the bolded text) to indicate that the Council intends for A-1.6. to apply to CP-endorsed LE trawl permits. Our primary concern is that retaining the permit length endorsement requirements will impede flexible use of the CP-endorsed LE trawl permits. Without A-1.6., if a CP-endorsed LE trawl permit were transferred to a smaller CP vessel then the LE trawl permit would be re-classified with a smaller length endorsement. Transferring that CP permit back to the original vessel would require acquiring another LE trawl permit. This could prevent companies with multiple CP vessels from maximizing the utility of their CP-endorsed LE trawl permits.

In summary, we believe the Council’s intends that A-1.6. should apply to all LE trawl permits. Our recommendation is simply that the Council clarify their intent.

Thank you for your attention to these matters.

Sincerely,

[Signature]

Daniel A. Waldeck
Executive Director
Community Fishing Association Proposal for the
Pacific Fishery Management Council
offered by The Nature Conservancy

October 15, 2008

Background and Need:

The Council’s development of a Rationalization proposal for the Pacific Coast Groundfish Limited Entry Trawl Fishery has been guided by a range of policy and legal requirements, including those designed to mitigate unanticipated impacts of rationalization by promoting fairness and equity, assisting communities, and minimizing disruption of current fishing practices, see, e.g., Chapter 6 of the Decision Document (Document). As a result, in its analyses the Council has identified and acknowledged several expected impacts on fishing communities (Chapter 4; Section 4.14). The Document also points to a number of provisions that could theoretically address community needs, including: (1) broad eligibility for quota share (QS), (2) a moratorium on QS transfer, (3) control limits for QS to potentially spread QS among more communities, (4) adaptive management set-aside, and (5) regional and area management proposals. See, Appendix A, p. A-48.

However, the Document does not yet clearly articulate to potentially affected communities how these different provisions could be used separately or in aggregate to mitigate such impacts, nor does it identify changes to the rationalization proposal that would be necessary to achieve such a result.

This proposal for a Community Fishing Association describes an approach that would build on the current alternatives before the Council to address community needs, while achieving management, conservation and socioeconomic goals needed for long-term stability in the fishery.

Community Fishing Association Proposal:

We request the Council’s approval of provisions (listed in the next section) that would permit the formation and operation of voluntary Community Fishing Associations, as a means to help preserve a community’s fishing heritage and access to the resource, as well as contribute to the conservation and management of the fishery. Such Associations would be responsible for complying with the applicable requirements of the Magnuson-Stevens Fishery Conservation and Management Act and the West Coast Groundfish Fishery Management Plan. This proposal is intended to offer an option for a community or a group of permit or QS holders within a community to take proactive steps to help mitigate potential dislocation effects by anchoring access to the fishery in its area or sharing risks and costs. It would not require the Council to set aside a portion of QS for the participants, though such Associations could potentially interact with any adaptive management set-aside proposal the Council may adopt.

A Community Fishing Association (Association) would be a corporation created for community benefit, with participating members that could hold Quota Share (QS). Such an Association would not be eligible for initial issuance of QS, but could acquire QS through direct acquisition from willing sellers. Each year, the Association would make QP available, through a private agreement, to its members for their assistance in achieving the Association’s objectives, e.g., maintaining landings in a given community or achieving conservation goals. An example describing various potential roles and relationships in an association is included at the end of this proposal.

1 An Association could be either a for-profit or a non-profit corporation.
Any fisherman may elect each year whether to be a member of the Association and enter into a private agreement with the Association. Any member would be eligible to access Association-owned QP up to the vessel cap – for fishermen who hold a groundfish trawl permit and QS; this will be the aggregate of individually held QP plus any Association-owned QP. Any member who does not hold a trawl permit or QS could apply to the Association to lease a groundfish trawl permit (if one is available) and QP. In either case, members of the Association would have access to services from the Association (e.g., observers) and would have to abide by the rules of the Association (e.g., to land all or some of the fish in a particular community, to abide by area or gear limitations, to cooperate with bycatch reduction efforts, etc.).

While each Association would have its own specific objectives and propose its own rules, Association membership agreements will include a mandatory clause that participants comply with the rules of the Association. Because failure to comply with federal fishing regulations could be grounds for revoking approval for the Association, a Community Fishing Association would require all members’ full compliance. The Association could assist in enforcement by taking action to sanction a member who fails to comply –revoking Association privileges, imposing Association fines, expelling an individual from the Association, or turning over a case to state or federal law enforcement officials.

Participants will help shape the Association’s objectives. There are a number of options for determining which Associations will be formed. Associations could be formed as a community-level initiative – led by a harbor commission, commercial fishermen’s organization, local processor, or a non-governmental organization. The parties could present a proposal to NMFS and, if satisfactory, proceed to incorporate, raise capital, recruit a board of directors, invite participants, and purchase QS and/or permits. Participants could include, but are not limited to, fishermen, local government officials, a harbor director, commercial fishermen’s organization, local processors, and/or non-governmental organizations. An alternative approach would be to for each state agency to identify as eligible those communities that will benefit, and select an organization tasked to form the Association.

A fisherman or other participating entity may join different community Associations from year to year, or may belong to multiple Associations provided that vessel caps are not exceeded and his or her total control over the fishery is fully disclosed and certified.

**Basis for Proposal: Changes to Facilitate Formation of Associations:**

As noted in the Decision Documents, the current Rationalization proposal includes provisions that support, and could be adjusted to link with this Association approach to address community concerns, including: initial QS allocation and QS transfer rules (A-2), the Adaptive Management option (A-3), and area management or regional landing zones (A-1 and A-8).

To create such an Association for the benefit of multiple participants or a community, the Rationalization proposal would first need to establish an exemption or a different, higher accumulation limit for Community Fishing Associations to those proposed for individuals in A-2.2.3(e). The options before the Council were based on individual ownership of QS, and thus would set control limits designed to guard against excessive control of quota by one person. Paradoxically, the limits would undermine the formation of private co-management arrangements like cooperatives or Associations, which would acquire QS for the benefit of multiple participants in a community. Such Associations could be established in and benefit vulnerable communities in multiple ways;
including ensuring access to the resource or sharing costs and risks associated with the conservation and management requirements contemplated under the Rationalization.

**Avoiding Excessive Control through an Association:** Under this proposal each Association would be required to verify to NMFS subject to perjury that no single individual participant is able to use his or her affiliation with the Association to exercise excessive control over the fishery.

There are several alternative means to verify that the Association is not controlled by any individual. NMFS could require an affidavit certifying that all persons serving on the board of, employed by, or members of the Association will not have a controlling interest in the Association that takes them above any control caps established under the IFQ program. A second option would be to require that a plan for the Association – including measures to address excessive control – be submitted to NMFS prior to the Association acquiring QS. Reported violations of these limits would be investigated as appropriate.

The preliminary preferred alternative for rationalization would cap the proportion of groundfish a person could accumulate or control, directly or indirectly, individually or via ownership of catcher vessel permit(s). Thus, while the Association may own an amount of QS in excess of individual accumulation limits, the established individual ownership and vessel limits would apply to individual Association participants, i.e., no individual may exercise so much control over the Association that they would exceed their individual control cap and the Association may not transfer control of quota pounds (QP) to be used on a vessel so as to exceed established vessel caps. The Association will report its membership and transfers of QP to vessels to NMFS annually.

**Pacific Coast Trawl Fishery Rationalization - Requested Provisions for Community Fishing Associations:**

The Nature Conservancy is proposing to establish an Association as described above in the Central Coast of California using QS issued to permits owned by The Nature Conservancy. The Nature Conservancy would work with these communities to establish such an Association and would transfer its QS to the Association.

The Nature Conservancy believes it would be fair and equitable for the Council to issue to each permit holder the full amount of QS for which they qualify based on their catch history. In order to address MSA and Council concerns with excessive consolidation, The Nature Conservancy proposes that the Council require that holders of QS in excess of the accumulation caps divest of such excess within three years of initial issuance. Therefore, such holders of excess QS can be fairly and equitably compensated for their excess QS without compromising the Council’s policy goal of avoiding excessive consolidation. Failure to require divestiture, for example by “grandfathering” permanently such excess QS, could permanently undermine the Council’s objectives.

Consistent with the Council’s objective of minimizing adverse effects of the IFQ program on fishing communities, the Association proposal will benefit vulnerable or potentially vulnerable Central Coast communities and may serve as a model for other areas identified by Council members or included in the Decision Documents (e.g., Regional Landing Zone proposal, A-7). The approvals requested are well within the range of alternatives already contemplated and analyzed by the Council. While

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2 As set forth in Chapter 6, the M-SA requires fair and equitable treatment in allocation decisions, e.g. National Standard 4(a); Section 303A(c)(5).
establishment of private arrangements among harvesters and other participants through an Association does not require specific federal authorization, certain terms such as different accumulation limits for Associations, require provisions in the Trawl Rationalization proposal.

**Provisions to Allow Formation and Operation of Community-Based Fishing Associations**

The Community Based Fishing Association approach requires changes to A-2-2-.3(e) in the final alternative for the trawl sector IFQ program - as specified in provisions (a) and (b). These changes are needed to remove barriers to formation of multi-member associations, and to provide an opportunity for a holder of QS in excess of individual accumulation limits to divest of that QS to entities in the location where the catch history was earned, rather than having it automatically redistributed coast-wide, as in the existing proposal.

In addition, the final plan should include direction and guidance to NMFS on the requirements for approval, operation, and compliance of such Associations, as specified in (c) – (e).

(a) **Amend A-2-2.3(e) to Establish Association Control Cap QS/QP Accumulation Provisions:** Notwithstanding any limitations on QS or QP under the West Coast groundfish trawl rationalization program, following review by NMFS of the Association as an entity formed for the benefit of the local communities and the purposes specified in the MSA (see b), an Association may own or control QS/QP in excess of the accumulation limits for individuals.

(b) **Amend A-2-2.3(e) to allow for Divestiture of QS in Excess of Control Cap:** Any party owning or controlling QS in excess of the accumulation provisions shall divest of such excess QS within three (3) years of the date on which these regulations take effect. The party may transfer such excess to any other party, including an Association, in accordance with the rules that govern such transfer.

(c) **Qualification of Community Fishing Associations to Obtain Alternative Accumulation/Control Limits:** The Alternatives should provide a framework for NMFS approval and review. The Council may want to consider later action to better define the details of this framework that could work as follows:

(1) Upon receipt by NMFS of an acceptable proposal to form an Association for the purposes of addressing the needs of potentially vulnerable communities and conservation and fishery management objectives, NMFS may decide to authorize such Association. An Association can operate similar to a “harvesting cooperative.” In addition, an Association will have the power to own QS.

(2) The Association will not be approved if the NMFS determines that the sole purpose or primary effect is to allow an entity to control quota shares in excess of the control caps which apply to entities that are not part of the Association; or the Association will allow, in any manner, the Association or its members to exert anticompetitive market power with respect to exvessel price negotiations between processors and harvesters.

(3) NMFS may revoke approval of the Association at any time based on a NMFS determination that the Association has failed to comply with the terms and conditions for its approval or is otherwise being used to circumvent or undermine the goals of the trawl rationalization program.

(d) **Rules for Use of Association QP/QS:** An Association may lease, sell or transfer QP to commercial fishermen who are Association members in compliance with appropriate vessel or
control cap, provided, however, that such Association-owned QP must be relinquished to the Association if such member leaves or is asked to leave the Association. The sale or lease of Association-owned QS or QP shall be governed by the same rules that apply to all QS and QP holders.

(e) Mechanism for Attribution of Quota Share for Purposes of Accumulation Caps: The Council should approve a mechanism for determining attribution of quota share that requires disclosure and certification of quota ownership and the amount of control over the organization that individual wields to ensure that by either measure the individual cannot use their role in an organization to exceed the control caps or vessel caps.

Requested Approvals of Related or Supporting Options:
In addition to the required approvals requested above, the proponents of this proposal request the Council and NMFS adopt each of the following options:

(a) The Adaptive Management Program Option: Following approval of an Association, if the Council and NMFS adopt the Adaptive Management Program Alternative, the Association could be an applicant to the Adaptive Management Program or could assist its participants in developing proposals. The Association or its participants would utilize the QP in accordance with the guidelines for such use established by the Council and NMFS.

(b) Geographic Management Units: For species with a coastwide OY, the management units for QS will be subdivided geographically at the 40° 10’ N latitude line. Additional geographic management unit subdivisions should be considered in the future.

For more information, please contact Erika Feller (efeller@tnc.org or 415-281-0453) or George Yandell (gyandell@tnc.org or 415-281-0478) with The Nature Conservancy.
An Example of a Community Fishing Association

Associations can be established to achieve multiple objectives, including addressing community concerns, while achieving management, conservation and socioeconomic goals needed for long-term stability in the fishery. Therefore, it follows that Association-owned QS would be leased to fishermen under terms representing a balance of these objectives.

A Community Fishing Association is formed that holds 4 trawl permits and has acquired QS for various species. The Association serves two fishing communities and requires that 75% of all landings made by members take place in one of those two communities. The Association charges a modest lease rate for use of Association QS and has established a number of conservation guidelines to avoid bycatch.

A Board of Directors is formed. The Board includes one of the harbor directors, the president of the local commercial fishermen’s association, the director of a local conservation non-profit, a fisheries science professor from the local university, and the owner of a local restaurant who is also a fisherman. A management team that runs the day to day operations of the Association reports to the Board. The management team would be responsible for ensuring compliance with regulatory requirements, developing legal agreements, contracting with observers for use by Association members, developing bycatch risk sharing agreements, etc.

Fisherman A has a vessel with a permit and received quota share. However, he would like to target more on a particular species and joins the Association to gain access to some additional QP each year. As a condition of access to the Association QP, he lands 75% of all of his catches in one of the two ports.

Fisherman B runs a highly successful fishing operation but is now interested in retiring and selling his quota. He has fished out of one of the ports for 30 years and would like to see someone take over his operation locally – his deckhand was very interested - but no individual has financing to buy him out. The Association purchases his QS and permit and leases it back to the community.

Fisherman C was a deckhand for fisherman B and is interested in starting his own business – he would like to have bought Fisherman B’s quota but didn’t have the money. He joins the Association and leases a permit as well as QP to use on a vessel he recently purchased. Eventually he hopes to make enough money to purchase his own QS.

The owner of a local processing company/fish buyer has purchased QS and enters into an agreement with the Association in which his QS will be fished according to Association community and conservation guidelines. In exchange, he will be guaranteed the right to purchase fish caught under this quota share plus a bonus amount.

The local community recognizes that the Community Fishing Association does not own enough QS to meet the community’s objectives. With the support of local elected officials and community leaders, industry participants and the Association apply for loans and grants to enable the Association to purchase additional QS.
Pacific Fishery Management Council
Don Hansen, Chair
7700 NE Ambassador Place, Suite 101
Portland, OR 97220

Re: Trawl Rationalization Amendment 20 – Agenda Item F-3

Dear Chairman Hansen,

I am the manager and captain of the FV Muir Milach. We have fished whiting in both the mothership and shoreside sectors want to offer some comments on the trawl IFQ program.

Catch History Years

My primary concern about the catch history years is that whatever they are, when the Council makes its final choice they should be the same for mothership and shoreside whiting (and for groundfish.) It is the same fleet of boats that deliver shoreside and to motherships and would be unfair to use different years for catch history. Using different years is “cherry picking” and will unfairly impact some boats

Whatever choice the Council makes for catch history years, it should be “apples and apples” between all catcher vessel sectors.

Processor Allocations of Harvest Shares

I do not support the portion of the preferred alternative that would allocate 20% of the harvest shares to processors. I agree with the points made in the letter to the Council from the FMA dated Oct. 13th.

Combining “adaptive management” with processor allocations takes too much away from fishermen.

If allocations are made to processors, no processor should be allocated quota above the ownership cap, and strict “control” rules should be in place to enforce the ownership/use caps.

Coops

We are opposed to the designation of “coops” as the preferred alternative for the shoreside sector. The Council should focus on designing a program that doesn’t require going back to Congress for additional legislation.

Coops can be a useful tool within an IFQ system, but coops shouldn’t be a mechanism to create processor linkages.

The new MSA requires the Council to “fully analyze alternative program designs, including the allocation of limited access privileges to harvest fish to fishermen and processors working together in regional fishery associations or some other cooperative manner.”
The definition of “Regional Fisheries Associations” in the new MSA makes it clear that RFA’s must “be a voluntary association among willing parties.”

Coops work best when they are voluntary “affinity” based associations, rather than arbitrary groupings based on processor linkages. A straight-forward IFQ system doesn’t stop IFQ holders from voluntarily forming cooperatives to deal with bycatch issues or to work cooperatively together with a processor.

Processor Linkages

NOAA GC’s memo makes that clear that linkages are not legal in the shoreside sector. If the Council is going to include a “coop” option for the mothership sector, it should be one that meets the legal criteria that would apply to shoreside “coops” as a matter of policy.

**There are two key features of the mothership “coop” proposal, without which it might as well be an IFQ program:**
1- processor with linkages, and
2- the punitive “non-coop” part of the fishery for vessels that want to change processor linkages.

The un-rationalized “non-coop” pool is nothing more than a means to force involuntary linkages between harvesters and a closed class of processors as the price of rationalization.

The analysis compares the mothership “coop” proposal to AFA coops, but misses key differences. In the AFA pollock mothership sector there is a closed class of processors, but there are no linkages. If linkages aren’t necessary in the AFA mothership sector, why are they necessary for whiting?

In the AFA shoreside pollock sector, processor linkages do exist, but coop formation is contingent on approval by 80% of the vessels, which gives some protection to independent boats. Even with linkages, coops can sell a 10% of their allocation to the processor of their choice. This also provides an alternative way to move between coops without going through an “open access” year.

The mothership processors will have the benefit of a closed class. It is also clear from the analysis that there is substantial vertical integration in the mothership sector.

Even if linkages are necessary, it should not apply to 100% of the harvest. There must be a way for harvesters to change markets without going through open access.

**Single CV Sector**

I support a single CV sector for the trawl IFQ program. Creating artificial firewalls between the shoreside whiting and groundfish sectors doesn’t make sense.

Boats that fish whiting may receive a portion of the buyback history, or they may have groundfish quota from their groundfish history. In a single sector, this could offset the need for setting aside a portion of the groundfish OY to support the incidental catch needs of the whiting fishery.

**Adaptive Management**
I support the inclusion of an “adaptive management” part of the program, along the lines of the 10% holdback in the B.C. trawl IFQ program. The B.C. program seems to have been successful in addressing community and processor concerns about potential negative impacts from IFQs.

It is unfortunate that the analysis is not more specific about how this portion of the allocation could be used.

**New Entrants**

I have a relief skipper who has been with our vessel for many years and operated the vessel in the whiting fishery. There are no provisions for skippers under any of the alternatives. The adaptive management provision could be used to help skippers become stakeholders in a quota share program.

With coops there is no way a skipper can acquire a small amount of quota. To become a quota owner under the coop alternative he would have to purchase the entire history of a vessel. Under an IFQ system a new entrant can buy in gradually.

Thank you for considering my comments.

![Signature]

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