October 5, 2004

Dr. David Hanson
Chair, Trawl IQ Committee
Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 200
Portland, OR 97220

Dear Dr. Hanson:

We were provided with a copy of a August 19 letter from the trawl representatives on the Trawl IQ Committee that was entered as public comment during the September Council meeting. Although the letter was not addressed to us, we understand that you have requested a response from the processor representatives on the committee.

We have all worked diligently through the Council system to support better science and management for the Pacific groundfish fishery. We participate at the Council, serve on Council committees, and consistently push for more funding for fisheries science and research.

We supported the trawl buyback program in spite of reservations (which unfortunately came true in some cases) that a skewed geographic distribution of permit reductions would cause problems. We have supported the Council’s efforts to construct a groundfish rationalization program, seeking to ensure only that it benefits all participants in the fishery.

Regarding the specific proposals made by the trawl representatives, we suggest the following:

- We agree with changing the decision rules of the TIQ Committee so that all decisions are made by consensus. However, if consensus is not reached, we suggest that the issue be taken off the table and not forwarded by the Committee.

- We agree that the analytical committee be requested to outline data needs. However, this should include the means of collecting the needed data, not just analyzing the incomplete data that exists, especially in regard to processing. We note that the analytical committee seems to be rushing forward with analysis without taking the time to assess data gaps and determining how to fill them.

- We have no objection to informal meetings and have already discussed this possibility with trawl and environmental representatives. We note that the offices of Senator Smith and Senator Murray have already convened one such meeting and appreciate their interest in our fishery.

- We further suggest that the Council consider separating discussions on whiting and non-whiting trawl IQ’s. It may be possible to reach an earlier consensus on a rationalization plan for the whiting fishery, which could even serve as a template for the non-whiting trawl fishery.
We note that Dr. Hogarth recently made this suggestion at the Pacific States Marine Fisheries Commission meeting in Seattle.

We also suggest that the Council and NMFS decide on funding priorities for their many activities, including groundfish rationalization, support of fishery management plans, and fisheries research. We are concerned that earlier this year the Northwest Fisheries Science Center suffered a shortfall in survey money due to funds being used to support development of a rationalization plan and that the shortfall was alleviated by taking money away from cooperative research. It does us no good to allocate access privileges among fishery participants if we have no idea how much fish is available to allocate. We also note that the Council has insufficient funds to manage the highly migratory species fishery.
The Council needs to determine how to fulfill its responsibilities under the law.

Like the trawl representatives, we are fully committed - and have demonstrated that commitment - to working cooperatively to conserve and manage our west coast fisheries.

Sincerely,

[Signature]
Jay Bornstein

[Signature]
Frank Dulcich

[Signature]
Dale Myer

[Signature]
Joe Plesha
August 19, 2004

Dr. David Hanson  
Chair of the Trawl IQ Committee  
Pacific Fishery Management Council  
7700 NE Ambassador Place, Suite 200  
Portland, OR 97220

Dear Dr. Hanson:

The Council took an important step forward when they began the process of examining how an individual quota system could promote both the biological and economic health of our West coast trawl groundfish fishery. Studies of IFQ programs from around the world have shown that a properly designed system can enhance safety, increase the value of fishery products, reduce discards and bycatch, increase the availability of fresh seafood, improve fishing industry profits, and provide for effective harvest capacity management and sustainable fisheries. IFQs contribute to safe, stable jobs that pay living wages. They are a crucial part of a rational fishery.

We have a chance to realize these benefits in our trawl groundfish fishery, but only if all stakeholders work together in developing and discussing alternatives in a rational, analysis-driven process. As harvesting sector representatives of the Trawl Individual Quota Committee, we are committed to working with our colleagues representing the processing sector, conservation groups, and coastal communities to properly and effectively evaluate alternatives and provide advice to the Council on designing an IFQ program that balances the needs of harvesters, processors, coastal communities, and the resource. To this end, we propose that:

- The decision rules of the Trawl IQ Committee be changed so that all Committee recommendations are developed through consensus rather than by voting. If, after full deliberation, consensus is not reached, the Committee will provide the Council with position statements that identify each group’s key concerns and rationale for their position, and discuss why consensus could not be achieved.

- The Council’s IQ analytical committee be requested to outline what information is needed, and whether this information is available, so the impacts of a full range of harvester/processor initial harvesting quota allocation options can be assessed.

- We meet informally with processors, conservation and coastal community interests prior to the next Trawl IQ Committee to discuss what each sector believes to be essential sector-specific objectives achieved from an IQ program, as well as to discuss information that could be made available to the analytical committee to assist in their impact analysis. We hope that such a dialogue could help us focus our discussions on the relative benefits of alternatives when we next meet as a Committee. Understanding and clearly defining these objectives – including those that may be conflicting – will aid in understanding the trade-offs between alternatives currently under discussion as well as designing new alternatives that may better address specific concerns.

We are committed to doing our part in developing an IFQ program that best meets the unique needs of West coast harvesters, processors, coastal communities, government managers, and, most importantly, the resource. We support funding this initiative, because adequately funded analysis is a critical component of our ability to fully discuss trade-offs between alternatives and
provide reasoned advice to the Council. We believe it is imperative for all the stakeholders in the west coast trawl groundfish fishery -- the harvesters, processors, the coastal communities, environmental groups, and fishery managers -- to work cooperatively towards improved fisheries management. A safer, more profitable, and better managed fishery is possible, if only we can all work together.

Sincerely,

Steve Bodner
Chris Garbrick
Alan Hightower
David Jincks
Marion Larkin
Pete Leipzig
Brad Pettinger
Rich Young

cc: Don Hansen, Chair, PFMC
Don McIssac, Executive Director, PFMC
Other members of the Trawl IQ Committee
Steve Freese, NMFS, NW Region
Dr. Bill Hogarth, Assistant Administrator for Fisheries, NMFS, NOAA
West Coast Congressional delegation
October 13, 2004

Donald K. Hansen, Chairman  
Pacific Fishery Management Council  
7700 NE Ambassador Place, Suite 200  
Portland, OR 97220-1384

Re: Trawl Individual Fishing Quota (IFQ) alternatives and the Council decision whether to continue investing in their development

Dear Chairman Hansen,

The Pacific Marine Conservation Council (PMCC) is a public-benefit, non-profit corporation that works with fishermen, marine scientists, conservationists, and the general public. PMCC seeks to ensure that needed steps are taken to rebuild and sustain depleted groundfisheries along the West Coast, as well as to balance healthy marine ecosystems with viable fishing community economies.

PMCC has previously provided comments to the Council on this issue, recording both procedural complaints and substantive concerns. We have also contributed to the public scoping process which NOAA Fisheries has conducted under the National Environmental Policy Act in preparation for possible development of an environmental impact statement. Our scoping testimony and comments are fairly well chronicled in the scoping summary prepared by Council staff, that was presented at the September Council meeting. This summary document is useful not only to review the pitfalls of possible trawl IFQ systems that have been identified by PMCC, but also to keep in mind the fears and concerns raised by others.

This is clearly an extremely controversial issue. It is also exceptionally complicated. The IFQ-style options we seen presented to this point fail to fully address the goals and objectives set forth in the Council’s strategic plan, or even the internal objectives of this process. I realize that some additional analysis will be completed between the date of this letter and the Council meeting – including the Council requests to take a look at permit stacking and longer cumulative limit periods – so I don’t want to arbitrarily suggest that fresh ideas might not come forward. But, realistically it’s time to take a hard look at where this is going.

**PMCC strongly recommends that further development of a trawl-only IFQ system be tabled.** We make this recommendation not only because we see the inherent flaws in a trawl IFQ system that
would promote inequity within the commercial groundfish fishery, threaten the health of recreational fisheries, consternate the implementation of essential conservation measures, and hurt the economies of some of our coastal communities. We also believe that the process of developing a trawl-only IFQ system is diverting resources and staff time that could be better spent.

Taking creative and decisive action to significantly reduce bycatch in the groundfish fishery is a far better focus at this time. The Council is about to embark on development of a bycatch program fishery management plan amendment. This amendment and its implementing regulations could help ensure that we effectively rebuild depleted fish populations along this coast while providing increased economic opportunities. In a time of scarce and uncertain resources it makes much more sense to go after the core of what restrains our commercial and recreational fisheries, rather than to pour money on a complicated and dangerous economic experiment for one gear group.

However, should some new ideas for alternatives be offered at the Council meeting we want to remind the Council to carefully consider whether these alternatives are consistent with the following provisions of national fisheries law:

*From Magnuson-Stevens Act (303(b)(6))*

The following must be taken into account in designing limited access systems:

(A) present participation in the fishery  
(B) historical fishing practices in, and dependence on, the fishery  
(C) the economics of the fishery  
(D) the capability of fishing vessels used in the fishery to engage in other fisheries,  
(E) the cultural and social framework relevant to the fishery and any affected fishing communities, and  
(F) any other relevant considerations.

I’d also like to offer here an excerpt from the February 2004 GAO study, *INDIVIDUAL FISHING QUOTAS: Methods for Community Protection and New Entry Require Periodic Evaluation*:

“Several methods are available for protecting the economic viability of fishing communities and facilitating new entry into IFQ fisheries. The easiest and most direct way to help protect communities under an IFQ program is to allow the communities themselves to hold quota. Fishery managers can also help communities by adopting rules aimed at protecting certain groups of fishery participants. Methods for facilitating new entry principally fall into three categories: (1) adopting transfer rules on selling or leasing quota that help make quota more available and affordable to new entrants; (2) setting aside quota for new entrants; and (3) providing economic assistance, such as loans and subsidies, to new entrants.

“In considering methods to protect communities and facilitate new entry into IFQ fisheries, fishery managers face issues of efficiency and fairness, as well as design and implementation. Community protection and new entry methods are designed to achieve social objectives, but realizing these objectives may undermine economic efficiency and raise questions of equity. For example, allowing communities to hold quota may result in a loss of economic efficiency because communities may not have the knowledge and skills to manage the
quota effectively. Similarly, rules to protect communities or facilitate new entry may appear to favor one group of fishermen over another. Furthermore, community protection and new entry methods raise a number of design and implementation challenges. For example, according to fishery experts, defining a community can be challenging because communities can be defined in geographic and nongeographic ways. Similarly, loans or grants may help provide new entrants with the capital needed to purchase quota, but they may also contribute to further quota price increases. Given the various issues that fishery managers face in developing community protection and new entry methods, it is unlikely that any single method can protect every type of fishing community or facilitate new entry into every IFQ fishery. Deciding which method(s) to use is made more challenging because fishery managers have not conducted comprehensive evaluations of how IFQ programs protect communities or facilitate new entry.

“In comparing the key features of IFQ programs and U.S. fishery cooperatives, we found that each approach has advantages and disadvantages in terms of regulatory and management framework, number of participants, quota allocation and transfer, and monitoring and enforcement. Specifically, in terms of regulatory and management framework, IFQ programs have greater stability than cooperatives because they are established by federal regulations, while cooperatives are voluntary contractual arrangements. In terms of quota allocation and transfer, IFQ programs are open in that they allow the transfer of quota to new entrants, whereas cooperatives are exclusive by contractual arrangement among members. In terms of monitoring and enforcement, IFQ programs are viewed as being more difficult to administer, because NMFS must monitor individual participants, while cooperatives are viewed to be simpler for NMFS to administer, because NMFS monitors only one entity—the cooperative. For some fisheries, a combined approach may be beneficial. For example, a cooperative of IFQ quota holders can combine an IFQ program’s stability with a cooperative’s collaboration to help manage the fishery.”

Finally, PMCC believes that it makes sense for the Council, in considering IFQ programs or any other type of dedicated access privileges (DAP), to evaluate alternatives for consistency with the recommended DAP standards crafted by the US Commission on Ocean Policy, as included in the Commission’s final report to the President:

“At a minimum, the national guidelines should require dedicated access programs to:
• specify the biological, social, and economic goals of the plan; recipient groups designated for the initial quota shares; and data collection protocols.
• provide for periodic reviews of the plan to determine progress in meeting goals.
• assign quota shares for a limited period of time to reduce confusion concerning public ownership of living marine resources, allow managers flexibility to manage fisheries adaptively, and provide stability to fishermen for investment decisions.
• mandate fees for exclusive access based on a percentage of quota shares held. These user fees should be used to support ecosystem-based management. Fee waivers, reductions, or phase-in schedules should be allowed until a fishery is declared recovered or fishermen’s profits increase.
include measures, such as community-based quota shares or quota share ownership caps, to lessen the potential harm to fishing communities during the transition to dedicated access privileges.

be adopted only after adequate public discussion and close consultation with all affected stakeholders, to ensure community acceptance of a dedicated access plan prior to final Regional Fishery Management Council approval.”

We believe that the US Commission on Ocean Policy recommendations should be incorporated into a clearly defined set of national standards for IFQ programs. These standards, once adopted by Congress, would help frame future debates in the Region, should the Council decide to once again examine the possibility of IFQ management in one of more fisheries.

Thank you for considering our comments.

Respectfully,

Peter Huhtala
Senior Policy Director
On behalf of directors and members of the Morro Bay Commercial Fishermen's Organization and the Crab Boat Owners' Association of San Francisco, I've been asked to submit the following comments:

1. The manner of noticing and the timing of the scoping sessions did not give open access fishermen participating in the salmon troll fisheries adequate opportunity to consider these issues and comment.

2. At this time, we prefer Status Quo Management to any of the proposed changes in access. (We believe the current groundfish observer system should go a long way toward clarifying "uncertain" bycatch rates.)

3. We oppose any type of IFQ systems.

Barbara Stickel  
F/V Regina  

on behalf of:  

Thomas J. Stickel, Director  
Morro Bay Commercial Fishermen's Organization  

Craig Barbre, Director  
Morro Bay Commercial Fishermen's Organization  

Larry Collins, Vice President and Director  
Crab Boat Owners Association of San Francisco

"Be who you are and say what you feel, because those who mind don't matter and those who matter don't mind."  Dr. Seuss (1904-91)
IFQ - PFQ       JUST SAY NO

The fish in the sea are a vital part of our countries fishing heritage that is protected by the “Public Trust Doctrine” which is integral to our common law that protects public trust assets for “ALL”.

Marine fish are the property of the American people, are held in trust for them by federal and state governments, and must be managed to preserve the full range of those benefits for present and future generations. Privatizing the fish in the sea is an inappropriate application and unconscionable mismanagement of that TRUST.

Promote EQUAL ACCESS – EQUAL OPPORTUNITY for all fishermen and all processors

- Equal opportunity for time on the sea
- Equal gear restrictions
- Equal opportunity to access public resource
- Equal and healthy price competition among processors
- Equal antitrust applications for all

An IFQ is a regulatory taking of equal access to a public resource that currently exists & disenfranchises smaller entities, the young, and the elderly within the fishing communities and rewards over-capitalization, the problem child of the fisheries.

JUST SAY NO to privatizing a public resource to a few concentrated hands
JUST SAY NO to rewarding over-capitalization
JUST SAY NO to sharecropping a public resource
JUST SAY NO to rewarding over-fishing
JUST SAY NO to those with the least conservation ethic
JUST SAY NO to those that have had the most by-catch and regulatory discards
JUST SAY NO to rewarding illegal activity that contributes to quota share
JUST SAY NO to making different classes of fishermen

JUST SAY NO to IFQ an unneeded and discriminatory management tool. There were and still are valid reasons for the congressional moratorium on IFQ – show me an IFQ supporter & I’ll show you someone with something to gain at public expense.

Is each and every charter boat going to get an individual IFQ. What about an IFQ for each individual that wants to go sport fishing? Or an IFQ to each community to divvy up on an
equal basis. Why are Alaskan communities now having to go out and buy IFQ quota back from private individuals, this is a ridiculous way to run public trust, public buying public assets back. How about your grandson, why should he have to buy into a public resource because you gave it away? IFQ’s are just plain WRONG and have no place in fishing. Only those that have ONE, will tell you they are good. You can accomplish the same resource and safety benefits as IFQ’s by just dividing the annual OY into the number of boats that fish each year and assign years quota’s to each boat, EQUALLY, without giving it away in the form of a dedicated IFQ.

As for processor IFQ’s – PFQ’s slavery was taken out by President Lincoln and the Union Army, I see no reason to re-initiate that archaic institution that only promotes dissension in the industry between the haves and the have nots and makes fishermen into sharecroppers.

**JUST SAY NO!!**

What else is there to say, I don’t believe in them, they take from the POOR and Give to the RICH and permanently remove all hope for the small beginning fisherman and they stifle fishing communities to just a few boats. They won’t let fishermen just be happy with a reasonable standard of living, they make them compete for the last fish in open season just before assignments of IFQ’s.

This summer I would like to say home with my sick wife but will have to go Tuna fishing because in a few short years IFQ’s will be threatening & if I don’t have a BIG catch history I’ll get SCREWED, so I have to go now or starve in the future, REDICULOUS way to have to be forced from my family at a time so crucial to my wife’s mental well being, a TERRIBLE position to be placed in just to survive myself in the future.

Don’t give me this HARDSHIP case either, I’ve been there and gotten taken before. In 1980 I had just bought a brand new 75 foot state of the everything fishing vessel, there was not a fishery on the West Coast it was not designed to participate in, and be a highliner - Trawl, Shrimp, Crab, Tuna, Salmon. The vessel had 4 engines, futuristic electronics, three fish holds, tanked, freezing capacity, Stern ramps, net reels, excess fuel capacity, spacious luxury living quarters, raised foredeck, you name it had it. Disaster, Brand new, never fished a day, $500,000 mortgage and whoops the architect made a mistake, it tipped over. Insurance payment $17,000.00 per year, & they refused to pay. Four years in the court system, no justice. Broke, no possible way to get another vessel of any kind. Along comes limited entry, I tried for a hardship case, but since I did not deliver any fish I was short shifted – no permit – no more trawling, done, not because I had not put up my life’s investment and tried. I was forced into being a sharecropper for 12 years, fishing someone else’s boat before I could get started on my own again. No Cadillac the second time around, An ol’ vessel, with no frills, just a good ol’ sea boat, capable of a reasonable standard of living, but not IFQ material, at least not one to offer a living. So you see it’s not all Roses in the fishing business & I don’t believe I should be short shifted again by privatizing the resources I depend on for my families living. PLEASE JUST SAY NO! That is why I work so hard politically, not for myself, but for the young, the old, the not so lucky members of our industry. I’ve been there and lost, and know what it’s like to have the rug jerked out from under you. Fishing communities are made up of all types of people and
that diversity needs to be maintained. the POOR need a chance and the RICH already have it made. They do not need any more advantage.

IFQ’s are like cancer, once initiated will spill over into other fisheries as the “ONLY” tool to solve the race to fish. It is criminal to allocate processor IFQ – PFQ on our opinion & that will end up a huge issue before this is over, just like in Alaska crab. Stop it NOW. We can do better than giving our public resources to private business. My grandson wants a job he should not have to buy a public resource from someone that has over-exploited it in the past & then had it given to him, RIDICULOUS way to run a ship by over-rewarding over-capitalization.

IFQ – JUST SAY NO

Dale Beasley, CRCFA
Some Late Scoping Comments from Dave Fraser  
On:  
Inclusion of Processors in the PFMC Groundfish Rationalization

IFQs allocate access to a share of a public resource, which becomes private property only after it is captured. IPQs grant a right or privilege to process a fixed portion of the harvest. Thus IPQs direct the disposition of private property, rather than a public resource.

IFQs insure that public resources are harvested in a safe and efficient manner. IPQs eliminate or restrain competition among processors and create a regulated marketplace which requires creating a substitute mechanism for price formation.

Throughout the NPRMC’s crab rationalization process process, the crab processing sector was adamant that rationalization was not going forward without processor quota. In the end all the arguments for IPQ come down to this: “Our way, or no way.”

Major players in the processing sector has made it clear to everyone seeking to rationalize fisheries, that regardless of the economic cost to other non-diversified processors, fishing communities, vessel owners, or, indeed, the cost in human life for those who work in the nation’s most dangerous occupation, they will block any action that doesn’t give them control of the harvester’s market choices.

High powered lobbying efforts should not be allowed to preclude building a low cost and effective rationalization program within the current framework of the Magnuson/Stevens Fisheries Management and Conservation Act.

There are many alternative approaches that have been utilized to deal with the concerns of processors in a variety of rationalized fisheries. Even without IPQs, the crab rationalization plan gives processors substantial protection by program elements. These include:

- Separate Catcher Vessel and Catcher Processor classes of quota, so fishermen can’t process their own catch.
- Regional restrictions on deliveries.
- Processors are allowed to acquire and own harvest quota.
- Limits on consolidation of harvest quota, preserving a diverse supply for processors.

Legitimate processor concerns can be addressed without creating IPQs and segmenting markets.

1.0 The Missing Analysis

The National Standards disallow measures that have economic allocation as their sole purpose. While IFQs to harvesters do result in economic allocation, they have strong conservation and safety purposes. However, the argument for inclusion of processors in quota allocation is almost entirely economic.

Before including any specific element such as direct allocation of IFQ to processors, a closed class for processors, or IPQs in the groundfish rationalization program, there needs to be economic analysis of the fixed capital investment by groundfish processors.

One of the stated purposes of IPQs (or the allocation of IFQ to processors) is to address the transitional costs associated with non-malleable capital in the processing sector. An appropriate analysis dealing with inclusion of processors in a groundfish rationalization program requires quantitative analysis of the groundfish specific fixed capital (malleable or otherwise) in the processing sector, and a comparison with fixed capital in the harvest sector.
Unfortunately an obstacle to the necessary analysis is that Section 303(b)(7) of the M-S Act exempts processors from the requirement to submit economic data. As a result they are free to claim harm, but the analysts don’t have the ability to verify their claims. None the less, the analysis should include an evaluation of the level and duration of the IPQ or other compensation necessary to compensate the transitional costs of the processing sector.

Processors hid behind the lack of data in the development of the NPFMC crab program. Given that the primary argument for inclusion of processors in quota allocation is economic, they should be required to provide verifiable, meaningful data to the analysts to support their claim to IPQ or IFQ allocation in the PFMC groundfish program.

2.0 Are Processor Quotas Necessary or Prudent?

2.1 National Academy of Science Recommendations

In the 1996 Magnuson-Stevens Reauthorization Congress directed the National Academy of Science to provide advice and recommendations on IFQ programs and specifically directed the evaluation of processor allocations. Section 303(d)(5) of the M-S Act directs Councils to consider the recommendations for the NAS report (Sharing the Fish).

2.1.1 "Sharing the Fish" on Processor Quota

Page 205 of "Sharing the Fish" contains a two part recommendation relative to processors and quota. The first part speaks to allocating a portion of the IFQs to processors; the second speaks to creating a “two pie” or IPQ system:

“On a national basis, the committee found no compelling reason to recommend the inclusion or exclusion of processors from eligibility to receive initial (fishing) quota shares”

"Nor did the committee find a compelling reason to establish a separate, complementary processor quota system (the "two-pie" system)."

Page 153-155 of “Sharing the Fish” provides a more extensive and very useful discussion of the issues surrounding processor quota allocations. The NAS concluded:

"The committee was not convinced, however, that the solution to the perceived problems lies in the allocation of either harvesting or processing quota to processors."

2.1.2 Distribution of Benefits of Quota Shares - Initial Allocation

"Sharing the Fish" - the report to Congress by the National Academy of Science recommended a broad distribution of the benefits of Quota share programs. The benefits are inherently broadly distributed in the initial allocation under a harvester IFQ due to the large number of vessels and fishers. However, the benefits of the Processor Quota are highly concentrated due to the concentration of the groundfish processing sector that has all ready occurred through consolidation under the status quo.

Processor Quotas are inconsistent with the recommendations of the National Academy of Sciences found in “Sharing the Fish.”

2.2 Economists’ Views on Processor Quotas

The entire theoretical underpinning of Processor Quotas rests on the work of one economist – Scott Matulich. It is his belief that in a free market, fishers with IFQs will "expropriate the quasi-rents
rightfully belonging to processors" because harvesters would no longer fear that company owned boats would pre-empt their catch if they were to go on strike.

Matulich has been able to parlay this diagnosis into a prescription for a particular cure of his own design called the “2-pie” or IPQ system.

To judge whether the side effects of Matulich’s cure are likely to be worse than the disease, it is necessary to turn to other economists. As noted in the preceding section the National Academy of Science considered and rejected Matulich’s prescription. They were not alone.

2.2.1 The GAO on Matulich

In December of 2002 the GAO provided this committee with a report on IFQs which contained a very critical review of a paper by Matulich purporting to provide an empirical basis for his theory in the context of the existing Halibut and Sablefish IFQ program. They questioned the methodology and the potential for bias in the survey design for gathering data.

2.2.2 Economists on Processor Quota - Milon and Hamilton

In a paper prepared under contract for the North Pacific Council by Florida economists J. Walter Milon and Stephan F. Hamilton (A Comparative Analysis of Alternative Rationalization Models for the Bering Sea/Aleutian Islands Crab Fisheries - March 2002) the authors describe the impacts of a "segmented monopsony."

In discussing the IIPQ model Milon and Hamilton noted:

"The (IPQ) quota allocation defines a property right of each processor to serve a perfectly segmented market, and, with a fixed quantity of harvest, each processor maximizes his profits by paying the lowest ex-vessel price that supports harvester delivery of this quantity. The outcome is regional monopsony ex-vessel pricing...Accordingly, the delineation of processor quota rights subsumes all economic rent from the ITQ program in the harvest sector...With a two pie permit distribution that allocates the full processing quota, the value of harvester permits are driven to zero...With completely defined property rights in the processing sector, the allocation of property rights in a harvest sector ITQ program becomes redundant."

Milon and Hamilton went on to observe that in a system where some percent of the harvest share remains "free market" (such as the 10% “B” shares in the NPFMC crab program) the outcome is a blend that:

"...results in a continuum of market segmentation levels. Consequently, all possible two-pie permit distributions have identical implications for economic efficiency, but differ in the degree to which the policy rent is shared between market participants. Processors are likely to fare better, and harvesters fare worse, as the ratio of A to B permits increases in the proposed fishery management system."

Cartels are precluded by existing anti-trust laws. It is ironic that the same outcome (monopsony pricing) would be legally achievable under Processor Quotas. The only functional difference is that when a legal Processor Quota system segments the market, it will be more effective than if a group of processors had conspired to set prices. In the latter instance there is always hope that a new processor could enter destabilize the cartel by offering competitive prices.

2.2.3 Economists on Processor Quota – Halvorsen

Economist Dr. Halverson, who was contracted by the NPFMC for an earlier analysis of the distribution of bargaining power under different 'game' rules for American Fisheries Act coops, was also critical of
the Matulich 2 Pie theory. Dr. Halvorsen presented a paper to a hearing of the U.S. House Resources Committee explaining the theoretical deficiencies of the Matulich theory.

2.2.4 Economists on Processor Quota - Christy and Anderson

Two other very prominent fisheries economists served on the NMFS Advisory Panel to the NAS when "Sharing the Fish" was prepared, Lee Anderson (chairman of the NMFS East Coast AP) and Francis Christy. Christy, who worked in fisheries for many years for the UN-FAO, is considered to be the economist who came up with the idea for IFQs. Lee Anderson, who wrote a seminal text book on IFQs and economic theory, was a member of the Mid-Atlantic Fisheries Management Council when the 1st IFQ program was adopted. Both economists have been very critical of the Matulich theory and of the idea of IPQs. While Anderson recognizes the potential for negative impacts on processors from IFQs to the extent that their capital is non-malleable, he doesn't advocate IPQs as the appropriate fix for that potential problem.

2.3 Department of Justice

The DOJ Anti-trust division prepared a memo dated August 27th 2003, which recommended NOAA oppose IPQs.

3.0 Do We Believe in the Value of a Competitive Marketplace?

3.1 Price Formation Under Status Quo versus Under Processor Quota

The heart of the controversy over Processor Quota goes to its impact on price formation.

IPQs would effectively segment and allocate the market into which groundfish harvests will be delivered. That action would radically shift negotiating leverage between harvesters and processors relative to status quo. Without a specific legislative exemption, that action would constitute a “per se” violation of antitrust law equivalent to price fixing. It is a “hard-core cartel agreement” that is prosecuted criminally by the Department of Justice.

Processor Quotas create a very different environment. The harvest must be delivered only to a processor holding unused IPQ. This results in a game of "musical chairs" where the "last man standing" has no choice about where to sell - and as a consequence there is an urgency to "sit down" early at a sub-optimal price to avoid being the "last man standing."

If a harvester wishes to move to a different processor because they are unhappy with the way they are being treated, there is only one way to do it. They must displace someone who is working for a different processor. The only way to do that is to offer to fish at a lower price than the person you are displacing. This fundamental alteration of the dynamics into a game of musical chairs destroys the ability of fishers to benefit from collective bargaining as provided under the 1934 Fishermen's Marketing Act.

3.2 The Nature of the Right or Privilege represented by the Processing Quota

There is a fundamental difference in purpose between IFQs and IPQs. The purpose of IPQ is to direct the transfer of private property. The purpose of IFQs is to allocate access to a share of free swimming critters, which up to the point of capture, are a public trust resource.

IFQs are generally understood to be a privilege to harvest a fixed portion of the common property
public trust resource. The result of being allowed to harvest that resource is that it is converted to private property at the point of harvest.

A IPQ is a right or privilege to process a fixed portion of the harvest. Congress has been clear that they regard Harvest Quota shares as a privilege, but there is a spectrum between 'privilege' and 'right' that has yet to be debated with regard to IPQs. The wrinkle here is that crab, once harvested, have been converted to private property. Thus, it appears that the IPQ directs the disposition of private property, rather than the disposition of a public resource.

The introduction of IPQs for the purpose of eliminating or restraining competition among processors creates a regulated marketplace and the need to provide a substitute mechanism for price formation.

4.0 Community Protections and IPQ

The element of community protections in the NPFMC crab program are largely a response to the impacts of market segmentation resulting from IPQs. The testimony of Mayor Freed of Kodiak to the Senate commerce committee hear in May 2003 indicated that their community believed the best protection would be to not adopt an IPQ element. Many other Alaskan communities adopted resolutions opposing IPQs.

IPQs facilitate consolidation and without meaningful processor consolidation limits this ultimately means plant closings in coastal communities.

5.0 Alternatives to Processor Quotas to Protect Processors

There are many alternative approaches that have been utilized elsewhere to deal with the concerns of processors in a variety of rationalized fisheries. These include elements in a number of existing programs, as well as proposed alternatives that didn’t receive adequate consideration by the Council.

In the crab rationalization plan, processors were given substantial protection by various program elements including the following:

- Processors are allowed to own and acquire IFQs.
- Catcher Vessel IFQ holders must deliver their crab to processors rather than processing themselves as Catcher Processors.
- Regional restriction on deliveries, which favor existing processors.
- Limitations on consolidation of IFQ ownership at 1% each for harvesters, which preserve a diverse supply for processors.
- Processors are allowed up to 5% each of the harvest IFQ, in contrast to 1% limit for harvesters.

Without analysis of the adequacy of these provisions, nor discussion or debate, the NPFMC added the provision of Processor Quota. If analysis shows there is further necessity to protect processors, there are less-damaging alternatives in existing programs such as the AFA.

5.1 Other Alternatives

- Processors could be allocated a portion of the harvest ITQ commensurate with their relative proportion of fishery specific non-malleable capital.
• A quasi closed class of processors, guaranteeing a percentage of the harvest to be delivered to the class of eligible processors based on their aggregate processing history.
• An AFA style coops with disincentives for leaving a coop, such as a one year forfeiture of 10% of the harvester’s IFQ to the coop being left.

5.2 Existing Programs

5.2.1 AFA Pollock in the Shoreside Sector

• AFA shoreside processors were collectively guaranteed a share of the pie.
• AFA shoreside processors were provided a closed class.
• AFA shoreside processors were provided with a degree of stability in the design of the coop rule.

AFA catcher vessels are only guaranteed their history as a member of a coop with a processor partner. 90% of the catch history of the coop had to be delivered to the processor partner in a given year. Though vessels are able to move between processors annually, disincentives were built in that discouraged movement between coops, where the alternative to being in a coop was an open access derby for one year.

The critical difference between the AFA processor protections and IPQs is that while the AFA coops provide a large measure of stability through the requirement for annual coop contracts with an eligible processor, no processor is guaranteed a fixed share of the harvest for more than one year, and ultimately it is competition that governs whether a vessel will remain with a processor or move its quota to another processor.

5.2.2 Halibut & Sablefish IFQs

Halibut and sablefish shoreside processors were protected from competing with freezer boats.

5.2.3 British Columbia’s IVQ Groundfish

In the BC Canada groundfish IFQ, the allocation of 10% of a vessel’s catch history is conditional on community and processor concerns. This 10% of the IFQ provides leverage to processors, working in cooperation with community interests, that can be used to attract deliveries made under the harvester portion of the IFQ.

5.2.4 Eastern Canada Opilio Crab

In the "harvester only" IFQ program for snow crab, binding arbitration was instituted to set a base price. It is worth noting that crab processing there is still profitable enough that it has attracted a number of new entrants.

There are many options for addressing processor concerns without adopting IPQs and a segmented market.
U.S. DEPARTMENT OF JUSTICE  
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August 27, 2003  

James R. Walpole  
General Counsel  
United States Department of Commerce  
National Oceanic and Atmospheric Administration  
Washington D.C. 20230  

Dear Mr. Walpole:  

You have asked for the assistance of the Department of Justice Antitrust Division ("Department") in identifying antitrust issues associated with a price arbitration system that was proposed as part of a rationalization plan to manage crab fisheries in the Bering Sea and Aleutian Islands ("BSAI"). The plan was developed by the North Pacific Fishery Management Council ("Council") at the request of Congress to replace the current management program. The NOAA General Counsel's Office, Alaska Region, also has asked the Department to comment on the likely effects on competition of the entire rationalization plan. The Department submits these comments in response to your January 9, 2003 letter and NOAA's request.

\[1\] A fishery means "(1) one or more stocks of fish that can be treated as a unit for purposes of conservation and management and that are identified on the basis of geographic, scientific, technical, recreational, or economic characteristics, or method of catch; or (2) any fishing for such stocks." 50 C.F.R. 600.10.

\[2\] The Council is one of eight Regional Fishery Management Councils established pursuant to 16 U.S.C. 1852. Its region covers the States of Alaska, Washington and Oregon, and it has authority over the fisheries in the Arctic Ocean, Bering Sea and Pacific Ocean seaward of Alaska. 16 U.S.C. 1852(a)(1)(G). The functions of the Council include preparing for the Secretary of Commerce a fishery management plan for each fishery, conducting public hearings on fishery management plans, and reviewing processing in each fishery. 16 U.S.C. 1852(h). The Council was directed by the Consolidated Appropriations Act of 2001 (Pub. L. No. 106-554) to determine whether rationalization is needed in its fisheries and to analyze individual fishing quotas, processor quotas, fishermen cooperatives and quotas held by communities.
EXECUTIVE SUMMARY

The Department supports implementation of a new fishery management plan that would end the “race to fish” inherent in the current derby-style management plan. Under the current derby-style program, the season ends as soon as the total allowable catch has been fished, producing an undesirable “race to fish” among harvesters. The race to fish is economically inefficient for both harvesting and processing and likely dangerous to the participants. The Department therefore recommends that NOAA support individual fishing quotas (“IFQ”) for harvesters, a reform that will end the race to fish. Provided that IFQ are easily transferable, the gains in efficiency from ending the race to fish — reducing overcapitalization and improving safety — are likely to outweigh the harm of any loss of competition among harvesters. The Department recommends that the plan allow easy transferability of IFQ shares; otherwise the incentive for market participants to make efficient investment decisions will be reduced.

The Department further recommends that NOAA oppose individual processor quotas (“IPQ”), because IPQ will likely reduce beneficial competition among processors with no countervailing efficiency benefit. This lost competition could deter the development of new processed crab products, reduce the incentives for processors to make efficient investment decisions and reduce welfare for consumers of processed crab products. While harvester quotas should eliminate the harmful race to fish, processor quotas are not justified by any such beneficial competitive purpose.

If the goal of using IFQ is to compensate processors for overcapitalization, we urge NOAA to consider advocating more direct solutions, such as a program to buy excess processor equipment. We also understand that there are concerns with social goals such as preserving jobs in historic fishing villages. To the extent NOAA agrees with these goals, we recommend it consider advocating more direct solutions.

The Department also urges NOAA to oppose any form of sanctioned price arbitration. Allowing an arbitrator, rather than the market, to set price may distort the incentive of processors and harvesters to make efficient investments. Further, processors and harvesters must be cautious not to use the arbitration program as a way to agree on price with their competitors, which could violate the antitrust laws.

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3 The Department of Justice has supported individual fishing quotas in the past. See, e.g. Comments of the Department of Justice in Proposed Rulemaking: Amendment 18 to the Fishery Management Plan for Alaska Groundfish Fisheries in the Bering Strait and Aleutian Islands, Docket No. 911215-1315 (Transferrable individual fishing rights would result in an efficient allocation of limited fishery rights); Business Review Letter to the Pollock Conservation Cooperative, February 29, 2000 (The Department is not presently inclined to initiate an enforcement action against cooperative that allocated amongst itself the fixed quota of the BSAI pollock TAC.)
The binding arbitration proposal specifies that each processor will participate in arbitration individually and not collectively. Processors’ independent participation in binding arbitration will not violate the antitrust laws. In contrast, competing processors that agree on the price they will pay harvesters would be engaged in price fixing that violates the Sherman Act. Liability cannot be avoided by having a third party arbitrator set the actual price to be paid. Similarly, competing processors that agree to use the non-binding benchmark arbitration price to set ex-vessel prices (or even as a starting point for ex-vessel price negotiations) could also be liable under the antitrust laws.

Harvesters that go beyond the contemplated arbitration program and agree among themselves to sell at the arbitrated price could violate the antitrust laws. However, harvesters would be immune under the Fishermen’s Cooperative Marketing Act (“FCMA”) if all participants in the arbitration are members of an eligible fishing cooperative.

Finally, the arbitration plan contemplates an exchange of competitively sensitive information which, if not handled properly, could raise antitrust concerns. Voluntary exchange of the information among competing harvesters and/or processors could violate the Sherman Act if it reduces competition. Harvesters and processors should be cautious in participating in any form of voluntary price arbitration or information exchange.

The Department’s analysis here considers only the effects on competition of the proposals and whether participation in the program could result in antitrust violations. We have not considered other factors generally outside the purview of the antitrust laws, such as the social goal of protecting jobs in historic fishing villages or balancing the regulatory effects evenly among harvesters and processors. The Department is not in position to evaluate such interests. In making the ultimate recommendations, NOAA and the Council may wish to take such goals into account and balance them against the competition issues discussed here.

BACKGROUND

In developing its recommendations, the Department reviewed the rationalization plan, interviewed industry participants and examined economic research on rationalization programs. It is our understanding that the current derby-style system of fishery management works as follows: Each year, under joint management with the Council and NOAA Fisheries, the State of Alaska sets the total allowable catch (“TAC”) for each fishery for the year. Once the fishing season is opened, harvesters are permitted to fish until projections determine that the TAC is reached. The fishing season is then closed. The season varies by fishery but can be very short, as little as 2 to 3 days at the fishery with the shortest season. A natural result of this system is that a “race to fish” developed, which led to overcapitalization among harvesters and processors and to behavior that is dangerous to harvesters and results in less precise stock management.
In 2001, Congress directed the Council to determine whether rationalization of the fisheries under its management was needed. The Council was asked to analyze, among other things, the effects of IFQ and IPQ.

The Council detailed its proposal for rationalization of BSAI crab fisheries in its August 2002 Report to Congress and its May 6, 2003, letter to Congress. Under the proposed plan, crab harvesters would be allocated IFQ “shares” for 100% of the TAC in a fishery. Ninety percent of these shares would be Class A shares that must be processed by a processor within that fishery who holds IPQ. Ten percent would be Class B shares, which could be processed by any processor. The amount of IFQ issued to a particular harvester would be based on that harvester’s historical catch in a fishery, computed over a qualifying period. IFQ shares would be fully transferable to anyone meeting certain requirements, subject to a limit on the number of shares that can be held by an IFQ holder. The shares would be leasable by any IFQ holder for the first five years of the program and thereafter leasable only within harvester cooperatives.

Similarly, processors in each rationalized fishery would be allocated IPQ shares. IPQ shares would be issued for 90% of the allocated harvest, corresponding to harvester Class A shares. The amount of IPQ issued to a particular processor would be based on that processor’s historical processing activity, computed over a qualifying period. No processor would be allowed to hold more than 30% of the IPQ in its fishery. The proposed rationalization plan includes a number of community protection provisions that limit the liquidity of processor shares.

The proposal includes a plan for binding arbitration to determine the price paid by a processor to harvesters for raw crabs, the ex-vessel price, if the parties cannot reach mutually

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4 The Council plan would apply to eight fisheries, which constitute all the large Alaskan Crab fisheries.

5 The Council also proposes creating Class C shares to distribute 3% of the TAC to fishing vessel captains. This 3% will be allocated first, with the remaining 97% of the TAC being allocated to the remaining harvesters. For the first three years fishing vessel captains may sell their catch to anyone they wish. After three years, the captains must sell 90% of their 3% to IPQ holders, and may sell the other 10% of their 3% to any processor.

6 To be eligible to purchase IFQ a person would have to be a U.S. citizen and have at least 150 days of sea time as a harvester in a U.S. fishery. Share limits vary by fishery and are between 1% and 10% of the TAC. However, various methods exist to allow IFQ holders to combine shares. For example, subject to vessel caps, more than one IFQ holder may fish off of a single boat. In addition, there is no limit to the amount of IFQ that can be controlled by a cooperative.

7 The “ex-vessel” price is the price paid for fish offloaded directly from the fishing vessel.
agreeable terms. The Council's preferred arbitration method is a "last best offer plan" under which the arbitrator's primary goal is to set a price that preserves the historical division of revenues between harvesters and processors.\(^8\) The Council also proposes a pre-season, non-binding fleet-wide arbitration to develop and announce a guideline ex-vessel price for each fishery\(^9\) that will "inform price negotiations between the parties, as well as the Last Best Offer arbitration in the event of failed price negotiations."\(^{10}\)

ANALYSIS

I. INDIVIDUAL FISHING QUOTAS

The current derby-style management of the crab fisheries has led to a race to fish. With the TAC fixed, harvesters must fish quickly to maximize their share of the harvest, and thus they overinvest in crew, equipment and boats, and they engage in behavior that is dangerous to harvesters and makes product management more difficult. Similarly, because the catch is spoilable, processors overcapitalize so that they can accept and process the catch in a very short amount of time. This overcapitalization by harvesters and processors is economically inefficient.

The source of the overinvestment problem for both harvesters and processors is the incentive to race for the crabs. One way to solve these kinds of problems is to create permanent property rights in the harvest, as in the proposed IFQ program. Such programs have demonstrably lengthened the harvesting season and reduced capacity in many other fisheries, for example, in the halibut and sablefish markets.\(^{11}\)

\(^8\)Our understanding of the Council's binding arbitration proposal is based on the February 2, 2003, Council Motion on Crab Rationalization.

\(^9\)On April 5, 2003, in a Council Motion on C-2 Crab Rationalization, the Council added the proposal for pre-season non-binding arbitration. Our understanding of the non-binding arbitration is based on the April 5, 2003 Council Motion on C-2 Crab Rationalization, the April 2003 Council News and Notes, and the May 6, 2003 Council letter to Congress. It is unclear from the language in those documents whether the non-binding arbitration will produce one benchmark price for all crab fisheries or whether it will produce a separate benchmark price for each fishery.

\(^{10}\)April 5, 2003 Council Motion on C-2 Crab Rationalization. In the May 6, 2003, letter to Congress the purpose of non-binding arbitration is described as follows: "The non-binding price formula is intended to provide a benchmark price that will be a starting point for negotiations and minimize the number of price disputes as negotiations progress."

\(^{11}\)General Accounting Office, Individual Fishing Quotas (GAO-03-159, December 2002) at 20.
If the race to fish were ended, harvesters (and processors) would be left with an excess of capital investments. Endowing harvesters with tradeable shares would compensate them for these investments. Each harvester would receive a permanent property right to fish based loosely on his investment in capital. Those harvesters who leave the market could sell their shares and therefore receive compensation.\footnote{The Department offers no view on whether harvesters (or, as we discuss later, processors) should be compensated for overcapitalization, but urges NOAA to consider the effects on economic efficiency of the compensation plan. For example, auctioning the initial shares instead, which would not compensate harvesters, could improve efficiency. In addition, an auction would capture for the public some of the value from the scarce resource, which could be used for public purposes. The proceeds could, for example, be reinvested in the fisheries, used to fund conservation programs or used to partially compensate harvesters and/or processors for overcapitalization.}

The Council has proposed to allocate IFQ to harvesters based on a harvester’s historical participation in a fishery. We have no reason to believe that such allocation will result in an unreasonably inefficient distribution of IFQ. If shares are made transferable, so that they could be sold or leased to more efficient harvesters, any inefficiencies in the initial distribution should be temporary.

IFQ programs have the potential to reduce capital investments below the optimal level. Ideally, a rationalization program would preserve the competition that incentivizes participants to make optimal investments and remove the incentive to overinvest. However, in a quota program, participants may inefficiently underinvest in capital; since they no longer can increase their profits by competing shares away from others. Efficiency can be preserved by creating a liquid market for quota shares. In other words, the ability to buy and sell IFQ freely guarantees that the most efficient market participants will harvest the catch. Rather than taking share from competitors, a firm buys (or leases) shares from less efficient firms, allowing the market to realize the efficiency gains. As the market for quota becomes less liquid, such as restrictions on leasing or absentee-owner provisions, inefficiencies will arise.\footnote{The market would also not function efficiently if harvesters had strategic reasons for holding shares, for example to prevent entry.}

The proposed rationalization plan has provisions limiting liquidity, such as the prohibition on leasing IFQ outside of cooperatives after the fifth year. To the extent NOAA supports goals other than economic efficiency, it should weigh those goals against the potential for reducing economic efficiency and urge that those goals be accomplished in a manner least harmful to the market.
II. INDIVIDUAL PROCESSOR QUOTAS

The second part of the proposed rationalization plan is to issue IPQ, which no fishery in the United States to date has implemented. Using IPQ likely will reduce competition among processors, which could discourage efficient investments, limit new product development, and undercut competition in selling processed crab products. With IPQ, any efficiency losses are balanced against efficiency gains—eliminating incentives for harvesters and processors to overcapitalize as well as improving stock management and safety. In contrast, there are no such IPQ benefits. Thus, we urge NOAA to oppose processor quotas, because of their anticompetitive effect, and to accomplish the program’s other goals in ways that do not limit competition.

A. Effect on Competition of IPQ

1. Inefficient investment

In a market without IPQ, when a processor invests in technology to lower its costs, it can increase profits by offering harvesters a slightly higher ex-vessel price and thereby win a greater share of the catch. Under an IPQ program, the same investment may not be profitable because it will lower costs only on the processor’s quota share of the market. The processor cannot earn further profits by taking share from other processors. Thus, some efficiency enhancing investments that would have been profitable in the absence of IPQ may not be made under this proposed program.

The current proposal also does not take full advantage of ways to mitigate these inefficiencies. First, the creation of Class B IPQ shares could preserve some of the investment incentives for processors. However, preserving competition for the small percentage of the harvest represented by Class B shares is unlikely to preserve fully the incentive to make optimal investments. Second, these inefficiencies could be mitigated by making the market for IPQ as liquid as possible. However, the current plan appears to impose significant restrictions on the liquidity of IPQ. We understand that many of the limitations are designed to protect the historic interests of fishing communities. NOAA and the Council should address these conflicting goals.

2. Fewer new products

IPQ could also stifle new product development. What new products might appear under different regulations is difficult to predict, but some markets changed to IFQ-only programs have developed in positive ways. For example, ending the race to fish in the halibut fisheries may have contributed to an expansion in the delivery of fresh halibut.

Market participants expect similar product innovations in processed crab. But issuing IPQ could curtail the creation of such new products. First, new entrants that might to develop new products may have difficulty acquiring IPQ, either because of the limitation imposed on their transferability or because existing processors want to deter entry. Only the 10 percent of the
market covered by Class B shares is fully available to competition. Second, some existing processors might be better positioned to create new products, but limited by their endowed IPQ and constraints on acquiring additional shares. Third, any processor’s incentives to make investments in new products is limited by its endowed share of IPQ and constraints in the market for IPQ. While increasing the liquidity of IPQ could mitigate some of these concerns, we see no countervailing efficiency benefit from IPQ to justify these potential problems.

3. Less competition

Crab processors produce multiple products for different consumers using different techniques. Market participants we interviewed stated that ending the race to fish would only increase product differentiation because processors would have more time to work with the crabs. The likely result is that more of the harvest will be devoted to higher value products and that prices of these products will fall. Endowed processor shares and transferability limits might reduce this competition by altering processors’ incentives to invest in capital that would lower their costs, a benefit that could be passed to consumers, or by altering product mix.

B. Arguments by IPQ Proponents

Proponents seem to make two arguments in favor of implementing IPQ. First, they argue that, if harvesters are to be endowed with IPQ to compensate them for stranded capital, then processors should also be compensated by endowing them with IPQ. They state that overcapitalized processors will bid up the ex-vessel price, shifting economic rents from processors to harvesters. In response, it is likely that overcapitalization is a short-run problem, and thus creating a permanent property right to compensate processors is an inefficient solution. If NOAA believes that processors should be compensated, a direct one-time buyback of capital from processors would be more desirable.

Second, IPQ proponents argue that any rationalization plan must make all participants no worse off than under the current regime. Undoubtedly, some participants will benefit from changes while other will not, but the experience of other fisheries suggests that long run winners and losers are hard to predict. For example, the GAO concluded that the halibut IFQ-only program had a varied effect on processors; some were better off and some worse off.15

14Without compensation, many processors will likely be worse off in the time it takes for processors to remove unprofitable capital from the crab markets. How quickly capital adjusts to its optimal level will depend on the ex-vessel price and the value of alternative uses of that capital.

III. ARBITRATION AND INFORMATION EXCHANGE

You have specifically asked us whether the system of binding arbitration as described in the Council Motion on Crab Rationalization, dated February 2, 2003, would violate the antitrust laws if it were not legislated but instead were instituted by agreement among harvesters and processors. Below we address the legality of participating in the binding and non-binding arbitration, the economic effects of the proposed arbitration, and whether sharing the information submitted to the arbitrator among harvesters and processors could violate the antitrust laws.

Based on the documents cited in footnotes 9 and 10, we understand that the arbitration process will work as follows: Prior to the harvesting season, harvesters and processors in each crab fishery will jointly appoint a market analyst/arbitrator to review harvester and processor data and market conditions and announce a pre-season formula for setting a non-binding ex-vessel price. The stated purpose of developing a non-binding price is to guide the individual negotiations between processors and harvesters and later to guide the arbitrator in the binding arbitration process. After the non-binding price is announced, processors and harvesters may then negotiate contracts, subject to the amount of IPQ and IFQ they hold. Harvesters can make joint or individual bids. Harvesters that are unable to make a contract with a processor through negotiation may choose to use binding arbitration (or wait and later use the price that is developed in others’ arbitrations). In the arbitrations that do proceed, separate and independent arbitration using a “last best offer” method is conducted for each processor. All harvesters who entered arbitration with a processor will receive that processor’s arbitrated price. Harvesters who earlier waited and did not arbitrate can then choose a processor and will receive the price that was developed in the binding arbitration conducted with other harvesters.

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16If several groups of IFQ holders have matched with an IPQ holder, each may make a last best offer.

17The Council’s recommended arbitration proposal charges the arbitrator with establishing a price that “preserves the historic division of revenues in the fisheries” while considering elements including current ex vessel prices; consumer and wholesale product prices for the processing sector; innovations, developments, efficiency and productivity of the different sectors; and the interest of maintaining financial health of the different sectors.

18Of course, harvesters may choose a processor only until that processor’s IPQ is filled. It is not clear how harvesters who did not arbitrate will be matched to processors with remaining IPQ. If the ex-vessel price developed in arbitration for one processor is high, there may be excess demand by harvesters to opt into this arbitrated price. How that excess demand will be rationed is unclear.

-9-
A. Legality of Participating in Arbitration

As we understand the proposed arbitration program, participation by harvesters and processors is voluntary. For a harvester and processor to independently choose to use arbitration to develop the price at which they will agree to trade crabs would not violate the antitrust laws. However, if processors agree among themselves to use arbitration or to adhere to a price developed in arbitration, that agreement likely would violate the antitrust laws. The same is true for harvesters, except that harvesters may have immunity under the FCMA. These liability and immunity questions are discussed below.

1. Horizontal Agreements on Price

An agreement by a group of harvesters or processors to trade crabs at a price set by an arbitrator could be viewed as a naked agreement not to compete on price and thus an automatic or "per se" violation of Sherman Act §1, 15 U.S.C. §1. It is well established that an agreement for the purpose of "raising, depressing, fixing, pegging, or stabilizing" price is illegal per se. United States v. Socony-Vacuum Oil Co., 310 U.S. 150, 223 (1940). Even if the agreed price is set by a third party such as an arbitrator, all that matters for liability is that competitors agreed to charge that same price. In addition, liability here would extend to harvesters that agree among themselves to participate in the arbitration process and harvesters who later join that agreement by opting in once the arbitrator sets a price; they too would be fixing the ex-vessel price by agreeing with their competitors to abide by the arbitrator's decision.

Harvesters or processors may violate the antitrust law even if they agree with competitors only to use the pre-season benchmark price as a starting point for negotiations. If ex-vessel prices were affected by the non-binding arbitration (as the rationalization plan intends), a court could reasonably infer that the non-binding arbitration was part of an illegal price fixing agreement.

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19 In some limited circumstances, an agreement to set price could be examined under a "rule of reason," which requires the court to "assess and balance a restraint's harms benefits and alternatives." VII Phillip E. Areeda & Herbert Hovenkamp Antitrust Law §1508a (2nd ed. 2003) For a discussion of analyzing agreements among competitors, see Antitrust Guidelines for Collaborations Among Competitors (Federal Trade Commission & U.S. Department of Justice, April 2000).

20 Plymouth Dealer's Association of Northern California v. United States, 279 F.2d 128, 132 (9th Cir. 1960) ("The competition between the Plymouth dealers and the fact that the dealers used the fixed uniform list price in most instances only as a starting point, is of no consequence. It was an agreed starting point; it had been agreed upon between competitors; it was in some instances in the record respected and followed; it had to do with, and had its effect upon, price." [footnote omitted]).
Under the proposed binding arbitration, processors will not violate the antitrust laws so long as each participates individually, as required by the Council's arbitration proposal. Harvester will not violate the antitrust laws so long as each participates individually or as part of an FCMA cooperative.\(^{21}\)

2. Antitrust immunity for fishermen's cooperatives

Harvesters can avoid antitrust liability for the conduct described above by joining a fisherman's cooperative. Under the Fishermen's Cooperative Marketing Act, 48 Stat. 1213 (1934), 15 U.S.C. §521, harvesters that join a cooperative and set prices in a manner consistent with the FCMA will be exempt from of the antitrust laws with respect to that price setting. *United States v. Maryland & Va. Milk Producers Assn.*, 362 U.S. 458, 466-467 (1960).\(^{22}\) However, the cooperatives participating in arbitration must include only members who are eligible for immunity under the statute; if a cooperative includes members who are not eligible for antitrust immunity under the FCMA, the entire cooperative loses its immunity. *National Broiler Mkrg. Ass'n v. United States*, 436 U.S. 816, 828-829 (1978); *Case-Swayne Co. v. Sunkist Growers, Inc.*, 339 U.S. 384 (1967); *Hinote*, 823 F. Supp. at 1354.

a. Vertically integrated harvester-processors

An important issue is whether a harvester that is vertically integrated with a processor can be a member of an FCMA fishermen's cooperative. The Supreme Court explicitly declined to decide this issue in *National Broiler*, U.S. 436 at 828, n. 21. The *Hinote* court found that vertically integrated catfish processors were not exempt from the antitrust laws for conspiring to fix the prices of catfish products. However, the activity challenged in the case was not the processors' conduct as farmers but their conduct in selling finished catfish products. *Hinote*, 823 F. Supp. at 1358 -1359. Under *Hinote* it is possible that a vertically integrated harvester could join an FCMA cooperative and be exempt from antitrust liability with respect to its activities as a harvester, making an agreement to set the ex-vessel price of crabs. In determining whether a vertically integrated harvester can be a cooperative member without causing a cooperative to lose its immunity, a court is likely to look at a variety of factors, including the nature of its harvester and processor activities, the extent to which its activities are integrated, and the precise nature of the challenged agreement among cooperative members. See id.

\(^{21}\) Although processors do not have immunity under the FCMA, a processor that participates in arbitration solely as a buyer should have no antitrust liability even if a group of harvesters with whom the processor negotiates are found to have engaged in non-immune price fixing.

\(^{22}\) The *Maryland* case, as well as other cases concerning cooperative exemptions was decided under the Capper-Volstead Act of 1922, 42 Stat. 388 (1922), 7 U.S.C. §291 which provides for the same kinds exemptions as the FCMA. Cases decided under Capper-Volstead are precedent for cases under the FCMA. *U.S. v. Hinote*, 823 F. Supp. 1350 (S.D. Miss. 1993).
b. Agreements between cooperatives and non-members

Under the FCMA, cooperatives may not combine with non-cooperatives or "restrain trade by combining with nonexempt parties to set either resale prices for the cooperative's products or purchase prices paid to their non-member competitors." IA Phillip E. Areeda & Herbert Hovenkamp, Antitrust Law ¶1508a (2nd ed. 2000) Thus, it is possible that all harvesters in a cooperative could lose their Capper-Volstead immunity if the cooperative and non-member harvesters agreed to participate in binding arbitration with the same processor.

We are unaware of any direct authority on whether a cooperative can act collectively with persons who are eligible to join but have not done so. Of course, legal immunities are narrowly construed, and antitrust immunity under the FCMA in particular has been strictly interpreted.23 One reason that the immunity might not be read to allow agreement with non-members is that non-members are not subject to regulatory oversight. Both the FCMA and Capper-Volstead allow regulators to challenge conduct otherwise immune from the antitrust laws if the regulator believes that the price of an agricultural product is "unduly enhanced" by the activities of the cooperative.24 A harvester that is not a member of a cooperative would not be subject to this oversight. Thus, it would be inconsistent with the intent of the statute to allow harvesters to enjoy the antitrust immunity afforded cooperative members.

3. Legality of information exchanges

We understand that processors and harvesters participating in binding arbitration wish to have access to all information used by the arbitrators, including information from arbitrations between other harvesters and other processors.25 Thus, each harvester and processor would see the data submitted to the arbitrator by every other harvester and processor. Such exchange of competitive information could violate the antitrust laws.

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23See, e.g., Hinote, 423 F. Supp. at 1354 (in order to have antitrust immunity under the FCMA defendant must establish that not only was the cooperative entitled to FCMA protection, but that all entities with which defendant allegedly conspired were entitled to protection). Case-Swayne, 339 U.S. at 393 (Capper-Volstead Act is a special exception to a general legislative plan and therefore Court is not justified in expanding the Act's coverage).


25The February 2, 2003, Council Motion on Crab Rationalization states "Subject to limitations of antitrust laws and the need for proprietary confidentiality, all parties to an arbitration proceeding shall have access to all information provided to the arbitrator(s) in that proceeding." We have been informed by NOAA staff and Council staff that processors and harvesters would be given data from arbitrations that they did not participate in.
Information exchanges can be procompetitive, and therefore they are not automatically illegal but are examined under a rule of reason. *United States v. Citizens & Southern National Bank*, 422 U.S. 86, 113 (1975). An agreement among competitors to exchange information can be a violation of the Sherman Act if it is found to have an anticompetitive effect. *Todd v. Exxon Corp.*, 275 F.3d 191, 198-199 (2nd Cir., 2001), even without an agreement to adhere to a particular price.\(^\text{26}\)

We cannot say that the transfer of any particular type of data would be benign. When price, capacity and cost data are shared among competitors, the ability to monitor a collusive agreement for “cheating” can improve significantly; thus, if the inability to monitor collusion is a significant factor in preventing an agreement, data transfers can make an agreement possible. Similarly, when firms interact repeatedly in a market, exchanges of price data can help them reach a collusive price even without an explicit agreement; thus, if processors are exchanging wholesale crab product price data, they may be able to use that exchange to reach an implicit agreement on prices for those products.\(^\text{27}\)

The information that would be disseminated here includes data on historical distribution of wholesale crab product revenues between harvesters and processors,\(^\text{28}\) the pre-season market report (the outcome of the non-binding arbitration), other data on market prices and completed arbitrations, and data voluntarily submitted by IFQ and IPQ holders. If that data were

\(^{26}\) *United States v. Container Corp. of America*, 393 U.S. 333, 1336 (1969) (“exchange of price information seemed to have the effect of keeping prices within a fairly narrow ambit.”); *see also United States v. United States Gypsum Company*, 438 U.S. 422 (1978), (“exchanges of current price information, of course, have the greatest potential for generating anticompetitive effects and although not per se unlawful have consistently been held to violate the Sherman Act”).

\(^{27}\) In some cases, disseminating information to buyers and sellers can be pro-competitive if that information facilitates efficient trading. This procompetitive need for market information usually creates strong financial incentives for independent third parties to step in and provide that information. While we may be concerned that a market report could facilitate price fixing no matter who provides the information, when the competing market participants themselves organize to do it, those concerns are heightened. In the case of the market for raw crabs, the absence of third parties providing (or attempting to provide) this service currently makes us skeptical that informational problems are causing market failure; nor does the rationalization plan itself appear to create new informational problems. Finally, the benchmark price developed during non-binding arbitration does not appear to address any kind of market failure: With a stated purpose of reducing price disputes and guiding the decision of the arbitrator in the binding arbitration process, the benchmark price appears to be intended to facilitate an agreement to set prices.

\(^{28}\) February 2, 2003, Council Motion on Crab Rationalization at 4.
disseminated to processors, it could facilitate agreements to fix prices or limit capacity for processed crab products, newly developed crab products, or crabs delivered by holders of Class B shares. The shared data could also effectively suppress price competition for processed crab products even without a direct agreement. For example, if a new product is developed and processors learn each others' capacity for that product, then that knowledge could soften price competition for that product.

We have been told that some price data is already largely public, but the quality of that information is not clear. If disseminating the data provides no new, improved or more accessible information to processors, then it likely is not problematic. However, if the exchange of data increases the quality or reliability of already public data, antitrust concerns could arise.

We were told in interviews that harvesters and processors want access to all data used by the arbitrator so that they can insure that the data is accurate. This might justify only very limited information exchanges that facilitate the arbitration process.

C. Economic Effects of the Proposed Arbitration

One likely outcome of implementing either an IFQ-only or an IFQ-IPQ program is that bargaining power of harvesters and processors in negotiating ex-vessel prices will change, resulting in a new division of the economic rents created by crab harvesting and processing. Some argue that an IFQ-only program will shift bargaining power towards harvesters. Others argue that an IFQ-IPQ program will shift it towards processors.

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29If that data is largely "word of mouth," as we understand it is, the arbitration process could significantly improve the quality of information about prices.

30The arbitration proposal does not state whether data would be disseminated as it is received by the arbitrator or only after he has announced the price. If the data submitted in a given arbitration will be disseminated to participants in that arbitration as it is received, it could serve a purpose by enabling harvesters or processors to submit "rebuttal" data. However, we see no justification for harvesters or processors seeing data from arbitrations other than the ones in which they are participating. If the data is disseminated after the arbitrator has made his decision, the absence of a right of appeal of the decision appears to mean that there is no remedy available to a harvester or processor who believes that an arbitration decision was made on the basis of incorrect data and thus no need for the data to be disseminated.

31Because the Council proposes endowing IFQ and IPQ, rather than selling them, we assume these endowments are designed, at least in part, to compensate market participants for overcapitalization. If issuing both IFQ and IPQ rendered IFQ worthless because all bargaining power would accrue to processors (as some believe), then the compensation scheme would fail.
The Council has made it an explicit goal of the rationalization plan to preserve the historic division of revenues between processors and harvesters, and it has chosen the binding and non-binding arbitrations as its method for preserving that division. Apart from the antitrust concerns, arbitration to preserve the historic division of rents has the potential to inefficiently affect processor and harvester investment decisions. For example, processors could be deterred from making efficient investments because the arbitrator may, in the name of maintaining the historic division of revenues, transfer too much of the benefits from that investment to harvesters by setting the ex-vessel price too high. Conversely, setting the ex-vessel price too low could similarly deter harvesters from making efficient investments. When the division of rents is set by market mechanisms, the optimal investment decisions are preserved. In addition, this arbitration scheme is complex and could have many unpredictable and undesirable consequences as market participants learn how the system can be manipulated. For example, market participants have an incentive to manipulate the data they submit to the arbitrator to affect the perceived historic division of revenues or to distort (in their favor) the price required to meet this goal. Thus, there is no guarantee that arbitration can even meet its stated goal of preserving the historic division of revenues.

CONCLUSION

The Department endorses the proposed IFQ program. The current race to fish causes overcapitalization by harvesters and processors and results in market inefficiencies, danger to harvesters and difficulty in managing the crab population. The benefits from a system of readily tradeable IFQ in eliminating these externalities are likely to outweigh any negative effects of eliminating competition among harvesters.

The Department urges NOAA to oppose IPQ. Processor shares could deter product innovation, reduce the incentive for processors to make optimal investment decisions and raise prices for processed crab products, all without countervailing efficiency benefits.

32Because of the difficulties of measuring the division of economic rents, the Council recommends maintaining the historic division of revenues as a proxy for rents. However, some of the criteria the arbitrator is directed to consider, such as innovations and efficiencies, make it clear that the goal is to divide economic rents. BSAI Crab Rationalization Program Trailing Amendments, Community Protection Binding Arbitration, April 2002 at 21-23.

33We do not advocate substituting regulatory rate-making for market forces. We do note, however, that where legislators have chosen to have rates set by regulation they have instituted procedural rules that allow the quality of data used by the regulator to be tested and provide a right to appeal the regulator’s decision. In the case of the proposed arbitration system no such safeguards exist.
The Department urges NOAA to oppose the proposed non-binding and binding arbitration. The proposed arbitration could be used to facilitate price-fixing agreements, and participants in the arbitration who are not immune from the antitrust laws because of membership in a FCMA cooperative could be in violation of those laws. 'Arbitration is not a substitute for market forces and may distort the incentives of processors and harvesters to make efficient investments. It is also unwieldy and complex, and thus subject to manipulation or significant error.

Based on the competition and antitrust law concerns that we have discussed, we urge NOAA to request that the Council develop a rationalization plan that does not include IPQ or arbitration.

Sincerely,

[Signature]

R. Hewitt Pate
October 13, 2004

Mr. Donald McIssac  
Executive Director  
Pacific Fishery Management Council  
7700 Ambassador Place, Ste. 200  
Portland, OR 97220-1384

Dear Mr. McIssac:

Ecotrust and Ecotrust Canada are pleased to submit for inclusion in the briefing book for the upcoming Council meeting a draft report on the effects of IFQ programs on coastal communities in British Columbia. The final report and our complete database will be available to the Council in November.

The results are rather striking. While clearly the intent was to improve the economic viability of fishing operations, the result in fact has been to dramatically increase the rate of overcapitalization, further isolate rural and First Nations communities, as well as raise huge economic barriers for the next generation of fishermen hoping to enter the fleets.

The report utilizes maps to illustrate the geographic patterns of license and quota holdings by community for the entire BC coast. In light of these findings, we would like to request that the Council consider restarting its approach to IFQ program development. We suggest a focus not on just one gear sector of the groundfish fleet, but a comprehensive review of all sectors where IFQs may be relevant and conducting a thorough impact analysis on coastal communities. This will allow a far more rational approach to understanding how IQ programs can be structured to allow creative and adaptive responses by communities wishing to remain engaged in fisheries along the west coast.

The report is intended to stimulate further thinking and dialogue about IQ programs and we hope it will be received in this manner.

Respectfully,

Edward H. Backus

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CATCH-22
conservation, communities and the privatization of BC’s fisheries
an economic, social and ecological impact study
DRAFT - OCTOBER 13, 2004
executive summary

"Catch-22: Conservation, Communities and the Privatization of BC Fisheries" investigates the economic, social and ecological impacts of federal fisheries licensing policy, especially those promoting privatization whereby an individual or company owns a preset portion of the total allowable catch called an individual fishing quota (IFQ). Quotas are bought, sold or traded like shares on a stock exchange. Critics consider IFQs a form of resource privatization.

The Department of Fisheries and Oceans (DFO) has implemented IFQs in the geoduck, halibut, sablefish, groundfish trawl and three shellfish fisheries. It is currently developing a controversial plan—opposed by many working fishermen and First Nations—to privatize B.C.’s salmon fishery.

Many of the major reforms of B.C. fisheries in the 1990s, including the introduction of IFQ programs, represented a catch-22 for fishing-dependent communities. DFO’s solutions created as many economic, social and ecological problems as they solved.

**Economic Impact**

In the 1990s, Ottawa committed to reducing overcapitalization in the B.C. fishing industry to increase its economic viability. A decade later the market value of fishing vessels, equipment and licences actually grew. Overcapitalization is worse than ever. What went wrong?

Through license buybacks and other policies, Ottawa cut the fishing fleet in half and thereby reduced investment in vessels and equipment to about $286 million, a 64 percent reduction from 1988 to 2003. However, this decrease was more than offset by the doubling in value of commercial fishing licenses and quota to $1.8 billion over those same years.

DFO policies, such as the Mifflin Plan for salmon and individual fishing quotas (IFQs) for groundfish, created wildly inflationary markets for licences and quota. Between 1994 and 2002, the price of gillnet salmon licences more than doubled and troll licences rose more than one-third. Other fisheries experienced skyrocketing trends, too. The advertised price of halibut quota increased from $9 per pound in 1991 to $36 per pound in 2004. In fact, the groundfish IFQ fisheries including halibut, sablefish and groundfish trawl are some of the most capital-intensive fisheries in B.C.

For those who have them, fishing quotas and licences are highly profitable, revenue-generating assets. As a result, they are becoming increasingly concentrated in fewer and fewer hands. Their extremely high market value is well outside the reach of many rural working families, First Nations and younger fishermen. A fisherman now needs to be a millionaire to enter into most fisheries.

**Social Impacts**

With salmon catches declining and the prices of licences and quota soaring because of DFO policies, many fishermen have been forced to sell out either under the auspices of “voluntary” licence retirement programs or by selling their licences to wealthier fishermen.

Not surprisingly, many of those fishermen who sold out were in rural and aboriginal communities. Between 1994 and 2002, rural communities, with a population of less than 10,000, lost 554 licences as a result of fleet downsizing and the sale of licences to urban areas. That’s almost half (45 percent) of all shellfish, groundfish and pelagic fishing licences owned by rural people. The decline in urban coastal regions was only 30 percent.

Because of lower incomes, limited economic opportunities and lower property values, rural fishermen have less access to capital than their urban counterparts. First Nations people face even more obstacles, since their incomes are 35 percent lower than the B.C. average and unemployment is double. Additionally, many native people living on Indian reserves do not have fee-simple ownership of their homes and
therefore cannot use home equity to borrow money to buy fishing licences or quotas.

As a result, both rural and aboriginal individual ownership of commercial fishing licences and quota has declined precipitously. Native individuals privately own 1,106 fishing licences, or only 18 percent of all commercial licences (excluding clam licences which cannot be bought or sold and so don’t have a market value). For IFQ fisheries, private native ownership is only five percent.

One of the effects of the shift in licence ownership is that many rural communities and First Nations see few benefits accruing from adjacent fisheries resources. The West Coast of Vancouver Island is a case in point. Local residents own only two percent of all groundfish trawl, halibut and sablefish licences. Participation in IFQ fisheries is only marginally better in the North Island and North Coast, at three and nine percent, respectively.

In effect, fisheries policy, whether intentional or not, is skewed in favour of urban-based corporations and individuals with greater access to capital and economic opportunities. Those communities most dependent on fishing for their economic lifeblood are being squeezed out of B.C. fisheries.

**ECOLOGICAL IMPACTS**

The conservation record of privatizing fisheries through individual fishing quotas (IFQs) is dubious at best. By giving fishermen a set individual quota, IFQs end the frenzied “race for fish.” However, IFQs can induce bad behaviour by fishermen, including quota busting, poaching, throwing back small fish (high-grading) and misreporting catches. These problems can be solved in part by onboard and dockside observers but add considerable costs to fishing.

Setting a total allowable catch (TAC)—which is scientifically defensible and sustainable—is one of the most important fisheries conservation measures. Privatizing fisheries through IFQs raises two fundamental problems about how sustainable catch levels are set.

First, IFQs create windfall profits for those who initially receive them, but create huge debt for new entrants who must buy the expensive quotas in order to fish. This overcapitalization puts pressure on the resource since fishermen lobby for higher catches to finance their bigger debt-loads. Previously, the problem was “too many fishermen chasing too few fish.” Today, it’s “too much money chasing too few fish.” Under such a scenario, short-term profits win out over conservation as fishermen succumb to immediate financial pressures.

Second, as part of their attempts to privatize fishery resources, DFO has established co-management agreements with exclusive groups of licence and quota holders, which has increased the influence of industry stakeholders. Conservation groups, communities, First Nations, and labour interests are marginalized, since fisheries management becomes increasingly focused on maximizing the narrow economic returns of licence and quota holders. Economic interests must be balanced by community and conservation values.

The privatization of B.C. fisheries has netted a catch-22: DFO’s solution has become the problem, worsening overcapitalization, undermining the sustainability of fishing-dependent communities and compromising conservation for economic efficiency. It is time for a serious re-examination of current policy and a move towards new solutions that work towards the long-term health and viability of fishing-dependent communities and fish stocks.

**RECOMMENDATIONS**

1) **Public Registry**

DFO should establish a public registry requiring individuals and companies to register all their leases, trades and sales of fishing licences and quota, and to fully disclose financial interests in these assets. The registry would allow the government, industry and public to monitor ownership and capital trends in the industry and to help protect against corporate concentration and overcapitalization.
2) National Standards
DFO should establish national standards for IFQ programs that would reduce overcapitalization in licences and quota, protect working crews from bearing the costs of quota leases, and limit excessive consolidation and corporate concentration in the fishing industry.

3) Community Quota Entities
DFO should permit the establishment of and provide funding for Community Quota Entities, which would be non-profit societies established to hold fisheries licences and quota in trust for aboriginal and fishing-dependent coastal communities. The CQEs would lease fishing privileges to local fishermen and facilitate new entrants into the industry.

4) Public Data
DFO should establish a comprehensive data-access policy that provides full and transparent access to biological and catch data and thereby rebuild trust in DFO Science and ensure rigorous review of fisheries decision-making by independent scientists and the public. Furthermore, all fisheries data funded and collected by private companies as part of IFQ fisheries must be placed in the public domain.

5) Fisheries Co-management
DFO must ensure that diverse interests are represented in fisheries co-management agreements and harvesting committees including licence and quota holders, labour, processors, coastal communities, First Nations, environmentalists and other citizen groups. Economic interests must be balanced by social and ecological values.
research team

This report is published by Ecotrust Canada and Ecotrust (USA), based in Vancouver, B.C, and Portland, Oregon, respectively. The work of both non-profit organizations is predicated on the notion that economic and ecological systems are mutually interdependent. To this relationship, Ecotrust Canada and Ecotrust have sought to add a third "e"—social equity—to ensure that economic development awards benefits to all the citizens of the Pacific Northwest. Economy, ecology, equity: the triple bottom line. That’s the vision and methodology we have applied in Catch-22: Conservation, Communities and the Privatization of B.C. Fisheries.

A team of researchers in Canada and the United States researched and wrote the report. They include Dr. Astrid Scholz, a resource economist for Ecotrust; Eric Enno Tamm, a researcher and writer for Ecotrust Canada; Dr. Andrew Day, a fisheries management consultant; Danielle Edwards, a fisheries database specialist and marine biologist; and Charles Steinback, a GIS (Geographic Information Systems) analyst for Ecotrust.

Aquatic Management Board and ‘Namgis First Nation on Vancouver Island, and represents independent advice and analysis provided to these partners. Ecotrust Canada and Ecotrust would like to thank the steering committee which guided the production of the report, including members of the research team, Dr. Marty Weinstein, aquatic resources coordinator to the ‘Namgis First Nation; Mona McDougall, assistant aquatic resources coordinator to the ‘Namgis First Nation; Edward Backus, Vice President of Fisheries for Ecotrust; Brenda Kuecks, Director of Community Programs for Ecotrust Canada; and Ian Scott, GIS manager for Ecotrust Canada.

Ecotrust Canada and Ecotrust would also like to thank several individuals who reviewed early drafts of the document: Dr. Don Hall, Fisheries Manager for the Nuu-chah-nulth Tribal Council; and Dr. Chris Newton, formerly the chief fisheries economist for the Food and Agriculture Organization in Rome. Special thanks also to Jeff Ardron, marine analyst with Living Ocean Society, for providing fisheries data to the research team.

Ecotrust Canada and Ecotrust would also like to thank the Oak Foundation for their financial contributions to research and publish this report.

acknowledgements

The report was commissioned in partnership with the West Coast of Vancouver Island.
note on statistics

Unless otherwise noted, data for this report were obtained from the DFO Pacific Fishery Licence Unit, DFO Catch Statistics Unit, on-line landings statistics, and various publications and reports. Due to considerable challenges in obtaining complete time series of information for all fisheries, we focus our analysis between 1994 and 2002—the two most complete years of data available to us, which also fall before and after several major regulatory and policy changes in B.C. fisheries. The comparative analysis for 1994 and 2002 excludes the party-based non-vessel licences (such as herring gillnet, intertidal clam, goose barnacle, herring bait and smelt fisheries), because the 1994 licence lists were not available from DFO. Financial figures have been converted to constant 2003 dollars, unless otherwise noted.
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CHAPTER 1
introduction

Over the past decade, Canada’s Pacific fishery has undergone fundamental changes. A combination of factors—habitat degradation, overcapacity and overcapitalization, fish stock depletions, declines in ocean productivity and depressed global fish prices—threatened the fishing industry’s viability. In response, the Department of Fisheries and Oceans (DFO) introduced a sweeping set of policies to restructure and rationalize the industry. The objectives were two-fold: (1) to improve economic viability and (2) to impose stricter conservation measures including reduced bycatch, improved monitoring and the targeted protection of weak fish stocks.

In part, these changes came as a result of severe federal government restraint. In the 1995 federal budget then-Finance Minister Paul Martin committed to privatizing many of the responsibilities and services of DFO by entering “into partnerships with the fishing industry and others in the management of capacity, licensing and compliance.” The objectives of cutting DFO’s budget, increasing revenues through new user fees and downloading responsibility to industry were well served by privatization.

This report focuses on the impact of these policy reforms on communities and conservation. We begin by reviewing the history of federal fisheries licensing policy and the growing shift to privatized models of fisheries ownership and management. The study looks at how these policy reforms have changed the economics of fishing. Have fisheries reforms reduced or increased over-capitalization in the fishing industry? We then explore the social impacts in terms of distribution of wealth, especially to rural and aboriginal communities. How has DFO policy reform affected fishermen in rural communities and aboriginal participation in fisheries? Our research employs a novel approach by using GIS (Geographic Information Systems) to investigate the spatial patterns of licence ownership, effectively mapping the socio-economics of B.C. fisheries. The final section of the report deals with conservation. What are the long-term ecological implications of this policy reform on fish stocks? Does privatizing the ownership of fisheries resources promote conservation?

Our analysis is based on DFO’s licensing and catch landings databases from 1994 to 2002, a survey of the market value of fishing licences and a review of relevant academic research and published reports. Using this data and information, we address the economic, social and ecological impacts of fisheries licensing policy in BC.

We do so in the spirit of provoking a broad-based public discussion about the future of our ocean resources and to provide communities and First Nations with both data and analysis that will contribute to a better understanding of fisheries policy. Our report is also a challenge to decision-makers to conduct thorough and comprehensive impact analysis of policy options in fisheries prior to implementation. We caution that our report is only a beginning and invite discussion, debate and further research and analysis on these issues critical to the survival of our ocean resources and coastal communities.

Our analysis shows that many of the major reforms of B.C. fisheries in the 1990s represented a catch-22 for communities: The solutions became, in effect, part of the problem. Far from reducing over-capitalization in fisheries, DFO policies exacerbated the problem and instead of increasing the economic viability of coastal communities, the rationalization, restructuring and ultimately privatization of B.C. fisheries marginalized aboriginal fishermen and rural regions. Poor regions have become even poorer. Despite the commitment stated in Canada’s Oceans Strategy that coastal communities “be actively involved in the development, promotion, and implementation of sustainable oceans activities,” this report has revealed that quite the opposite is true. As far as commercial fisheries are concerned, coastal
communities are less involved than a decade ago.

Human communities are part of the rich diversity of B.C.’s marine ecosystem. Recognizing the importance of the connection of coastal people to the sea, the U.N. Convention of the Law of the Sea calls upon states to consider the “economic needs of coastal fishing communities” and the FAO’s Code of Conduct for Responsible Fisheries recognizes “the important contributions of artisanal and small-scale fisheries to employment, income and food security” in fishing-dependent communities, which should receive “preferential access” to fisheries.

A thriving coastal economy and bustling rural communities, social justice and the righting of historic wrongs for First Nations, abundant fish stocks and pristine marine ecosystems—these are the tangible benchmarks by which we must measure our success to manage our ocean resources. The ocean is part of humanity’s common wealth. We have provided in this report some practical and innovative recommendations to enhance conservation and to re-engage coastal communities in the ownership and management of our common-property ocean resources.
CHAPTER 2
fisheries: public trust
or private property?

Fish, by nature, are a common property. They are largely undomesticated animals and swim indifferently across the world’s borders. Their home—the ocean—is a common pool, defying bureaucratic boxes, legal jurisdictions, economic theories, and physical barriers. This has created a challenge for fisheries managers throughout history.

Under British common law, the Crown has provided the public with a right to tidal fisheries dating back to the Magna Carta in 1215 AD. In Canada, the federal government, on behalf of the Crown, has legal authority to manage fisheries in the public interest.

Canadian federal authority, however, is balanced with First Nations’ rights and title. Through various decisions, including R. v. Delgamuukw and R. v. Sparrow, among others, courts have defined aboriginal title as a sui generis collective property right, meaning British common law and Canadian constitutional law need to be reconciled with the prior occupation of First Nations. Aboriginal title involves several issues—how the land and ocean resources are managed and used, the right to exclusive use or occupation, and the question of “fair” economic benefit from resource use. In addition to rights to fish for food, social and ceremonial purposes, First Nations have established rights to fish for economic purposes (R. v. Gladstone). The extent of First Nations’ rights and title are the subject of on-going litigation and negotiation.

Subject to certain conditions, including conservation measures and the aforementioned First Nations rights, the Minister of Fisheries and Oceans grants a fishing licence to a person (an individual or a company) to harvest a certain species of fish. Legally, a licence is not a permanent authorization or right to fish nor a permanent grant of fish. It is a privilege granted on an annual basis. The courts have confirmed that under the Fisheries Act, “the Minister has absolute discretion in determining the issuance of licences.”

For much of the twentieth century, the Minister granted fishing licences to any citizen who wanted to fish. The only exceptions were, at times, racial restrictions placed on Aboriginal people and immigrants of Asian descent. Otherwise, any Canadian was free to participate, commercially or recreationally, in fishing. By the 1960s, however, this open-access system became untenable. There were simply “too many fishermen chasing too few fish” in largely unregulated, highly competitive derby fisheries. There was a perceived need for stricter government control.

LIMITED ENTRY

In 1969, Ottawa imposed limited entry in the commercial salmon industry in B.C., restricting access to vessels that historically participated in the salmon fishery. Under the “Davis Plan,” named after Fisheries Minister Jack Davis at the time, any fishing vessel that caught 10,000 pounds or more of salmon in either 1967 or 1968 was granted a licence. A total of 5,870 salmon or “A” licences were issued. In 1974, herring licences were similarly limited. Limited entry ended the open access nature of commercial fishing in B.C.

In 1977, Canada extended its jurisdiction 200 nautical miles offshore and asserted control over fisheries in its territorial waters, the so-called Exclusive Economic Zone (EEZ). With expansion of domestic fishing capacity, Ottawa imposed limited entry in several other fisheries by the early 1980s: halibut, groundfish trawl, geoduck, abalone, spawn-on-kelp and sablefish. A decade later, there was limited entry in almost every commercial fishery in B.C.

In 1969 the estimated value of the salmon fleet was $483 million (in 2003 dollars), reflecting the value of vessels and equipment. With the introduction of the Davis Plan, however, the
value soared. Although a licence was still—by legal definition—only an annual permit to fish, the government allowed fishermen to buy, sell and transfer them. A fishing licence became a valuable privilege, especially as prices for salmon and herring rose in the 1970s. By 1988, the estimated market value of the fishing fleet was $1.68 billion. More than half of that, or $902 million, reflected the value of the fleet’s licences. Taking inflation into account, the capital value of the fleet increased more than threefold in 20 years.\(^8\) With virtually no limits on licence transferability and growing investment in new vessels and technology, capitalization in the industry actually grew.

**INDIVIDUAL FISHING QUOTAS**

Responding to overcapitalization and excess capacity issues in the fishing fleet, in 1982 Dr. Peter Pearse, then chairman of the Royal Commission on Pacific Fisheries Policy, recommended that Ottawa go further in formalizing private property rights through a new licensing regime. The proposed remedy had the same objective as in the 1960s: to reduce the fleet by excluding some fishermen while granting more secure fishing rights to others. Dr. Pearse recommended that DFO not only give fewer licences, but also give selected licence holders a pre-defined portion of the available fish. Individual fishing quotas, or IFQs, would grant an exclusive right to an individual or company to fish a certain percentage of the total allowable catch (TAC) of a fish species in a specific geographic area. Quotas would end the competitive nature of fisheries. Pearse’s proposal went further still. He proposed that licence holders should be able to buy, sell, lease and trade quota without restriction, making quotas fully transferable. This is known as an ITQ (individual transferable quota) system. As fishermen buy and sell licences, according to economic theory, larger, more efficient operators would buy out smaller ones, overcapitalization would decrease, and the fleet would become smaller and more manageable. (Pearse recently repeated this proposal in his coauthored federal-provincial report on the salmon fishery, *Treatise and Transition: Towards a Sustainable Fishery on Canada’s Pacific Coast.*\(^9\) In this latest version, he emphasized the concept that licences should be long-term tenures rather than annual privileges.)

The idea that fish should be privately owned and bought and sold like shares in the stock market was a radical departure from the notion of fish as common property. Nevertheless, the idea of privatizing fisheries through tradable quotas gained prominence. Some fishermen and fishing companies who stood to gain a “windfall profit” from the initial grant of quotas promoted privatization. Senior DFO officials, who saw an opportunity to offload management costs and responsibilities onto industry and meet their budget reduction targets, also supported privatization. Others, such as the Fraser Institute, trumpeted quotas for ideological reasons, believing that a free-market approach to managing natural resources would optimize economic benefits and ensure conservation.\(^10\)

**SALMON DILEMMA**

Salmon, however, were problematic and not so easily moved into a quota system. In 1994, there were 4,415 salmon licences, divided among seiners, gillnetters and trollers, which caught five species of salmon from more than 4,000 distinct stocks spawning in some 1,500 streams and rivers. Salmon stock levels fluctuate wildly, forcing DFO managers to upgrade or downgrade the salmon runs and allowable catches during the fishing season. It would be logistically difficult, perhaps even impossible, to assign individual quotas to each fisherman for each species for each river, and adjust these in-season. Salmon stocks were nevertheless declining and excessive fishing capacity threatened the resource. A different solution was sought in 1996 with the introduction of the Pacific Salmon Revitalization Strategy, known as the Mifflin Plan, name after Fisheries Minister Fred Mifflin at the time.

The Mifflin Plan involved three elements: an $80-million licence retirement or “buyback” program, single gear licensing which restricted fishermen to one kind of gear only, and area licensing which further restricted fishermen to one of two seine areas, or one of three gillnet or troll areas. If fishermen wanted to fish in another area or with different gear, they would have to buy out a fellow fisherman and “stack” the licence on their vessel. The stacking provision would further rationalize the fleet. Following Pearse’s argument, fishermen with more
efficient boats—and more money—would buy out smaller, marginal operators.

**GROUNDFISH TRAWL IFQs**

The following year DFO reformed the groundfish trawl fishery, implementing individual transferable quotas. At approximately 140,000 tonnes in annual landings, groundfish trawling is the largest fishery by volume in B.C. It equals about 60 percent of the total landed weight of all fisheries in B.C. There are 55 area-specific species quotas in the fishery and through a system of buying, selling, trading and leasing the fleet was rationalized to some 60 to 80 working vessels from 142. A Groundfish Development Authority (GDA), representing community and labour interests, was also established to provide advice to the Minister regarding 20 percent of the quota allocations.

The privatization of the trawl fishery saw the establishment of a commercial quota registry. According to its website, A to Z Quota Registry is “sort of like a small stock exchange. Vessel and licence holders register their quotas, vessels, licences, and equipment with our company, and we try and match buyers with sellers, or those interested in trading quota. When a match is found we collect either a service charge or commission from the participants.”12 Thus, B.C.’s first private fish stock exchange with buyers, sellers and brokers was created.

**RESOURCE PRIVATIZATION**

What has been the cumulative effect of all these licensing policy reforms? More than 30 years after the introduction of the Davis Plan, the B.C. fishery is being consolidated and increasingly privatized. By 2003, 76 percent of all commercial fisheries, by weight, were managed as quota fisheries (including roe herring which involves licence pools and quotas); the percentage is 52 percent by landed value.

Participation in commercial fisheries—with the exception of special non-transferable native and clam licences—is dependent on how much money one has. Access to capital has become the ultimate requisite for a successful fisherman. According to the A to Z Quota Registry, participation in commercial fishing “is just a matter of money.”

B.C.’s fisheries are being managed to maximize the returns of licence and quota holders—if not the *de jure* then the *de facto* owners of the fish in the ocean—while marginalizing or simply ignoring the interests of crews, shore workers, marine suppliers and the broader socio-economic benefits for rural fishing communities and First Nations. Ocean resources are shifting from being a public trust managed for the benefit of all Canadians to private property managed in the narrow interest of exclusive groups of licence and quota holders. This privatization of a public resource has fundamentally changed the economics of fishing and significantly skewed who participates in and benefits from Canada’s Pacific fisheries.

---

**FIGURE 1: Privatization of B.C. Fisheries**

<table>
<thead>
<tr>
<th>Quota Fisheries &amp; Competitive Fisheries, 2003</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tonnes</strong></td>
</tr>
<tr>
<td>Quota Fisheries</td>
</tr>
<tr>
<td>164,008</td>
</tr>
<tr>
<td>52,052</td>
</tr>
</tbody>
</table>

* Quota fisheries include roe herring gillnet and seine fisheries
CHAPTER 3

economic impacts: fishing for millionaires

Capital investment in the B.C. fishing fleet has soared since 1969. Investment has taken two forms. The first category is investment in vessels and equipment. As earnings grew in the 1970s, fishermen reinvested in their operations to increase their fishing efficiency. Vessels became bigger, more powerful and faster to increase their catching capacity in the race for the fish. Many boats were retrofitted with bigger holds, better motors, keener electronics and refrigeration to freeze fish at sea. The fishing fleet had far more catching capacity than could be supported by sustainable harvest levels.

Increased earnings and more catching capacity, combined with limited entry, created a lucrative market for fishermen to buy and sell their licences. Investment in licences, in fact, became larger than investment in vessels and equipment. From 1969 to 1988, the market value of the fleet jumped by 360 percent. More than half this reflected the enormous value of licences, largely salmon and herring—the coast’s two most lucrative fisheries. Unfortunately, this capitalization in vessels and licences created more problems than it solved.

A 1986 report by the Auditor-General of Canada identified several negative consequences of

| TABLE 2: Estimation of Licence and Quota Market Values by B.C. Fishery |
|------------------------|-----------------|-----------------|-----------------|-----------------|
| **SALMON**             |                 |                 |                 |                 |
| Seine (AS)             | 266             | $361,880        | $96,260,000     | $96,260,000     |
| Gillnet (AG)           | 1075            | $82,767         | $88,975,000     | $88,975,000     |
| Troll (AT)             | 520             | $99,115         | $51,540,000     | $51,540,000     |
| **Salmon Total**       |                 |                 | $236,775,000    | $236,775,000    |
| **HERRING**            |                 |                 |                 |                 |
| Seine (HS)             | 251             | $709,462        | $178,075,000    | $178,075,000    |
| Gillnet (HG)           | 1250            | $140,564        | $175,705,000    | $175,705,000    |
| Spawn on kelp (J)      | 37              | $925,000        | $34,225,000     | $34,225,000     |
| **Herring Total**      |                 |                 | $388,005,000    | $388,005,000    |
| **GROUNDFISH**         |                 |                 | $75,765,200     | $279,252,300    |
| Trawl (T)              | 142             | $81,900         | $11,629,800     | $267,622,500    |
| Halibut (L)            | 410             | $46,860         | $19,212,600     | $317,250,000    |
| Sablefish (k)          | 47              | $190,000        | $8,930,000      | $139,568,817    |
| Rockfish (ZN)          | 248             | $101,782        | $25,242,000     | $139,568,817    |
| Schedule II (C)        | 527             | $20,400         | $10,750,800     | $10,750,800     |
| Groundfish total       |                 |                 | $75,765,200     | $789,455,717    |
| **SHELLFISH**          |                 |                 |                 |                 |
| Crab (R)               | 213             | $352,000        | $74,976,000     | $74,976,000     |
| Prawn (W)              | 247             | $438,000        | $108,186,000    | $108,186,000    |
| Shrimp (S)             | 235             | $49,200         | $11,562,000     | $11,562,000     |
| Geoduck (G)            | 55              | $3,000,000      | $165,000,000    | $165,000,000    |
| Red Urchin             | 104             | $235,000        | $24,440,000     | $24,440,000     |
| Green Urchin           | 49              | $40,000         | $1,960,000      | $1,960,000      |
| Sea Cucumber           | 85              | $100,000        | $8,500,000      | $8,500,000      |
| Euphausiid (ZF)        | 18              | $75,000         | $1,350,000      | $1,350,000      |
| **TOTAL FISHERIES**    |                 | $1,096,519,200  | $724,441,317    | $1,820,960,517  |

DFO’s licensing policy. According to the Auditor-General, although the number of fishing boats declined from 6,600 to 4,400 over a 15-year period, “the catching capability of the total fleet has increased dramatically through upgrading vessels under existing licences or by technological improvements. Moreover, the Auditor General concluded that, “the high level of investment in fleet capacity in relation to the value of the fisheries resource makes it difficult for fishermen to earn an adequate return on their investment income and creates financial difficulties when there are poor fishing seasons, price declines, or interest rate increases.” As a result, “the risk of over-fishing has increased substantially in the past decade.” The risk was reality. The Auditor General noted declining fish stocks and consistent over-fishing.

By 1995, in fact, salmon stocks and prices had declined to the point where the fishing fleet in B.C. began to lose money in terms of pre-tax income. The Mifflin Plan was designed to increase the fleet’s economic viability. Between 1996 and 2000, the combined effect of the licence retirement program and licence stacking cut the fleet by 54 percent, reducing capital investment in vessels and equipment proportionately.

However, a report commissioned by the BC Job Protection Commission found that the Mifflin Plan’s buyback and new licensing provisions doubled the market value of licences, even in the face of declining catches.

RISING MARKET VALUES

A survey of average sale prices (in 2003 dollars) advertised in various maritime publications (including The West Coast Fishermen and Fishermen Life) provides a relative comparison of the growing capitalization in salmon licences. Between 1994 (before the Mifflin Plan) and 2002, the average advertised sale value of a gillnet licence more than doubled, while the landed value per licence dropped by 60 percent. The sale value of troll licences went up by 35 percent while the average catch per licence dropped 48 percent. Although the Mifflin Plan was supposed to reduce overcapitalization in the fleet by reducing the number of boats, it had the opposite effect since licence values soared. It became more expensive than ever to become a salmon fisherman. A gillnet licence was worth six times the value of its annual landed catch and a troll licence three times.

Other fisheries, especially those with IFQ programs, experienced inflationary trends too. The advertised price of halibut quota, for example, increased from $9 per pound in 1991 (the first year of the quota system) to $27 per pound in 2002, a threefold increase when adjusted for inflation. By 2004, the price of one pound of halibut quota reached as high as $36.

Three factors, in part, increased the market value of halibut quota: harvesting costs decreased since fewer boats and crews fished the stock and the landed value rose more from $21 million in 1990 to $39 million in 1999, an 84 percent increase, due to higher catches and prices.
larger landings, better prices and lower costs do not account for most of the 300 percent increase in the market value of quota. A similar trend occurred with sablefish quota, which was advertised in the *West Coast Fishermen* in 1990 (the first year of the quota system) for $7.86 per pound, but is valued now between $40 and $50 per pound.

Licence values rose across the board for all fisheries, but disproportionately higher in groundfish quota fisheries. DFO set out to reduce overcapitalization in the fishing industry, but its policies had the opposite effect. What went wrong?

"WINDFALL PROFITS"

Several factors influenced the market value of commercial fishing privileges. First the granting or gifting of licences and quota created “windfall profits” for those who received them. The initial allocation of licences and quota cost nothing to the initial recipients and represented “a giveaway of public resources.”21 New entrants to fisheries must buy these licences to gain access to the resource. The market value paid to the initial recipient represents a windfall.22 So for instance, those 55 individuals initially granted geoduck quota-licences (one licence equals a 1/55th quota share of the TAC) in 1989 now have an asset worth $3.2 million. The average sablefish licence and quota holder owns an asset worth $3.2 million. And the average halibut licence and quota holder has an $820,000 asset. Many of those who were given licences and quota have reinvested their earnings in the fishery by buying more licences and quota. The tax system encourages this by making licence and quota purchases tax deductible. The initial windfall profit and subsequent buying and selling of licences and quota capitalized the fishery unlike never before.

**LICENCE STACKING**

Fisheries policy reform in the later 1990s created markets for the buying and selling of licences and quota. The Mifflin Plan, for instance, allowed those remaining in the industry to buy more licences to remain viable. A small-boat fisherman could stack multiple licences on a single vessel under the scheme. Many fishermen did just that. In 1994, 81 percent of salmon fishermen only owned one licence; in 2002, that number declined to 52 percent.

Fisheries policies that permit “stacking” increase the market value of licences. According to one study, “Each dollar of fisheries revenue for which licences can be stacked has much greater profit potential than a dollar of revenue for unstackable licences. The reason is that the revenue from the additional licence(s) does not have to go to serving fixed costs, such as vessel insurance and repairs. This greater profit potential, in turn, is translated into a higher licence value.”23 The study found that the market value of “stackable” licences (such as salmon) is three to six times the annual landed value per licence, while the market value of non-stackable licences are on par with annual catches. This is consistent with our findings. (See Figure 2A and 2B.)

**QUOTA LEASING**

Quotas can also be stacked in that fishermen can accumulate quota on a single vessel and increased their efficiency through economies of scale. IFQs also have another attribute which has
made them more valuable. IFQs encourage leasing whereby a quota holder rents quota to a working fisherman for a fee. Leasing fees, especially in the B.C. halibut fishery, have been as high as 70 to 80 percent of the revenue from the landed catch, which is similar to anecdotal evidence in Atlantic Canada.

It’s a lucrative arrangement for quota holders, since their economic returns are often secured through pre-season agreements irrespective of the fluctuating market price for the fish. Furthermore, quota holders bear no risk to property or personal injury from fishing, a dangerous occupation even during fair weather. Leasing—often done privately and informally—further increased the market value of IFQs, making them a valuable, revenue-generating asset.

**INCREASING DEMAND, SHRINKING SUPPLY**

Another factor contributing to the rising market value for fishing licences is growing demand, especially in the face of declining stocks (decreasing supply) in many fisheries. Allocation disputes among recreational, commercial and aboriginal fishermen have become more acrimonious as a result.

Over the past three decades, many of those fishermen initially excluded in limited-entry licensing were First Nation fishermen. To address this loss of access, the government has chosen to purchase some licences back from commercial fishermen and reissue them to First Nations through the Northern Native Fishing Corporation or band-held, non-transferable communal licences.

There is now growing demand for more licences. In 2004, a First Nation Panel on Fisheries recommended, “Canada take immediate steps to allocate to First Nations a minimum 50 per cent share of all fisheries, with the understanding that this may eventually reach 100 per cent in some fisheries.” Similar demands for an increased share of fisheries resources are also being made in modern treaty negotiations and litigation by coastal and in-river tribes.

Realizing the growing demand for fisheries quota and licences, many fishermen have supported IFQs to secure their ownership over fisheries and thus ensure they are adequately compensated if licences and quota are bought and transferred to First Nations through treaties. This has added the dynamic of speculative investment, a problem that even DFO has recognized. In 1994, an internal DFO memo from Assistant Deputy Minister Pat Chamut stated “the creation of IQs [individual quotas] creates disproportionate wealth for those who receive them… It has become evident that the adoption of IQs and the associated windfall profits that they will generate for fishermen will significantly increase the costs of future land claim settlements.”

Realizing this problem, the First Nations Panel on Fisheries has recently renewed calls that “a moratorium be placed on the further introduction of individual property rights regimes such as Individual Fishing Quotas (IFQs) unless First Nation interests including allocations in those fisheries are first addressed.”

Windfall profits, licensing policy that encourages licence stacking and quota leasing and growing demands by First Nations and stakeholders for commercial allocations have all contributed to the rising price of fishing licences and quota.

**GROWING OVERCAPITALIZATION**

How can overcapitalization in fisheries be measured? One means to compare the relative capitalization of one fishery to another is to calculate the ratio of the market value of licences and quota (capitalization) to the annual landed value in the fishery (revenue). Capital-to-revenue ratios have been calculated for B.C. fisheries in Table 3. A higher ratio indicates a relatively higher level of capitalization in the fishery.
In B.C., the gillnet and seine roe herring fisheries suffer from the most severe overcapitalization, with a capital-to-revenue ratio of 10. The fishery involves several licence holders “pooling” their licences together (a minimum of four for gillnet and eight for seine) and then receiving a collective quota to be fished by a vessel.30 In this way, the fishery combines elements of licence stacking (through the pooling of several licences on one vessel) and quotas. Since an owner-operator provision was dropped in 1979 and licences made transferable in 1991, leasing of herring licences is also permitted. These licensing provisions, combined with decreased catches and low herring prices, has created a highly overcapitalized fishery.

In contrast, the spawn-on-kelp roe herring fishery is one of the least capital-intensive fisheries in the province. The market value of the 37 J licences for the fishery is about $34 million and the average annual landed value is $9.5 million, giving a capital-to-revenue ratio of 3.6. All commercial licences in the spawn-on-kelp fishery are non-transferable and 78 percent are held by First Nations.31 Because these licences cannot be technically transferred (private, unofficial leasing does occur), their market value has remained low.

The groundfish trawl, halibut and sablefish IFQ fisheries suffer from overcapitalization with ratios of 9.2, 8.3 and 6.9 respectively. In the case of sablefish, the ratio is increasing since the landed value of sablefish has steadily declined by 50 percent since 1999. (Landed values in the ratios are based on a five-year annual average to take into account cyclical fluctuations.) Using only the 2003 landed value, the ratio would be 8.3 for sablefish.

The fisheries with the lowest capitalization ratios tend to be non-IFQ or have a low landed value.

FISHING FOR MILLIONAIRES

In the 1990s, Ottawa committed to reducing overcapitalization in the B.C. fishing industry to increase its economic viability. A decade later the value of fishing vessels, equipment and licences actually increased. Overcapitalization is worse than ever. What went wrong?

Ottawa cut the fishing fleet in half, through licence buybacks and other policies, reducing investment in vessels and equipment to about $286 million, a 64 percent reduction from 1988 to 2003. However, these same policies had the opposite effect on capitalization in fishing privileges. The value of all B.C. commercial fishing licences and quotas doubled in those years to $1.8 billion. This increased the total market value of the fishing fleet (including licences, equipment and vessels) by 25 percent.

### TABLE 3: Relative Capitalization in B.C. Fisheries

<table>
<thead>
<tr>
<th>Species</th>
<th>Capitalization (market value) of licences and quota</th>
<th>Annual landed value (5-year average)</th>
<th>Capital-Revenue ratios</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roe Herring (HS, HG)</td>
<td>$353,780,000</td>
<td>$35,313,400</td>
<td>10.02</td>
</tr>
<tr>
<td>Groundfish Trawl (T)*</td>
<td>$279,282,300</td>
<td>$30,184,148</td>
<td>9.25</td>
</tr>
<tr>
<td>Halibut (L)**</td>
<td>$336,462,600</td>
<td>$40,807,400</td>
<td>8.25</td>
</tr>
<tr>
<td>Sablefish (K)***</td>
<td>$148,498,817</td>
<td>$21,469,990</td>
<td>6.92</td>
</tr>
<tr>
<td>Sea Cucumber (ZD)</td>
<td>$8,500,000</td>
<td>$1,580,200</td>
<td>5.38</td>
</tr>
<tr>
<td>Salmon (AS, AG, AT)</td>
<td>$236,775,000</td>
<td>$44,390,400</td>
<td>5.33</td>
</tr>
<tr>
<td>Geoduck (G)</td>
<td>$165,000,000</td>
<td>$35,805,800</td>
<td>4.61</td>
</tr>
<tr>
<td>Prawn (W)</td>
<td>$108,186,000</td>
<td>$26,309,800</td>
<td>4.11</td>
</tr>
<tr>
<td>Red Urchin (ZC)</td>
<td>$24,440,000</td>
<td>$7,617,600</td>
<td>3.21</td>
</tr>
<tr>
<td>Green Urchin (ZA)</td>
<td>$1,960,000</td>
<td>$644,400</td>
<td>3.04</td>
</tr>
<tr>
<td>Spawn on Kelp (J)***</td>
<td>$34,225,000</td>
<td>$9,552,400</td>
<td>3.58</td>
</tr>
<tr>
<td>Crab (R)</td>
<td>$11,562,000</td>
<td>$5,033,000</td>
<td>2.30</td>
</tr>
<tr>
<td>Shrimp (S)</td>
<td>$3,962,000</td>
<td>$2,305,000</td>
<td>1.78</td>
</tr>
</tbody>
</table>

SOURCE: Most landed values for species are from DFO’s Commercial Catch Statistics homepage (http://www.pac.dfo-mpo.gc.ca/pages/data_e.htm) with some exceptions footnoted below; and capitalization levels are from Nelson Bros Fisheries Ltd, Licence Values in the Pacific Fishing Fleet, report prepared for DFO, March 31, 2003.

* Groundfish Trawl T licence landed values (excluding hake) have been calculated from landed weights and prices per pound obtained from DFO and Living Oceans Society. Hake landed values have been obtained from DFO’s statistics homepage. According to these calculations, the average landed value is about $30 million, significantly lower than the $65 million stated on DFO’s Groundfish Trawl homepage. The report authors have submitted this data to DFO’s Groundfish Unit for clarification and thus the landed value may change pending DFO’s response.

** Halibut L licence landed values do not include non-halibut species such as various rockfish which are caught and sold by L licence holders. Rockfish species make up more than 10 percent of the landed weight of the L licence catch.

*** Sablefish landed value is a four-year average, 2000/2001-2003/2004. Landed weights and prices per pound are from DFO.

**** Spawn-on-kelp J licence landed values came from the B.C. Spawn-on-Kelp Association and are about 20 percent lower than the export values recorded on DFO’s Commercial Catch Statistics homepage.
Expensive fishing licences and quotas are now becoming increasingly concentrated in fewer and fewer hands. The number of fishermen owning only one licence in B.C. declined from 43 percent in 1994 to 35 percent in 2002.\textsuperscript{32}

The extremely high market value of licence and quota is well outside the reach of many rural working families, First Nations and younger fishermen. Increasingly, B.C.’s fishery is being divided between quota and licence holders and tenant fishermen, that is working fishermen who must lease licences and quota in order to go fishing. Most people simply don’t have the capital necessary to buy quotas or licences.

This inequity will become especially acute as today’s fishermen retire and either lease their quotas and licences or sell them to the highest bidder. At one time, a young fisherman could earn the money needed to invest in the fishery by working as a deckhand on a fish boat and being mentored into the industry at the same time. Today, that is not a possibility. A fisherman now needs to be a millionaire to enter into most fisheries.

\begin{figure}
\centering
\includegraphics[width=\textwidth]{figure4.png}
\caption{Capitalization in the B.C. Fishing Fleet 1969 - 2003 (market values in 2003 dollars)}
\end{figure}

\textbf{FIGURE 4: Capitalization in the B.C. Fishing Fleet 1969 - 2003} (market values in 2003 dollars)

\begin{itemize}
\item 1969: $483 million
\item 1988: $902 million
\item 2003: $1,821 million
\item $777 million
\item $286 million
\end{itemize}

\textbf{Vessels/Equipment}

\textbf{Licences/Quotas}

CHAPTER 4
social impacts: net loss to fishing communities

Fisheries are extremely important and valuable to communities whose economies are partially fishing-dependent and whose identity and, in the case of coastal First Nations, culture are tied directly to fishing.

Not surprisingly, the decline of coastal resource industries, especially forestry and fishing, has adversely affected coastal communities more than other regions of the province. Statistics from the 2001 Census show that the rural communities—those outside the Capital Region, Greater Vancouver and Nanaimo—have experienced the largest population decline in modern history, a drop of 2.6 percent in only five years. Some communities lost more than a quarter of their populations in this same period. An index of human economic hardship in 2003 also showed that the North Coast and West Coast of Vancouver Island are the poorest regions in B.C.

SOCIOECONOMIC NEEDS

The major restructuring and rationalization of the fishing industry exacerbated the economic conditions in many communities. The objectives of fisheries policy focused on the economic viability of industry stakeholders (primarily licence and quota holders and processing companies), with little regard for, and only limited analysis of, regional or community impacts.

This was especially true of programs to privatize fisheries through IFQs. In assessing the first five years of the halibut IFQ program, DFO focused on the impacts on biological management, economic efficiency, crew employment and enforcement and administration. There was no mention of community or regional impacts. IFQ programs, in fact, aren’t designed to increase the viability of rural or aboriginal economies—and can even be detrimental to traditional fishing communities. The growing capitalization in fisheries in the 1990s has excluded many individuals from the fishing industry. Since investment and economic opportunities are limited and have declined significantly in resource-dependent communities over the last decade, urban-based fishermen and corporations have successfully outbid rural and aboriginal fishermen to buy commercial fishing licences and quota. The result has been a disproportionate loss of licences and quota in rural communities, and a disconnection between communities and their adjacent aquatic resources on the B.C. coast.

MARGINALIZING RURAL COMMUNITIES

In Canada, household incomes are lower in rural communities, defined as areas with a population under 10,000. In fact, rural families have had the lowest average incomes compared to families living in communities with a population of 100,000 or more for three decades. Furthermore, residential home values in Greater Vancouver are twice as high as on Vancouver Island and three times as high as Northern B.C. Home equity is an important source of capital for fishermen, because commercial lenders do not accept a fishing licence as collateral since it is not legally a form of property. Fishermen therefore often use the equity in their homes to borrow money to buy fishing licences. Because of lower incomes, limited economic opportunities and lower property values, rural families have less access to capital than their urban counterparts.

As fishing licence values increased, and catches declined, many rural and aboriginal fishermen have been forced out of the fishery under the auspices of “voluntary” buyback programs. Others have simply sold out to other fishermen who stacked multiple licences and quota on a single vessel. With few exceptions the loss of licences has been more pronounced in rural areas than in urban areas. Between 1994 and 2002, 554 licences have been lost from rural
communities as a result of fleet downsizing and the movement of licences to urban areas. That’s almost half (45 percent) of all shellfish, groundfish and pelagic fishing licences owned by rural people. The decline in urban coastal regions was only 30 percent.

The downsizing of the salmon fishery through a government buyback of licences represented the largest loss of licences in rural and urban regions. However, the number of non-salmon licences declined by 28 percent in rural communities compared to only five percent in urban regions. Even fisheries that have traditionally been based in small communities declined. According to DFO, “more than 84 percent of prawn licence holders live in smaller coastal communities outside of major metropolitan areas. Their incomes make an important contribution to local economies.”

Between 1994 and 2002, however, the number of prawn licences in communities with a population of less than 10,000 people declined by 58 percent. With only two exceptions, the rationalization and restructuring of fisheries has been significantly more detrimental to rural regions compared to urban regions.

**Barriers to Aboriginal Peoples**

First Nations people face more obstacles in buying fishing licences and quota than non-native fishermen. According to the 1996 Census, incomes for aboriginal people are 35 percent lower than the B.C. average and unemployment is double. Many native people living on Indian reserves do not have fee-simple ownership of their homes either; thus, they cannot tap their home equity to borrow money to buy fishing licences or quota.

As a result, native ownership of full-fee commercial licences has declined precipitously. There are only 199 full-fee commercial licences owned by native individuals in B.C. (excluding clams, which has been traditionally a low-value, labour-intensive fishery and is currently non-transferable). That is only three percent of all commercial licences. However, through non-transferable native licences (including “A-I” which are reduced fee licences held by status

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**TABLE 4: Net Loss of Licences from Rural Fishing Communities, 1994-2002**

<table>
<thead>
<tr>
<th>Fishery</th>
<th>License</th>
<th>Rural Licences 1994</th>
<th>Rural Licences 2002</th>
<th>Rural % change</th>
<th>Urban % Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salmon Gillnet &amp; Troll</td>
<td>A</td>
<td>707</td>
<td>329</td>
<td>-53%</td>
<td>-47%</td>
</tr>
<tr>
<td>Salmon Seine</td>
<td>AS</td>
<td>95</td>
<td>30</td>
<td>-68%</td>
<td>-44%</td>
</tr>
<tr>
<td>Schedule II Species by Hook and Line</td>
<td>C</td>
<td>112</td>
<td>94</td>
<td>-16%</td>
<td>-1%</td>
</tr>
<tr>
<td>Geoduck</td>
<td>G</td>
<td>4</td>
<td>3</td>
<td>-25%</td>
<td>6%</td>
</tr>
<tr>
<td>Halibut</td>
<td>L</td>
<td>59</td>
<td>50</td>
<td>-15%</td>
<td>4%</td>
</tr>
<tr>
<td>Crab</td>
<td>R</td>
<td>50</td>
<td>29</td>
<td>-42%</td>
<td>13%</td>
</tr>
<tr>
<td>Shrimp</td>
<td>S</td>
<td>17</td>
<td>30</td>
<td>76%</td>
<td>-8%</td>
</tr>
<tr>
<td>Sablefish</td>
<td>K</td>
<td>2</td>
<td>2</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Groundfish Trawl</td>
<td>T</td>
<td>3</td>
<td>6</td>
<td>100%</td>
<td>-2%</td>
</tr>
<tr>
<td>Prawn</td>
<td>W</td>
<td>53</td>
<td>22</td>
<td>-58%</td>
<td>12%</td>
</tr>
<tr>
<td>Green Sea Urchin</td>
<td>ZA</td>
<td>6</td>
<td>1</td>
<td>-83%</td>
<td>-43%</td>
</tr>
<tr>
<td>Red Sea Urchin</td>
<td>ZC</td>
<td>19</td>
<td>13</td>
<td>-32%</td>
<td>-41%</td>
</tr>
<tr>
<td>Sea Cucumber</td>
<td>ZD</td>
<td>16</td>
<td>10</td>
<td>-38%</td>
<td>-28%</td>
</tr>
<tr>
<td>Rockfish Hook and Line</td>
<td>ZN</td>
<td>56</td>
<td>42</td>
<td>-25%</td>
<td>-10%</td>
</tr>
<tr>
<td>Total</td>
<td>-</td>
<td>1199</td>
<td>659</td>
<td>-45%</td>
<td>-30%</td>
</tr>
</tbody>
</table>
### TABLE 5: First Nation Ownership of B.C. Fishing Licences, 2003

<table>
<thead>
<tr>
<th>Licence</th>
<th>Communal Licences</th>
<th>Reduced Fee Licences</th>
<th>NNC / Other Licences</th>
<th>Full-Fee Licences</th>
<th>Native Held Licences</th>
<th>Total Licences</th>
<th>% Native Held</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salmon (Seine)</td>
<td>AS 12</td>
<td>18</td>
<td>50</td>
<td>80</td>
<td>276</td>
<td>29%</td>
<td></td>
</tr>
<tr>
<td>Salmon (Gillnet)</td>
<td>AG 76</td>
<td>164</td>
<td>254</td>
<td>536</td>
<td>1406</td>
<td>38%</td>
<td></td>
</tr>
<tr>
<td>Salmon (Troll)</td>
<td>AT 19</td>
<td>24</td>
<td>0</td>
<td>7</td>
<td>539</td>
<td>9%</td>
<td></td>
</tr>
<tr>
<td>Herring (Gillnet)</td>
<td>HG 27</td>
<td>325</td>
<td>2</td>
<td>354</td>
<td>1256</td>
<td>28%</td>
<td></td>
</tr>
<tr>
<td>Herring (Seine)</td>
<td>HS 1</td>
<td>51</td>
<td>11</td>
<td>63</td>
<td>252</td>
<td>25%</td>
<td></td>
</tr>
<tr>
<td>Spawn on Kelp</td>
<td>J 11</td>
<td>15</td>
<td>11</td>
<td>36</td>
<td>46</td>
<td>78%</td>
<td></td>
</tr>
<tr>
<td>Halibut</td>
<td>L 26</td>
<td>27</td>
<td>53</td>
<td>435</td>
<td>12%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sablefish</td>
<td>K 1</td>
<td>1</td>
<td>2</td>
<td>48</td>
<td>4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Groundfish Trawl</td>
<td>T 14</td>
<td>5</td>
<td>5</td>
<td>262</td>
<td>7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rockfish</td>
<td>ZN 25</td>
<td>19</td>
<td>5</td>
<td>42</td>
<td>539</td>
<td>9%</td>
<td></td>
</tr>
<tr>
<td>Sardine</td>
<td>JS 25</td>
<td>4</td>
<td>29</td>
<td>50</td>
<td>58%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eulachon</td>
<td>ZU 2</td>
<td>2</td>
<td>2</td>
<td>16</td>
<td>13%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schedule II</td>
<td>C 12</td>
<td>20</td>
<td>12</td>
<td>28</td>
<td>4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crab</td>
<td>R 9</td>
<td>11</td>
<td>2</td>
<td>222</td>
<td>5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prawn</td>
<td>W 5</td>
<td>4</td>
<td>9</td>
<td>252</td>
<td>4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geoduck</td>
<td>G 1</td>
<td>1</td>
<td>1</td>
<td>55</td>
<td>2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Red Sea Urchin</td>
<td>ZC 7</td>
<td>1</td>
<td>1</td>
<td>14</td>
<td>13%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sea Cucumber</td>
<td>ZD 5</td>
<td>5</td>
<td>5</td>
<td>10</td>
<td>12%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shrimp</td>
<td>S 4</td>
<td>15</td>
<td>4</td>
<td>246</td>
<td>6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Krill</td>
<td>- 1</td>
<td>1</td>
<td>2</td>
<td>19</td>
<td>11%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total: 279 907 281 199 1666 6258 27%


### FIGURE 5: Loss of Fishing Licences in B.C. Coastal Communities 1994-2002

Note: Licence numbers do not include Z2 clam licences or HG herring gillnet licence.
Indians, “N” licences held by the Northern Native Fishing Corporation and “F” licences held communally by bands) the number climbs to almost 27 percent. These special provisions have stemmed the flood of licences out of aboriginal communities. This is particularly true in the salmon fishery.

The Northern Native Fishing Corporation (NNFC) holds 254 gillnet licences, about half of all native licences in that gear type in the North Coast. As a result, First Nations hold 38 percent of all commercial licences in the gillnet fishery coastwide. This contrasts sharply with troll licences. The NNFC holds no troll licences and there are relatively few communal licences, leading to very low native participation in the fishery, about nine percent. A spatial analysis of salmon licence ownership depicted on coastal maps (See Appendix A) illustrates the role the NNFC has played in protecting rural and aboriginal ownership of salmon licences. Some 49 percent of North Coast gillnet salmon licences are held in North Coast communities. The number for northern troll licences is 27 percent and for northern seine licences only 11 percent.

The high level of capitalization in IFQ fisheries and the poorer economic status of First Nations mean relatively few IFQ licences (halibut, sablefish, groundfish trawl, sea cucumbers and urchins) are owned by aboriginal people. Less than five percent of commercial IFQ licences are held by First Nations. When communal and reduced fee IFQ licences are included, participation in IFQ fisheries doubles to 10 percent.

Given the economic challenges facing aboriginal communities, including lower incomes, limited employment opportunities on reserve and lack of home equity, the participation of native people in the West Coast fishery would have declined even more without the NNFC and protective measures such as communal ownership. These non-transferable native licences represent a form of community-based ownership and are an exception to DFO’s commercial licensing policy.

**UNDERMINING THE ADJACENCY PRINCIPLE**

One of the effects of the shift in licence ownership is that many rural communities and First Nations see few benefits accruing from adjacent fisheries resources. The West Coast of Vancouver Island, stretching from Barkley Sound to Kyuquot Sound, is a case in point. Spatial analysis of the residency of licence owners shows that very few fishermen in this region own fishing licences. Yet the sparsely populated region is tremendously rich in aquatic resources including groundfish, shellfish, salmon and other species. By and large, ownership of licences and quota to fish on the West Coast resides with individuals who live outside the region. Local residents and First Nations own only 11 (2 percent) of all groundfish quota licences, including groundfish trawl, halibut and sablefish. IFQs are capital-intensive fisheries and thus less likely owned by residents of rural communities. On the West Coast of Vancouver Island, only two percent of B.C. quota licences are owned locally compared to six percent of non-quota fisheries. This is also true on the North Island and North Coast, where only three and nine percent of quota licenses are held, respectively.

The opposite is true in urban areas. Almost 44 percent of all quota licences are held in the metropolitan regions of Victoria and Vancouver. The portion of non-quota licences held in these metropolitan regions is 29 percent. In other words, individual fishing quotas tend to be more concentrated in metropolitan areas than non-quota fisheries.
By way of example, a spatial analysis of the landed value and ownership of geoduck quota shows how an IFQ fishery is concentrated in urban areas and how disconnected rural communities have become to their adjacent aquatic resources. On the West Coast of Vancouver Island, one individual living in Tofino owns the only two licences to harvest geoducks in this region. The situation is worse in the North Coast. Although $23 million in geoducks were harvested in the North Coast region in 2002, local residents only owned two of 36 quota licences. In a region that is suffering population loss and economic depression, almost $22 million in geoduck fisheries revenue went to individuals or companies outside the North Coast.

TABLE 6: Ownership of Major Fishing Licences on the West Coast of Vancouver Island (WCVI) 2002

<table>
<thead>
<tr>
<th>Fishery</th>
<th>License</th>
<th>Total</th>
<th>WCVI-based Licences</th>
<th>% WCVI-based licences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salmon Gillnet AG</td>
<td></td>
<td>1405</td>
<td>10</td>
<td>0.7%</td>
</tr>
<tr>
<td>Salmon Troll AT</td>
<td></td>
<td>539</td>
<td>55</td>
<td>10.2%</td>
</tr>
<tr>
<td>Salmon Seine AS</td>
<td></td>
<td>276</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Groundfish Trawl T</td>
<td></td>
<td>142</td>
<td>2</td>
<td>1.4%</td>
</tr>
<tr>
<td>Halibut L</td>
<td></td>
<td>436</td>
<td>9</td>
<td>2.1%</td>
</tr>
<tr>
<td>Sablefish K</td>
<td></td>
<td>48</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Geoduck G</td>
<td></td>
<td>55</td>
<td>2</td>
<td>3.6%</td>
</tr>
<tr>
<td>Crab R</td>
<td></td>
<td>222</td>
<td>14</td>
<td>6.3%</td>
</tr>
<tr>
<td>Shrimp S</td>
<td></td>
<td>247</td>
<td>14</td>
<td>5.7%</td>
</tr>
<tr>
<td>Prawn W</td>
<td></td>
<td>251</td>
<td>11</td>
<td>4.4%</td>
</tr>
<tr>
<td>Rockfish Hook and Line ZN</td>
<td></td>
<td>262</td>
<td>12</td>
<td>4.6%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>3,883</td>
<td>129</td>
<td>3.3%</td>
</tr>
</tbody>
</table>

The wild clam (“Z2” licence) fishery is a good example of a rural, community-based fishery. In 1998, licence limitation was introduced into the South Coast commercial clam fishery, reducing the number of clam harvesters to approximately 1,165. Clam licences are non-transferable, meaning harvesters cannot sell these licenses freely. In addition, DFO established a community management board on the West Coast of Vancouver Island (Area F) to allow for greater involvement of the local communities in the management of the fishery. Native people hold almost 57 percent of all “Z2” intertidal clam licences and rural ownership—at approximately 30 percent—is one of the highest participation rates of rural people in commercial fisheries in B.C. On the West Coast of Vancouver Island, more than 85 percent of the 337 clam licences (237 aboriginal communal and 100 regular clam licences) are held locally, illustrating the local retention of non-transferable fishing rights and their associated economic opportunities.

CORPORATE OWNERSHIP

Many licences in urban areas are owned by companies or individuals who effectively act as “absentee landlords” in that they lease their quotas or licences to tenant fishermen. Leasing is usually done through private, contractual agreements and so there is little or no data available on how widespread the practice is. There is, however, some data on corporate ownership of fishing licences.
C A T C H - 2 2
DRAFT –October 13, 2004—provided to the Pacific Fisheries Management Council
Citations should be checked against final report to be published in November 2004.

A Comparison of Geoduck Management Areas and the Distribution of Geoduck Licences per Coastal Region, 2002

Geoduck Management Areas
- Statistical Areas within Management Area N where catch was reported
- Statistical Areas within Management Area W where catch was reported
- Statistical Areas within Management Area G where catch was reported

Total Number of "G" Licences: 447
Total Number of "W" Licences: 261
Total Number of "N" Licences: 19

Percentage of Total "G" Licences: 25%
Percentage of Total "W" Licences: 13%
Percentage of Total "N" Licences: 5%

Percentages are expressed as rounded whole numbers. There were no geoduck licenses held in North Vancouver Island (Mainland, interior or outside BC).

Total Tonnes Caught per Geoduck Management Area

North Central BC Coast: 261
North Vancouver Island (Mainland): 447
West Coast Vancouver Island: 19
Metro Vancouver (Mainland): 3

19
In B.C., the largest corporate entity in fisheries is the Canadian Fishing Company (Canfisco), which owned 244 fishing licences of various fisheries in 2002. The total market value of Canfisco’s licences and quota is approximately $123 million. Jim Pattison Group, which also owns Overwaitea Food Group with 100 stores and Buy-Low Foods with 26 stores in Western Canada, owns Canfisco.

Canfisco is a large owner of the B.C. seine fleet. It directly owns one-third of all herring seine licences and 20 percent of all salmon seine licences. It is the largest canner of salmon in Canada and the largest roe herring exporter. Canfisco is dominant in these fisheries and is vertically integrated from the sea to the shopping cart.

**Social Inequity**

Growing corporate concentration, absentee landlords and dwindling licence ownership in fishing-dependent regions is indicative of a fundamental shift occurring in Pacific fisheries. The very measures that were meant to improve the economics of fishing have, in fact, undermined the viability of many rural and aboriginal fishing communities. The rationalization and restructuring of the West Coast fishing industry has impacted them disproportionately. In effect, fisheries policy, whether intentional or not, is skewed in favour of urban-based corporations and individuals with greater access to capital and economic opportunities. Fishermen in those rural communities most dependent on fishing are being bid out of the fishery.

Leasing, consolidation and the loss of licences in rural communities will likely become worse as the current generation of fishermen retire. These fishermen will either sell their fishing privileges to the highest bidder or simply lease their licences and quota and thereby earn revenues throughout their retirement. This will make it increasingly difficult for new entrants to fisheries. The U.S. General Accounting Office (GAO) has singled out this inequity as a problem, reporting to Congress that IFQ programs have “raised concerns about the fairness of initial quota allocations, the increased costs for fishermen to gain entry, and the loss of employment and revenues in communities that have historically depended on fishing.” The GAO outlined a series of measures that could protect community interests and facilitate new entrants in IFQ fisheries. Without similar measures in B.C. fisheries, social inequality will grow as fewer individuals gain greater access to and benefits from the resource.

<table>
<thead>
<tr>
<th>Licence</th>
<th>Number</th>
<th>Estimated Market Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salmon Gillnet (AG)</td>
<td>3</td>
<td>$248,301</td>
</tr>
<tr>
<td>Salmon Seine (AS)</td>
<td>90</td>
<td>$32,569,200</td>
</tr>
<tr>
<td>Herring Gillnet (HG)</td>
<td>81</td>
<td>$11,385,684</td>
</tr>
<tr>
<td>Herring Seine (HS)</td>
<td>51</td>
<td>$36,182,562</td>
</tr>
<tr>
<td>Sablefish (K) *</td>
<td>1</td>
<td>$190,000</td>
</tr>
<tr>
<td>Halibut (L) *</td>
<td>9</td>
<td>$28,435,944</td>
</tr>
<tr>
<td>Groundfish Trawl (T) *</td>
<td>7</td>
<td>$13,765,958</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>244</td>
<td><strong>$122,777,649</strong></td>
</tr>
</tbody>
</table>

*average price for groundfish licences includes average quota price.

Chapter 5

ecological impacts:
selling out conservation

Assessing the impacts of federal fisheries licensing policy on conservation is a difficult and complex task. Many factors, including habitat degradation, ocean survival rates and climate change, affect fish stocks. Nevertheless, fisheries licensing policy does play an important role in providing incentives and disincentives to fishermen to conserve fish stocks.

Fisheries licensing policy can take the form of input or output controls. Input controls limit the number of vessels, type and amount of gear, fishing methods, length of vessels and fishing season and permitted fishing areas. Output controls limit the amount of catch that can be taken out of the sea, which are usually set as annual TACs. An IFQ system can be both an input and output control. Quotas limit the amount of fish an individual fisherman can catch (an output control), but by making quotas transferable and stackable, the number of vessels fishing is often reduced (an input control) through fleet rationalization.

The conservation record of IFQ programs is mixed. By ending the race for the fish and rationalizing fishing fleets, they've helped fisheries managers control over-harvesting, ensuring that landings don't exceed TACs. Since the introduction of IFQs in the B.C. halibut fishery in 1991, the catch has been slightly lower than the TAC each year.43 The Alaskan IFQ programs in halibut and sablefish were also successful at eliminating the frenzied derby fishery, improving crew safety and reducing waste resulting from ghost fishing by gear lost at sea.44

Still, IFQs can induce bad behaviour by fishermen, including quota busting, discarding, poaching, high grading of catch and data fouling.45 These problems can be solved in part by onboard and dockside observers, but add considerable costs to fishing operations.

A 1997 global study by the Organization for Economic Cooperation and Development found that 24 of 37 IFQ fisheries surveyed were experiencing varying degrees of stock decline.46 One investigation of New Zealand fisheries under IFQ management found that in 1998 of the 187 stocks managed under IFQ programs, only 25 had stock assessments and of those 13 were below the biomass that would support maximum sustainable yield.47

The impact of IFQs on fisheries conservation in B.C. is equally inconclusive. The first IFQ program introduced in B.C. was in the abalone fishery in 1979, which closed in 1990 and remains closed today for conservation concerns. Catches in the geoduck, urchin and sea cucumber IFQ fisheries have remained stable, and increased in some cases. Catches of halibut have remained stable, though some First Nations claim that local depletions are considerable.48 Catches in the sablefish IFQ program have been declining since the early 1990s. Since the introduction of IFQs in 1997, the groundfish trawl industry has had steady catches, although the hake fishery collapsed in 2000 and then bounced back a few years later.

The conservation record of privatization is dubious, according to a major fisheries study by the U.S. National Research Council, in part because “IFQs are not a conservation tool, they’re mainly an economic tool to control overcapitalization and ‘the race for fish’. The TAC and other management measures are the main conservation tools in IFQ systems.”49

As outlined in this report, IFQs have reduced overcapitalization in fishing capacity in B.C. by reducing the number of working vessels, but licences and quota market values have soared. Overall, capitalization in the fishing fleet has actually increased.

The growing capitalization in fisheries licences and quota has serious long-term implications for conservation. Although the soaring price of quota and licences represents a “windfall profit”
to those initially granted them, it represents a capital cost that will have to be born by new entrants into fisheries, once current fishermen retire. This enormous financial cost will put pressure on future fishermen to catch more fish and to apply political pressure on DFO to maintain high catch levels.

Past over-fishing has often been attributed to undue influence of industry stakeholders, as the Auditor General pointed out in its 1986 report on fisheries. This is certainly true of the Atlantic cod fishery. Privatization through IFQs and the establishment of co-management agreements with exclusive groups of licence and quota holders is likely to increase the influence of industry stakeholders, while marginalizing conservation, community and citizen groups in fisheries management. DFO's concept of co-management focuses on narrow, economic interests in fisheries, negating social and conservation values represented by non-industry groups.

According to one assessment of the quota management system in New Zealand, “ITQs in combination with ‘cost recovery’ has distorted perceptions of the legitimacy of quota owners compared to recreational fishers, the environment, the other non-extractive values and uses of the environment.” Moreover, privatization has allowed quota owners to invest their returns from resource rents into influencing fisheries officials and politicians in New Zealand. This has given them a disproportionate voice and allowed quota owners to engineer “the evolution of institutions to further enhance their power and control and to marginalize other interests.” In British Columbia, a similar system dominated by licence and quota holders is being established to manage fisheries.

Full-cost recovery for data collection by private companies also raises questions about the ownership of fisheries data and the transparency of fisheries management and science. Already, the Marine Conservation Caucus, a DFO advisory process for environmental groups, has run into serious problems accessing data on the groundfish industry and has withdrawn from DFO’s groundfish consultation process as a result. The lack of access to data has hampered the efforts of independent scientists to scrutinize DFO Science and decision-making. There’s also concern that privileged access to data by certain industry consultants has strengthened at least the perception of biased science.

While it is important to incorporate the traditional knowledge of fishermen into stock assessment, there are serious concerns about having industry pay for and carry out data collection and stock assessment and act as co-managers of the resource. Short-term profits could win out over long-term sustainability in the fishery.

The shifting nature of the ownership of fisheries may also have serious implications for conservation. This is especially true of the salmon fishery, since the anadromous species is highly dependent on terrestrial habitat for its survival. According to one group of fisheries experts, the move to an IFQ fishery in salmon “takes the economic benefit of fisheries out of coastal communities, removing the incentive for local residents to protect critical salmon habitat.”

DFO is currently promoting the integration of all groundfish fisheries, including trawl (T), halibut (L), sablefish (K), rockfish (ZN) and Schedule II (C) licences, into a single IFQ system whereby quotas can be transferred between gear types: trap, hook and line and trawl. This could further rationalize the fishing fleet as large, efficient trawlers buy out smaller hook-and-line operators. This would have adverse impacts for conservation considering the impact trawlers have on seafloor habitat. Bottom trawls constitute one of the most invasive methods of fishing and the rate of habitat alternation of the seafloor has been calculated at more than 150 times the rate of global deforestation through clear-cutting. Coastal communities would also suffer from decreased employment, since so few
trawlers are based in rural and aboriginal communities.

IFQs are about economic efficiency: bigger boats and fewer licence and quota holders earning higher profits and wielding greater influence over fisheries. With privatization, the resource is eventually sold to the highest bidder. The soaring capitalization in licences and quota, and resulting debt load, threatens the resource by putting pressure on new entrants to catch more fish. At the same time, the disenfranchisement of rural and aboriginal communities adjacent to fisheries resources undermines the stewardship role these communities could play in promoting fisheries conservation and especially protecting fisheries habitat in the case of salmon.
Chapter 6  
conclusion and recommendations

Integrating ecological, economic and social values in fisheries management is paramount to conservation. Both human communities and marine ecosystems must be healthy for sustainability to occur.

This report focuses on a fundamental paradox of Canadian fisheries policy. While the objective of several decades of reform and rationalization in the West Coast fishery has been to increase economic viability, it has had the opposite effect for communities. The privatization of B.C. fisheries has netted a catch-22. DFO’s solutions have become problematic, worsening overcapitalization in the fishing industry even in the face of declining stocks, undermining the sustainability of fishing-dependent communities and threatening conservation.

Canada’s public fisheries resources are being bought, sold and traded in a highly unregulated, speculative market through private brokers and quota registries acting as veritable fish stock exchanges. There’s a complete lack of transparency and accountability in the ownership system. Trading and leasing is often done privately, without DFO’s knowledge. Prices and lease costs are unmonitored. While publicly traded corporations are subjected to certain regulations and disclosure rules, Canada’s public fisheries resources, by comparison, are not. Furthermore, there are no national standards for IFQ programs, protecting crew and community benefits and limiting consolidation of the industry, such as those being currently developed and debated by the U.S. Congress.

Without access to significant amounts of capital, rural and aboriginal fishermen are being slowly bought out. Federal fishing licensing policy is effectively severing the economic link between coastal communities and their adjacent aquatic resources. After thousands of years of unfettered dominion, First Nations especially have become tenants in their own territories. Marine resources are shifting from being common property, rural and community-based to an ownership structure that is urban, corporate and privatized.

Today, fisheries are becoming increasingly concentrated among fewer individuals and corporations who claim de facto proprietorship over the fish in the sea. DFO policies are effectively privatizing ocean resources, once considered a common property to be shared by all Canadians.

Still, governments can protect the next generation of fishermen by implementing measures to facilitate new entrants into fisheries and safeguard the interests of First Nations and coastal communities through a number of innovative policies. These measures include:\n
- Buying back quota which are allocated to younger, professional fishermen
- Issuing quota for a fixed period of time
- Setting aside TAC increases for new entrants
- Providing financial assistance for new entrants to buy quota and licences

- Prohibiting quota and licence sales, making them non-transferable.
- Placing geographic restrictions on quota and licence transfers
- Setting limits on the amount of quota or licences an individual or entity can hold
- Requiring quota and licence holders to be onboard their vessels when fish are caught
- Restricting the ports to which quota can be landed
- Creating separate quota markets for large and small vessels
- Giving communities the right of first refusal to buy licences and quota

Most countries with IFQ programs have recognized the detrimental effect of fisheries
privatization on social equity and have introduced many of these provisions. These countries include Iceland, Norway, Scotland, New Zealand and the United States. In Canada, DFO has granted special licences and quotas to protect First Nations interests and in 1997 established the Groundfish Development Authority (GDA), a non-profit society consisting of labour and community interests which advises the Minister of Fisheries on the allocation of 20 percent of the TAC. (The allocation advice involves processors and quota holders jointly applying for quota from the GDA and is based on a complex and weighted formula that limits the actual influence of community and labour interests over the allocations.)

In assessing the suite of options available to fisheries managers, the U.S. General Accounting Office concluded that the “easiest and most direct way to help protect communities under an IFQ program is to allow the communities themselves to hold quota.” In June 2001, the U.S. North Pacific Fishery Management Council recognized the fact that a number of small coastal communities “are struggling to remain economically viable” and that “[a]llowing qualifying communities to purchase halibut and sablefish quota share for use by community residents will help minimize adverse economic impacts on these small, remote, coastal communities in Southeast and Southcentral Alaska, and help provide for the sustained participation of these communities in the halibut and sablefish IFQ fisheries.”

In April 2004, U.S. federal fisheries regulations were amended to allow 42 rural communities with a population of less than 1,500 people and with historic participation in the halibut and sablefish fisheries to establish non-profit Community Quota Entities (CQEs) to hold and lease fisheries quota for local residents. The Alaskan state government provided CQEs with up to US$2 million in loans to purchase quotas. This program comes on the heels of Alaska’s successful Community Development Quota program, which granted a portion of Alaska’s pollock fishery to rural communities. Since 1992, the CDQ program has generated U.S. $110 million in wages, education and training benefits for over 25,000 residents of Bering Sea communities, US$500 million in revenues and US$260 million in asset value for six CDQ groups. The CDQ program has funded docks, harbours, seafood processing facilities, the acquisition of equity ownership in the pollock, Pacific cod and crab fisheries, and local economic development projects. The program has received widespread, bipartisan support in Alaska.

Without similar measures to protect rural fishing communities and First Nations in B.C., ownership of fisheries licences and quota by local residents will continue to dwindle, adding to the downward economic spiral of coastal communities. Furthermore, the skyrocketing overcapitalization in fishing licences and quota will put pressure on fish stocks as the fishing industry gains more influence over fisheries through co-management agreements with exclude or minimize the interests of First Nations, communities, recreational fishermen, environmental groups and the public at large. Fisheries co-management must be inclusive of all these diverse interests, accountable to the public and transparent in its decision-making. A mix of values and experience must share the responsibility of fisheries co-management. To limit fisheries co-management to the narrow economic interests of exclusive groups of licence and quota holders is to effectively privatize the public resource.

**RECOMMENDATIONS**

1) **Public Registry:** DFO should establish a public registry that would ensure full disclosure of ownership and market values of licences and quota. Fishermen would be required to register all their leases, trades and sales of licences and quota, and fully disclose financial interests in the assets. The registry would allow the government, industry and public to monitor ownership and capital trends in the industry and to help protect against corporate concentration and overcapitalization.
2) **National Standards:** DFO should establish national standards for IFQ programs that would reduce overcapitalization in licences and quota, protect working crews from bearing the costs of quota leases, and limit excessive consolidation and corporate concentration in the industry.

3) **Community Quota Entities:** DFO in partnership with provincial, municipal and First Nation governments should permit the establishment of and provide funding for Community Quota Entities, which would be non-profit societies established to hold fisheries licences and quota in trust for aboriginal and fishing-dependent coastal communities. The CQEs would lease fishing privileges to local fishermen and facilitate new entrants, i.e. the next generation, into the industry. The CQE program would be modelled on a similar program established in Alaska, including government-funded loans of up to $2 million for each CQE.

4) **Public Data:** DFO should establish a comprehensive data-access policy that provides full and transparent access to biological and catch data. Public access to fisheries data would re-build trust in DFO Science, promote public accountability and ensure rigorous review of fisheries management by independent scientists and concerned citizens. Furthermore, all fisheries data funded and collected by private companies as part of IFQ fisheries must be placed in the public domain.

5) **Fisheries Co-management:** DFO must ensure that diverse interests are represented in fisheries co-management agreements and harvesting committees including licence and quota holders, labour, processors, coastal communities, First Nations, environmentalists and other citizen groups. Furthermore, DFO should protect against the undue influence of licence and quota holders in the management of fisheries resources.
Appendix A

Spatial Analysis of the Ownership of B.C. Salmon Licences
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Draft—October 13, 2004—provided to the Pacific Fisheries Management Council
Citations should be checked against final report to be published in November 2004.
endnotes

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memorandum RE: Policy Requirements – Individual Quota Fisheries, to R. Glass, Assistant Deputy Minister (Policy),
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29 Jones, Russ, Marcel Shepert, and Neil J. Sterritt. First Nation Panel on Fisheries. Our Place at the Table: First
30 Canada. Department of Fisheries and Oceans. Integrated Fisheries Management Plan: Roe Herring. February 10 –
31 James. 2003, p. 16.
32 Excludes wild clams, goose barnacles, herring gillnet and smelt gillnet fishing licences. These personal (or
one-person) non-vessel based licences and licensing data for 1994 was unavailable from DFO for this report.
Ucluelet, May 2002.
36 U.S. General Accounting Office. Individual Fishing Quotas: Methods for Community Protection and New Entry
37 Rupert, Carlo, Margaret Thompson-James and Ray D. Bollman. “Measuring Economic Well-Being of Rural
Ottawa, Statistics Canada.
38 BC Stats. “British Columbia Multiple Listing Statistics,” February 2003. Data from the Canadian Real Estate
Association and BC Real Estate Association.
39 http://www-ops2.pac.dfo-mpo.gc.ca/xnet/content/Shellfish/prawn/history.htm
40 The two notable exceptions are in the trawl and shrimp industries. The number of groundfish trawl (T) licences in
rural communities doubled from three to six between 1994 and 2002. However, even at six this only represents four
percent of all T licences. Groundfish trawlers are the largest vessels, in terms of size, on the coast, which make them
difficult to service and repair in small boat works in rural areas. Most owners of groundfish trawlers live in urban and
metropolitan areas. The number of shrimp (S) licences increased by 86 percent in rural areas in this time period. The
value of this fishery, however, is relatively small, and has been declining, with a landed value of $3.3 million in
2003, less than one percent of the total landed value of commercial fisheries in B.C. This fishery began in the
1960s as part of the A licence privilege and later DFO granted limited “S” licences to fishermen with shrimp
landings. The Mifflin Plan allowed fishermen to separate their S and A licences. As a result, some rural fishermen
sold their A licences but remained fishing their vessels with shrimp licences. Others bought shrimp licences as a
cheap alternative to salmon fishing, since shrimp licences are half the value of salmon licences.
42 U.S. General Accounting Office. Individual Fishing Quotas: Methods for Community Protection and New Entry
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46 Quoted in Newton, Chris, Otto Langer, Martin Weinstein and Parzival Copes. “Privatizing salmon fishing won’t
47 Wallace, C. 1998. Tradeable quota in practice: decision making, institutions and outcomes—the New Zealand over
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