

Testimony of Jon G. Sutinen  
to the  
Subcommittee on Oceans and Fisheries of the Senate Committee on Commerce  
Hearing on S. 637, the Individual Fishing Quota Act of 2001  
May 2, 2001

Senators:

My name is Jon G. Sutinen. I am a professor in the Department of Environmental and Natural Resource Economics at the University of Rhode Island. I would like to thank Senator Kerry for allowing me this opportunity to comment on S. 637, the Individual Fishing Quota Act of 2001.

Unlike others here today, I am not a fisherman, a fishery manager, nor a legislator. I've never tried to earn a living working on the water. I've never tried to manage a fishery and faced the tough decisions that often pit people against fish. And, I have never held elective office and tried to represent constituents' interests by writing legislation to improve their lives. Instead, I sit before you as an observer, one who has studied fisheries for three decades. I, like others in my profession, have been working to understand the complex system of interactions between humans and nature that occur in fisheries. The results of our profession's research, I believe, can help you craft good legislation – legislation that serves the interests of your constituents, our marine resources and future generations.

*A failing grade?*

In my judgment, our fishery management establishment deserves a low grade for its performance over the last quarter century. Forty-six percent of the fish stock groups that are under the purview of the US National Marine Fisheries Service, and whose status are known, are over exploited. Another 39% are fully exploited and may be in danger of becoming over exploited. These are the results of spending \$660 million per year on the management of an industry that generates \$3.6 billion per annum.<sup>1</sup>

The United States is not alone, however. According to The Food and Agriculture Organization of the United Nations, 69% of the world's fish stocks for which data are available are exploited at or beyond the level corresponding to their maximum sustainable yield. After more than 25 years of trying, our fishery management institutions have failed to conserve resources and improve the economic health of fishing communities.

The New England groundfish fishery is a dramatic example of management failure, resulting in both overfishing and economic losses. The volume and real value of New England landings of species regulated under the Multispecies Fishery Management Plan have declined markedly since the early 1980s. The combined landings volume of haddock, cod, and yellowtail founder dropped from 85-110 thousand metric tons in the early 1980s to 15-25 thousand metric tons in the mid 1990s – roughly an 80 percent decrease. The value of these landings adjusted for inflation dropped by 60 percent despite a general trend of increasing real prices over the last 20

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<sup>1</sup> In other words, management expenditures amount to 18% of landed value. The data are from OECD (2000).

years. The most extreme case of decline was exhibited by the relatively slow growing redfish with drastic decreases in both landings and revenues. Redfish landings fell from 14,800 metric tons in 1979 to 322 metric tons in 1996, the lowest since the fishery for this species began in the 1930s. In 1994, federal scientists reported that excessive fishing had caused the stocks of New England yellowtail flounder and haddock to collapse. This mismanagement of groundfish is costing US citizens an estimated \$150 million per year in foregone net value, according to a study by scientists at the Northeast Fisheries Science Center.

The New England Fishery Management Council continues to struggle with its efforts to rebuild overfished groundfish stocks. Georges Bank cod and Gulf of Maine cod face fishing mortality rates that are too high to end overfishing. The spawning stock for Gulf of Maine cod is at a record low level. The Council's Multispecies Monitoring Committee concluded that a 67% reduction in fishing mortality was necessary to rebuild the other stocks in the groundfish complex.

Then there is the story of species left unregulated. Just a few years ago, low value species such as dogfish and skates were in great abundance, having filled the niche vacated by depleted cod, haddock and other valuable species. Now, however, even the lowly dogfish is overexploited. Some species of skates too appear to be at risk. The National Marine Fisheries Service admits that management plans in New England have not prevented overexploitation of the species under their management authority.

This record of decline and ineffective management can be reversed. Amending the Magnuson-Stevens Fisheries Conservation and Management Act (MSA) is needed to improve the way we manage our fish stocks. The question is how can this be done? Certainly, authorizing the use of IFQs is a crucial step towards successful fisheries management.

*IFQs are a potent and valuable tool for fisheries management.*

There is a worldwide trend towards the use of IFQs. A growing number of governments are bringing their fisheries under this form of rights-based management. They are doing this because IFQs work well. IFQs have a proven record of accomplishment of promoting sustainable management of fisheries and producing wealth.

The scientific evidence is quite clear on these achievements. The Organization for Economic Cooperation and Development (OECD 1997) reviewed management experiences in more than 100 fisheries in 24 member countries. This is the only study I know that systematically compares IFQs with more traditional approaches to fisheries management. The evidence shows that IFQs are an effective means of controlling exploitation, of mitigating the race-to-fish and most of its attendant effects, of generating resource rent and increased profits, and of reducing the number of participants in a fishery.<sup>2</sup>

IFQs have been effective in limiting catch at or below the TAC determined by management authorities. OECD reports that catch was maintained at or below the TAC in 23 out of the 31 IFQ fisheries for which information was available. The TAC overruns that did occur were due to inadequate monitoring and enforcement. Where overexploitation occurred, it was due to poor data that allowed the TAC to be set too high.

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<sup>2</sup> The report by the National Research Council (1999) drew upon much of the evidence contained in OECD (2000).

The OECD evidence demonstrates that IFQs eliminate or prevent a race-to-fish and the resulting problems of over capacity, excess effort, waste, unsafe harvesting practices, gear conflict and loss, and reduced product quality. Two of the most notable cases are the Canadian halibut and sablefish fisheries. Seasons that had been reduced to a few days under competitive TACs and limited entry were increased to most of the year almost immediately.

Elimination of the race-to-fish has not been universal, however. For example, in the Netherlands sole and plaice and Norwegian cod fisheries, IFQs failed to eliminate the race-to-fish. The race-to-fish in these fisheries is because the fishery could be closed down when the national quota was met, even if individual quotas had not been filled. In Iceland, the option to choose between individual effort and catch quotas in the demersal fishery led to an increase in investment. A race-to-fish occurs in the New Zealand flatfish fishery in years of low abundance. Most of the fisheries where a race-to-fish persisted used time or area closures independent of the attainment of TAC which may have been a factor.

This illustrates the importance of satisfying first principles when designing IFQ programs. It is essential not to contravene or block the incentives that IFQs put in place. Blocking those incentives reduces IFQs effectiveness.

#### *IFQs are not problem-free, but...*

The OECD study also demonstrates that IFQs present problems with the initial allocation of quota and with enforcement and compliance. Of the 55 IFQ fisheries reviewed by OECD, quota allocation problems were documented in ten fisheries with no counter examples.

The initial allocation of quota is *the* major impediment to the adoption of IFQs in most fisheries. The exceptions are fisheries with a relatively small number of producers who are relatively homogeneous. The struggle to find a fair and just allocation of harvest rights is difficult, time-consuming, and adversarial. The current debate over processor shares in Alaska is an apt example of this.

Allocation of fish (the access to fish or the rights to catch fish) is a problem that plagues all forms of fisheries management, whether based on IFQs or traditional methods. Allocation is the constant topic of meetings and decisions made by fishery managers, and the subject of legislative deliberations such as this one.

There is a tradeoff related to allocation and IFQs that should be appreciated by all concerned parties. While the initial allocation of IFQs is extremely difficult, the 'pain' is all up front and once-and-for-all. This is especially true for transferable IFQs, since thereafter a market emerges to handle the reallocation of quota that is needed for the fishery to evolve. If the IFQs are *not* transferable, then the management authorities will have to revisit the allocation issue repeatedly.

Without a market to handle allocation issues, the management system pays the price of allocation struggles on a continuing basis. It escapes the high up-front of initial allocation brought on by transferable IFQs, but it must face the continuing distraction of dealing with allocation instead of conservation.

Actual solutions to the initial allocation problem have taken a wide variety of forms. This variety is probably because there is not universal agreement on what constitutes a fair and just allocation. Each solution is the result of a negotiation and bargaining process. The important aspect of the solution is the process – the process by which the solution is found. An open and

transparent process is needed to insure institutional legitimacy, credibility, and trust. As an aside, we in the US have not yet designed a process that satisfies these criteria.

Higher enforcement costs and or greater enforcement problems occurred in 17 fisheries compared to five that experienced improvements. Enforcement proved particularly difficult in high value fisheries, in multispecies fisheries, and in transnational fisheries. Although enforcement costs frequently increased under individual vessel quotas, there was often an increased ability and willingness of fishermen to pay these increased costs. Support from industry for increased enforcement is common. IFQ holders recognize that the illegal fishing by others damages the value of their quota rights and have an incentive to aid authorities with enforcement.

The rents generated by IFQs provide governments with a source of revenue to cover the costs of enforcement and administration. In the many IFQ fisheries in Australia, Canada, Iceland, and New Zealand, industry pays for administration and enforcement with fees levied on quota owners. In some cases quota holders voluntarily paid for added enforcement, such as in the New Zealand lobster fishery. In addition, IFQ management has led to increased cooperation between fishermen and enforcement authorities in several cases, including the New Zealand fisheries in general, and the US wreckfish fishery. Fishermen reported improved compliance in the Canadian halibut fishery.<sup>3</sup>

Despite the many and serious problems that have confronted IFQs, fishery managers are finding ways to mitigate, if not solve, many of these problems. Potential participants commonly are afraid that they will not receive their fair share in the initial allocation of quota. Others fear that landings and processing will leave their communities, and that large corporations will take over the fishery, and other concerns. We have learned a great deal over the last 20 years of IFQ management. I believe that managers can find designs of IFQ programs that satisfy first principles (such as creating an exclusive harvest right) and still address the concerns of fairness and justice. Where no solutions are immediately evident, we should craft the legislation to encourage innovation and experimentation.

#### *How do IFQs compare to other fishery management measures?*<sup>4</sup>

In their assessment of other management measures, OECD concludes as follows:

<i>Total Allowable</i>	Competitive TAC management causes a race-to-fish with the attendant effects of over capitalization, shortened seasons, market gluts, increased harvesting and
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<sup>3</sup> Other problems with IFQs that were identified included: underreporting of catch and data degradation (documented for 12 fisheries, but improvements were made in six fisheries); industry resistance to IFQs in eight fisheries, but the opposite was true in five fisheries; several cases where quotas were consolidated (documented in 12 fisheries, but 5 showed contrary evidence), and rules were in place to limit consolidation; little evidence that smaller vessels are eliminated when individual vessel quotas are introduced (two fisheries where elimination occurred and five where it did not); class divisions were documented only for the Icelandic fisheries.

<sup>4</sup> The OECD study represents one of the few, if not the only, attempts to comprehensively assess the performance of the full suite of management measures. The study found considerable evidence, and excellent scholarly studies of individual quotas, limited licenses and total allowable catch measures. However, there is great paucity of evidence on the performance of the other management measures (size and sex selectivity, closures, effort quotas, vessel catch limits and gear and vessel restrictions). While the theory of how these measures are supposed to work is well developed, the supporting empirical evidence is missing. The actual application of these methods appears to be conducted more on faith than on a sound factual basis.

<i>Catch Quota (TAC)</i>	processing costs are particularly evident. Competitive TAC management generally has not effectively prevented overexploitation of the fishery resource – though it has been successful in some fisheries.
<i>Limited Licenses</i>	Over capitalization and increased harvesting costs occur with limited licenses, but the evidence is confounded by the presence of TACs in many of the reported cases. There have been some initial allocation problems, but the amount of evidence is too small to draw a firm conclusion. Limited licenses have not stemmed the tendency to overexploit the fishery resource.
<i>Size &amp; Sex Selectivity</i>	Size and sex selectivity measures do not mitigate the race-to-fish and result in increased enforcement costs and/or problems are supported by the evidence. There is only weak evidence that the average size of fish landed increases and that discards increase.
<i>Closures</i>	It is clear that time and area closures have not been effective in assuring resource conservation, though conservation might well have been worse without them.
<i>Individual Effort Quotas</i>	Individual effort quotas (e.g., days-at-sea, trap quotas) result in over capitalization, increased harvesting costs, and increased enforcement problems.
<i>Vessel Catch Limits</i>	Vessel catch limits (as distinguished from IFQs) increase enforcement costs and problems.

None of the other (non-IFQ) management measures perform well when they are used without IFQs. That is, they do not effectively control exploitation and mitigate the race-to-fish. They do not, however, present as many social and administrative difficulties as IFQs.

Most management measures are expected to provide some degree of conservation benefits in the form of maintaining or rebuilding resource stocks to desired levels. Unfortunately, in practice, none of the management measures assures optimal resource conservation. Achieving optimal conservation is complicated by several factors or conditions, including multispecies, bycatch and discards, and wide fluctuations in resource stocks and markets.

### *What do IFQs provide that other approaches do not?*

IFQs provide important benefits that other approaches do not. IFQs effectively constrain exploitation within set limits, mitigate the race-to-fish, reduce over capacity, gear conflicts and improve product quality and availability. Producers benefit, consumers benefit and, when the resource rent is used to pay for the cost of management, the general public benefits.

In addition, there are environmental benefits that are often overlooked. For example, reducing the 300,000 traps in Area 2 of the American lobster fishery is expected substantially reduce entanglements with whales, while at the same time realizing the same yield. Based on the evidence, I expect IFQs or transferable traps entitlements will ease this downsizing more effectively and with less sacrifice than other alternatives.

Only IFQs and other rights-based approaches have the potential to achieve this much.

### *Why do IFQs perform so well?*

Fishery economists and most social scientists are not surprised that IFQs perform so well in comparison to other management measures. IFQs solve numerous problems by providing exclusive harvesting rights. Other 'rights-based' management measures have the potential to do the same. None of the traditional management measures provides exclusive rights and, therefore, cannot solve the problems created by nonexclusive use of the resource.

In fisheries without exclusive harvesting rights, no fisherman has the right to exclude other fishermen from harvesting any part of the resource. From an individual fisherman's perspective, leaving fish to grow and reproduce is done at the risk of losing the fish to other fishermen. Thus, there is no incentive to conserve the resource for future use, since no fisherman has exclusive use. The nonexclusive nature of fisheries resources is the fundamental cause of overexploitation in modern fisheries.

Without an exclusive right to harvest a quantity of fish, competition to catch fish before others do causes a 'race-to-fish', resulting in fishing seasons that are shorter than optimal for maximum economic performance, landings that are too small and of inferior quality, and excessive investments in vessels and gear.

The nonexclusive nature of harvesting fisheries resources also leads to conflicts among user groups. Since no fisherman has the right to exclude another from access to the resource, two or more fishermen can interact at the same time and place in a fishery. They impose external costs on each other in the form of gear or other losses. Mobile gear (such as trawls) may fish in the same area as fixed bottom gear (such as traps), causing damage to one or both of the gears. Large, efficient vessels can operate in a fishery on which small-scale fishermen are heavily dependent, draining the stock available for capture by the smaller fishermen. Failure to consider these external costs when deciding where and how to fish causes inferior economic performance in the fishery.

Processors, distributors, wholesalers, retailers and consumers are also affected by the nonexclusive nature of harvesting. The race-to-fish can result in large quantities of fish being landed during short periods, requiring the buildup of excessively large processing, storage and distribution facilities to handle the periodic peak loads. Wholesalers, retailers and consumers find supplies of specific fish are abundant for short periods and scarce for long periods; or, the product is processed for long shelf life, generally reducing the quality of the products and price on the market.

Of all the management measures available to managers, rights-based management measures (such as IFQs) have the greatest chance of correcting the fundamental problem of nonexclusive harvesting rights and of reducing conflicts among users, producing superior economic performance while conserving fishery resources.

### *Are IFQs appropriate for multispecies fisheries and ecosystem management?*

Despite the complex challenges presented by multispecies fisheries, IFQs outperformed all other management measures. This is not to say, however, that only IFQs are needed in multispecies fisheries. Rather, when other management measures (such as mesh size regulations) are used in combination with IFQs, performance was superior. When not used with IFQs, performance suffered.

Fisheries that harvest multiple species are more difficult and costly to manage than single species fisheries. A high proportion of multispecies groundfish fisheries in OECD countries experienced poor resource conservation and economic performance. Relatively non-selective trawls are used in these fisheries, having high by-catch and discard rates, further weakening management's control on exploitation patterns (unless by-catch and discarded catch are monitored adequately).

Multispecies fisheries complicate all forms of fishery management. In multispecies fisheries where several species are caught jointly, no single management measure, or combination of measures, can achieve the optimal fishing mortality for all species. Almost any change in management measures will favor one species at the expense of another. Good conservation on all stocks appears infeasible in such cases.

With respect to the issue of ecosystem management, there is widespread consensus on the importance of accounting for multispecies interactions in fisheries analysis and management, but only a limited amount has been accomplished to date. The theory for developing models to explain and analyze interactions is well developed. Biological and economic empirical evidence, however, is inadequate. Attempts to model multispecies fisheries in several countries are ongoing and are already providing information for the management process in some fisheries. IFQs seem to offer high promise, relative to non rights-based approaches, for wrestling with the challenge of managing complex marine ecosystems. Other rights-based approaches are currently being explored by researchers, but no experiments or tests of these approaches are underway.

By-catch is inevitable in many multispecies fisheries. Incentives play a major role in determining the amounts of by-catch. An individual fisherman will try to control by-catch as long as the benefits outweigh the costs to him. Effective management recognizes this and creates or modifies incentives to lessen the impact of by-catch.

There is some anecdotal evidence suggesting that substantial discarding at sea and underreporting of landings have increased since the implementation of IFQs. However, a study done for OECD found no discernible increase in discards under an IFQ system compared to the previous limited effort management scheme.

Some countries have developed tools to counteract discarding. These tools include setting TACs by species such that different TACs can be filled approximately simultaneously; employing standard harvesting technologies; simple and well advertised discard rules; flexible monitoring and surveillance designed to deal with the most pressing problems at each point in time; and addressing alleged violations quickly and effectively with penalties high enough to deter such practices.

*Are IFQs guaranteed to conserve the fishery resource and produce wealth in a given fishery?*

No. IFQs do not guarantee conservation and wealth in a given fishery. Rather, the evidence says that the chances of conservation and wealth are far greater with IFQs than other management measures; and that the risks of failure are far less with IFQs than without them.

Most IFQ fisheries have yielded great benefits; and some have experienced unfortunate outcomes. Just as when the Dow Jones average rose from 2,000 to 10,000, the wealth of share holders in total grew. But mixed in with the many stocks that gained in value, there were some that lost value. The outcomes for any one stock and any one investor is uncertain. Likewise, the

outcomes in any one fishery are uncertain; and the outcomes for any one participant in a fishery are uncertain. We can only try to act so that we maximize the chance of success. IFQs provide that option.

### ***Comments on & suggestions for shaping S. 637***

Now I would like to comment on some of the provisions in S.637. I believe the bill in its current form can benefit from a few critical changes.

#### ***Prohibition on IFQ transfers***

Prohibiting transfers of IFQs will result in a number of problems. I list some of them here and offer an alternative approach to solve what I believe to be the reason motivating the prohibition.

Most of the successful IFQ fisheries in the world now allow, in fact depend on, transfers of quota by either sale or lease or other means. Transfers allow markets to function smoothly and to handle the allocation problems that too often cripple the management system.

Several of the fisheries reviewed by OECD initially prohibited transfers of quota when IFQs were first introduced. However, shortly after the fleet gained experience with and trust in the IFQ program, they saw the gains to be realized from trading quota. Fishermen restricted by non-transferable IFQs eventually persuaded the government authorities to allow transfers.

By prohibiting transfers – except for hardship and among family members – S.637 will severely impair the effectiveness of any IFQ program. The transfer prohibition is a ‘one-size fits all’ approach to IFQ programs. Nontransferable quotas may be appropriate in some fisheries, but certainly not in all.

The prohibition on transfers creates numerous problems.

1. The inability to transfer partial fishing rights makes it difficult for fishermen and fishing families to adjust to conservation requirements.
2. The prohibition will reduce incomes for those fishermen whose quota composition does not match their fishing opportunities.
3. The prohibition will instill an incentive to cheat, to bust one’s quota. If the quota are transferable, a fisherman who wants to fish more than his quota has the option to acquire more through the market. The incentive to cheat is less with transferable IFQs than without.
4. The prohibition will weaken the tendency to reduce fleet capacity and over capitalization.
5. The prohibition on selling and leasing prevents the IFQ from taking on value, a value that a fisherman can use if s/he elects to retire or otherwise exit the fishery.

And, there are other ill effects of the prohibition for given specific circumstances.

I can understand the concerns that some producers and those who live in fishing communities have with transferability. They seem to fear that their way of life will be severely impacted by transferable quotas. To me, it is rational that they are willing to accept IFQs if transfers are prohibited. However, based on the evidence, I’m also convinced that many of those who now oppose transfers of quota will, once they have gained experience with IFQs, call for a relaxation of the prohibition.

Prohibiting transfers *by law* is too inflexible in my judgement. If, after an IFQ program is put in place, a majority of fishing interests does want transfers, they must ask Congress to change the law. There must be a more flexible alternative.

I propose a compromise. I propose that S. 637 be modified to either

1. Initially prohibit transfers but establish a flexible framework in which Fishery Management Councils and the Secretary of Commerce can decide to allow the sale, lease and other transfers of quota.
2. Restrict transfers of quota to within specified communities or regions of a fishery – user groups or areas to be determined in the plan development process. Also allow for a framework adjustment process whereby the restrictions can be amended or entirely lifted.

### *Referendum requirement*

The double referendum requirement is an intriguing idea. It appears to be a way to insure that the procedures and provisions are fair to the affected parties.

A similar voting procedure is required for establishing agricultural marketing orders. Most agricultural marketing orders cover crops that are grown by a relatively few producers and marketed in few channels. Marketing orders are not viable for crops spread over wide areas, involving many producers who sell to many different markets. It is just too difficult to get so many heterogeneous crop growers to agree – with a two-thirds majority – to a common marketing order.

I am concerned that the referendum requirement establishes a hurdle that is too high. Many of the fisheries subject to federal management are quite large, involving hundreds – even thousands – of producers who operate over large geographic areas and sell to a wide variety of markets. Given the experiences in marketing order programs, I fear that agreements on IFQ programs will be rare – the exception rather than the rule.

As an alternative, I suggest devolving to relatively small groups the authority to set their own rules, including the use of IFQs. I urge the Committee to examine, for example, the experiences of the producer organizations in the UK. Each PO is awarded a quota. Members of each PO decide how they fish their group quota. Some POs have chosen to operate under IFQs and others have not, but all of them work under a group quota. Applying this approach to groundfish in New England, we can imagine awarding a quota for cod to the fishermen of Gloucester, a separate quota of cod to fishermen of Portland, etc. Allow each group to decide for themselves how to fish their quota, and require that a referendum be held in making that decision. This will give them the power to govern their lives and their destiny. In addition, this will create a stronger incentive for stewardship over the resource.

### *Devolution: Bottom-up trumps top-down*

Senator Snowe has said that the IFQ Act ‘provides ... the affected fishermen with the ability to shape any new IFQ program to fit the needs of the fishery.’ I believe the Senator is in line with another global trend, the move by governments towards giving fishermen more control over their fisheries. Abroad this is referred to as devolution – a set of institutional arrangements where the authority and responsibility of governing the use of marine resources is passed down (devolved) to the local level.

Why are governments devolving management authority? Because governing from afar – the traditional top-down approach to fisheries management – is not working well. The burden of centralized fisheries management has become too great for many governments, and they have found it less costly and more effective to allow users and local communities to shape the nature of their fishery management programs. The government plays the important role of insuring the users conserve the resources and protect the environment, but the government does not instruct the users how to achieve those ends.

User participation in the development and implementation of fishery management plans is found to be a critical element for successful management. Co-management arrangements are one of the more promising avenues for greater user participation. A substantial body of evidence demonstrates that more local control over management policy yields significant gains. OECD and many other studies have documented the benefits of meaningful user participation.

Moves towards more decentralized fisheries management in the Maine lobster fishery and in other fisheries here and abroad seem to be successful (in terms of conservation and social and economic outcomes). The Netherlands, Denmark, Norway, Sweden and the United Kingdom have devolved fishing rights and responsibilities to producers. These countries have found that the local control reduces administrative costs and greatly improves compliance with management regulations.

A significant benefit of co-management is the use of local knowledge about stock dynamics and ecology. Another advantage is the flexibility to adapt with short notice to changing management objectives and fishery conditions. Co-management at the local level achieves greater economic stability and decreases fishermen's perceptions of economic risk. Co-management and IFQs have been found to strengthen each other in some fisheries.

One of the greatest gains of user participation in management design and implementation is users' support of the program. It is nearly impossible to adopt and implement effective fishery management programs without the widespread support of commercial and recreational fishers. However, this support is often missing or very weak among users of our fishery resources. In fact, opposition to proposed management measures is all too common.

Some observers note that fishermen frequently oppose conservation and management measures because they have little assurance that their sacrifices will be sufficiently rewarded in the future. Their insecure claim on the future rewards of their sacrifice naturally leads them to oppose strong conservation measures. Therefore, they pressure Councils, NMFS and their elected representatives not to enact strong conservation measures. And, when measures they oppose are implemented, they work to subvert those measures. The result is ineffective management.

Authorizing the use of IFQs is expected to improve the prospects that fishermen's sacrifices will be worth it to them. But, the legislation should be further amended to address the problem of industry opposition to strong conservation and management measures. For example, producers can be given more of a voice in the selection of specific management measures. One way to do this is to encourage decentralization of fisheries management.

While the current version of S.637 is a step in the right direction, it does not provide fishermen with sufficient ability to shape the program to fit the needs of their fisheries. In addition, there appears to be reluctance by the Councils and NMFS to devolve to local organizations the authority to customize the rules to meet local conditions and needs (especially those rules that

have only local impact). The Magnuson-Stevens Act could be amended to encourage Councils to undertake experiments with decentralized approaches to fisheries management. Our fisheries would benefit from more experiments along the lines of the area management approach in the Maine lobster fishery.

Thank you.

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