Designing Effective & Enforceable Catch Share Systems

ENVIRONMENTAL LAW INSTITUTE, WASHINGTON DC

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SEMINAR SUMMARY

The Environmental Law Institute (ELI) hosted a panel discussion on the use of catch share systems to manage fisheries in the United States. Panelists addressed the history of catch share systems, federal policies to guide the development of additional catch share programs, and key elements of effective catch-share design.

Speakers

- John Campagna, Principal, Restore Capital
- Earl Comstock, CEO, Comstock Consulting LLC
- Kelly Denit, Fisheries Management Specialist, National Marine Fisheries Service, NOAA
- Monica Goldberg, National Policy Deputy Director-Oceans, Environmental Defense Fund
- David Wallace, President, Wallace & Associates

Moderator

- Jordan Diamond, Staff Attorney, Environmental Law Institute

Mr. David Wallace opened the panel with a case study of the oldest catch share system in the United States, which was initiated in the surfclam and ocean quahog fishery in 1990. Before any form of federal management was instituted in the fishery, surfclams were harvested in a boom-and-bust cycle. Regardless of whether production was high or low, fishermen made very little money. Under the Magnuson-Stevens Fishery Conservation and Management Act (MSA), the first federal management plan for the fishery went into effect in 1977. Mr. Wallace explained that initially, management relied on limited entry, a fixed quota, a "catch it or loose it" provision, and time and trip limits. Strict time limits – allowing vessels to fish less than once per week – made it difficult for fishermen to earn a living. While these measures helped rebuild the fishery, they required tremendous resources to micro-manage a cumbersome system designed for a low-biomass fishery.

Mr. Wallace described how the implementation of an individual transferable quota (ITQ) system addressed many of the problems associated with traditional management. It took years of bargaining to determine ITQ allocation. The natural result of a fully participatory process, involving adverse interests, was that nobody was happy with the allocation. The overcapitalized fishing fleet shed most of its boats – including many old, unsafe vessels that were locked into the previous management system – and many fishermen had to leave. To stay, a fisherman had to find financing to buy more shares and maximize the use of his vessel. Mr. Wallace emphasized that the idea that catch share systems are unique because they force fishermen to buy their way into the system is a myth, as it ignores the fact that fishermen must still buy boats with permits to participate in a traditionally managed fishery. Mr. Wallace concluded by noting that after 21 years, the big winners in the catch share system are the members of the public who buy abundant, relatively cheap clams and the taxpayers who avoid paying for micromanagement.

Ms. Kelly Denit began her presentation by explaining that a "catch share" is a fishery management program that allocates a specific portion of the total allowable catch to individuals, cooperatives, communities, or other eligible entities. The recipient of a share is directly accountable to stop fishing when its allocation is reached. There are currently 15 catch share programs in the United States.

Ms. Denit provided background on the development and implementation of NOAA's catch share policy. NOAA released the policy in late 2010, after the agency considered public comments on the draft version and held numerous stakeholder engagement sessions. The policy encourages the consideration and adoption of catch share programs by the regional fishery management councils (FMCs). It also states that catch share programs are not required for any fishery or sector (e.g., commercial, recreational, tribal or subsistence). Ms. Denit described the nine guiding principles included in the NOAA policy that the FMCs should consider such as the need to identify specific management goals, consistent with the Magnuson Stevens Act (MSA); the periodic revisiting of allocations; and the thorough consideration of the complex issue of transferability. The FMCs may maintain distinctions among sectors, which means they are not obligated to use catch shares for the recreational sector of a fishery simply because there is a catch share system for the commercial sector (or vice versa). The MSA gives FMCs the option to collect royalties for limited access privilege programs and requires the collection of cost recovery for certain costs associated with a limited access privilege program. Supporting fishing community sustainability is another guiding principle and NMFS plans to work to increase capacity among stakeholder groups to take better advantage of the MSA community provisions and other community-related tools. Where FMCs decide to develop catch share programs, NOAA will support them by providing technical expertise and additional guidance, as needed. In addition, NMFS will develop a plan to advance common infrastructure and data needs (e.g., catch accounting) and work with the FMCs to improve catch share literacy such as by providing lessons learned products.

Ms. Monica Goldberg began by mentioning the international context for catch share systems. Catch shares are currently being used to manage over 800 species in 35 countries. This management strategy has existed since the 1970s and has steadily grown since 1990. Ms. Goldberg then summarized some of the fundamental choices that managers are faced with when they design a catch share system: whether the system will be single- or multi-species; whether shares will be allocated to individuals or groups; whether there is a spatial component to the allocation; and whether (and how) a share may be transferred. These choices frame a typology of catch share programs and allow managers to customize a program to the needs of a particular fishery.

Ms. Goldberg then discussed the key characteristics and essential steps of program design, drawing on the Environmental Defense Fund's Catch Share Design Manual. First, managers and fishers must work together to define the program's goals, a step that provides an opportunity to address any conflicting objectives. They must also define and quantify the available resource. A critical step is defining eligible participants, both at the initial stage of the program and in the future. In some fisheries, requirements that vessel owners be on-board discourage consolidation. As managers define the privilege and transferability of the shares, they have additional opportunities to shape characteristics of the fishery. For instance, some catch share systems only allow shares to be sold within boat size classes. Finally, the system must include administrative systems and adaptive mechanisms for assessing and modifying the system.

Mr. John Campagna focused on the impacts of catch-shares on fishing-dependent communities. His analysis drew on research for a recently completed Ecotrust report, Community Dimensions of Fisheries Catch Share Programs. Based on interviews with fishermen, Mr. Campagna reported a fairly positive view of catch shares in fishing communities. He observed that this is largely because fishermen understand the power of owning an economic asset. For instance, there is a great appeal to gaining the right to compensation if an asset is damaged.

Mr. Campagna stated the need for creation of community entities that can meet the financing needs created by catch share programs. It is difficult for fishermen with small boats to raise capital if their shares are kept isolated. Consolidation within a community entity would allow financing through either charitable or private loans. Community entities could take a variety of forms and serve other roles – such as providing a conduit for new market entrants and technical assistance. Mr. Campagna explained that if the U.S. Department of the Treasury stopped classifying catch shares as "intangible" assets, then the New Markets Tax Credit could provide one way to encourage private investment in Community Fishing Associations.

Mr. Campagna closed by observing that the regional FMCs are not paying enough attention to communities. Moving forward, the test will be to create community entities that are able to compete in the long-term – not just receive an initial allocation of shares. This will be difficult because there is significant pressure to consolidate shares.

Mr. Earl Comstock discussed the potential role for recreational fishermen in catch share systems. Although past catch share systems have focused on the commercial sector, Mr. Comstock believes managers should consider incorporating the recreational sector for several reasons. First, recreational fishing is expanding. This trend supports job growth in coastal communities, as anglers patronize charter boats, inns, and other local businesses. At the same time, increased angling can put pressure on a fishery, especially one that is completely allocated to commercial fishing. Without a mechanism for transferring shares between sectors, a catch share program may increase tension in such circumstances. Mr. Comstock emphasized the importance of including recreational fishers in the early stages of system development, because once a catch share system is in place it can be difficult to make adjustments to allocations.

Mr. Comstock addressed the challenges to designing catch shares for recreational fisheries. First, anglers and commercial fishermen think in different units – anglers catch "fish," not "pounds." Second, recreational fishery managers have different goals than commercial fishery managers; in a recreational fishery, there is no benefit to reducing participation or consolidating an overcapitalized fleet. Also, participation in recreational fisheries is transitory and individual fishermen do not generally have the

long time horizon required to buy a quota. Mr. Comstock proposed "angler catch share pools" as one mechanism for dealing with these problems. A non-profit organization could hold the recreational sector's share allocation, purchase catch shares from the commercial sector, and sell stamps to anglers who wish to fish. The non-profit would be responsible for controlling the recreational harvest through tools like bag limits, seasons, or limits on stamps. This system could promote optimal resource use and conservation.

Question and Answer

How can the principles that the panelists discussed for designing catch shares in the domestic context be applied on the high seas? Can catch shares on the high seas provide equitable access to a common resource?

Ms. Goldberg answered that implementing a catch share system on the high seas would be extremely difficult, although it can be done in principle and there are some published studies that examine the possibility. The main obstacles are accountability and enforcement. Ms. Goldberg noted that there are some international systems in place that set fishing quotas (such as the International Commission for the Conservation of Atlantic Tunas), but in most cases there are insufficient monitoring and accountability mechanisms. Once those challenges are overcome, one can use the same design principles and hope to have the same kinds of conservation benefits.

Ms. Denit and Mr. Wallace agreed that there are opportunities for catch shares on the high seas. Mr. Wallace emphasized the opportunities in large industrial fisheries like those shared by the United States and Russia.

How can catch shares be applied in community fisheries in the developing world? Further, how much data is needed to design a catch share program?

Mr. Wallace acknowledged that governments in many countries struggle to collect sufficient data to effectively manage their fisheries. He emphasized, however, that fish stock conservation is possible even without sophisticated surveys and modeling. There are a few options for managers who are working without much data. In the United States, before the passage of the MSA, managers used "catch per unit of effort" as a metric for monitoring the health of fisheries. Managers can also use old-fashioned tools like size limits, which can be based on a one-time research project on a fish's sexual maturity. Finally, marine protected areas (MPAs) can protect fish when there is inadequate understanding of the population.

Ms. Denit explained that the key to implementing catch shares in that context is to build basic management capacity and that there are some successful models from West Africa and Pacific Islands. Ms. Goldberg added that the Catch Share Design Manual discusses examples from Mexico, Chile, and other developing countries. She suggested that people interested in Latin America and Caribbean catch shares contact Scott Edwards, EDF.

Mr. Comstock stated that the key to implementing fisheries management in both the industrial and developing world is that managers must have the power to exclude. Ms. Goldberg mentioned that in some countries the issue of exclusion is handled on the community level, as managers at the national level can allocate shares to a particular village.

How can catch share programs reduce by-catch?

Ms. Goldberg explained that there is a new, exemplary program in the Pacific. It sets very low by-catch limits for severely overfished, long-lived species. Each fisherman is only allowed a small number of by-catch fish each year, so they worry about losing their ability to fish by accidentally fishing in an area rife with a protected species. In response, the fishermen (in cooperation with EDF and the Nature Conservancy) have developed risk pools. The fishermen designed regulations that other fishermen must follow in order to access the pool. Ms. Goldberg described the benefits of the program: it takes advantage of the fishermen's expertise and innovation, and there is greater compliance in this type of scheme.

Mr. Comstock also mentioned the strong, shared incentive to reduce by-catch when one bad actor can lead to a fishery closure. In the North Pacific, NMFS has created an interesting incentive structure by setting by-catch limits for the whole fishery and letting the fishermen figure out how to split them up.

Does the National Marine Fisheries Service have the power to demand best practices for catch shares by rejecting inadequate management programs?

Ms. Denit answered that the agency does not approve any management plan – whether it involves catch shares or not – that does not comply with the requirements of the MSA. There was also mention of the role of FMC members in decision-making. She noted that groups that feel they are not well-represented on the regional FMCs should work with their governors, who are responsible for nominating council members.

Mr. Comstock stated his belief that NMFS has more power than it exerts, but that decision-making power has largely been delegated to the councils. Mr. Comstock hopes that NMFS will start rejecting more programs, especially since courts give the agency a great deal of deference in its policy implementation.

Mr. Wallace closed the panel by noting that it is very difficult for NMFS to reject a fishing program on the East Coast, where fishing communities are very vocal.

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