(NOAA photo)

According to *Science Insider* (subscription required), NOAA Administrator Jane Lubchenco has endorsed broader use of a “catch shares” approach to allocating the available catch in commercial fisheries. The shares strategy (also referred to as “individual transferable quotas” or “limited access privileges”) gives individual participants in the fishery a permanent and transferable right to a set proportion of the total allowable catch.

In theory, assigning shares should contribute in several ways to a more sustainable fishery. By limiting entry, a shares strategy should help address the chronic problem of over-capitalization — too many boats chasing too few fish — which tends to ratchet up pressure for high catch levels. By giving the fishers a long-term stake in the health of the fishery, it should give them incentives to support sustainable (reduced) catch levels. In some fisheries, shares can also make fishing safer by removing the pressure to catch as many fish as possible in as short a time as possible.

There is some evidence that reality matches the theory. Last fall, a group led by Chris Costello of UC Santa Barbara published a study in *Science* (subscription required) showing that catch shares fisheries worldwide are only half as likely as others to be experiencing a collapse, and that the risk of collapse decreases with every year that a catch share strategy is in effect.

To this point, rights-based fishery management strategies have not been widely adopted. In the United States, concerns about the distributional consequences of catch share approaches have limited their use. Essentially, fishers and fishing communities fear that catch shares will be accumulated by a few large entities, squeezing out small operators. Early experiments with rights-based approaches in Alaska were so unpopular that Congress imposed a moratorium from 1996 to 2002, to allow time for a study of mechanisms to make sure that they could be implemented fairly.

The current version of the Magnuson Act (the primary US law governing fisheries management) permits the use of "limited access privilege programs" (LAPPs), a kind of catch share approach, subject to approval of the appropriate regional fishery management council and with some limits on the concentration of shares. According to the National Marine Fisheries Service, twelve LAPPs were in effect as of January 2009, with four more in the works.

Lubchenco would like to see those numbers increase. She has said that broader use of catch shares is a "high priority," and she is putting her agency's funding requests where her mouth is. From *Science Insider*:

> Lubchenco noted that the agency's budget request for FY 2010 included $18.6 million to help the struggling New England groundfish fishery implement a catch-share program. She also announced a new task force that will figure out how the agency can make sure that councils consider this type of program when they update their management plans and how NOAA can provide technical support.

Presumably that means NMFS will complete work on the LAPP guidance it has been working on for the last two years, and will do what it can to push inclusion of LAPPs in the fishery management plans adopted by the councils. Still, catch share programs remain controversial with at least some fishers and fishing communities, as this post by Zeke Grader and Glen Spain of the Pacific Coast Federation of Fishermen's Associations illustrates.

The struggle to find a politically acceptable way to implement rights-based fishing can be seen as an illustration of the more general challenge of limiting access to the environmental commons. Any restrictions necessarily create losers as well as winners. Where the commons is already being overused when restrictions are imposed, as is typically the case, the losers generally know exactly who they are, and understandably resist as fiercely as they can.

The battles over catch shares also illustrate another aspect of environmental conflicts that is sometimes under-appreciated. The people involved in these conflicts are not always (perhaps not even often) rational economic actors motivated solely by monetary returns. Fishers, like farmers, are tied in a variety of emotional and cultural ways to their chosen life's work, to the point that they pursue it despite perennially low economic returns. That means that if reducing the number of people fishing or farming needs to be part of the solution, simple offers to buy them out may not be effective, at least not at "market" prices.