

A Review of Restricted Access Fisheries

Background

Restricted access programs in fisheries limit the quantity of persons, vessels or fishing gear that may be engaged in the take of any given species of fish or shellfish. Restricted access may also limit the catch allocated to each fishery participant through harvest rights such as individual or community quotas.

Without some form of restricted access, fisheries resources are available to anyone who wants to pursue them. Each individual fisherman or company is motivated to catch the fish before their competitors, which leads to overcapitalization of the fleet with too many vessels and too much gear. Overcapitalization usually results in reduced income to fishermen. Open access to fisheries often leads to problems with both biological sustainability and economic viability. Over the past 50 years, increased demand for fisheries products, big advances in fishing technology, and development of global fish markets have combined to intensify the "race for fish."

Restricting access has been used as a fishery management tool for thousands of years to improve resource sustainability, allocate catches among participants, and improve economic and social returns from fisheries. Restricting access to fisheries can 1) promote sustainable fisheries; 2) provide for a more orderly fishery; 3) promote conservation among participants; and 4) maintain the long-term economic viability of fisheries.

Great care must be taken in designing and implementing restricted access programs. First, broadly recognized goals for the fishery must be defined by managers, fishermen, and other constituents. Once these goals are identified, key restricted access elements can be identified to attain them. A primary purpose of restricted access programs is to balance the level of effort in a fishery with the health of the fishery resource. In most situations, except for harvest rights programs, this involves setting an appropriate fishery capacity goal (a combination of factors that represent the fishing power of the fleet).

History

Until recent decades, California did not restrict fishing effort. After World War II, fleet expansion, improved electronics and gear technology, new net materials, larger and faster vessels, plus increased fishing skills significantly increased fishing power. This trend of increased fishing capacity and adoption of new technology accelerated during the mid-1970s after passage of the Federal Fishery Conservation and Management Act of 1976 (Magnuson-

Stevens Act). This act began phasing out foreign fishing and encouraged "Americanization" of fisheries, primarily for groundfish, within our 200-mile exclusive economic zone. Federal loan and tax programs proved to be powerful incentives for private investment in fishing fleet expansion.

By the late 1970s, it was clear to many in the fishing industry, California Department of Fish and Game (DFG) and the Pacific Fishery Management Council (PFMC) that there was a need to limit entry to fisheries. In California, the first limited entry program was established in 1977 for the abalone fishery. This was followed in 1979 with legislation requiring salmon limited entry permits in 1980. By 1983, this became a salmon vessel permit system. While these and other limited entry programs capped the number of fishermen or vessels and created more orderly fisheries, they generally had little effect on overall fishing capacity. Participants in these restricted fisheries often increased their fishing power with larger vessels, more gear and increased time fishing, or shifted to other fully developed open access fisheries.

Since the early 1980s, DFG has implemented restricted access programs at an accelerating rate. High value fisheries such as herring, sea urchin and Dungeness crab are now under restricted access. When demand from industry for restricted access programs intensified in the mid-1990s, DFG decided it was time to address restricted access in a comprehensive manner. In late 1996, DFG formed a limited entry review committee to develop a standard restricted access policy for the Fish and Game Commission. A draft policy was completed in 1998 and underwent major revision in 1999 with assistance from outside experts and consultation with constituents. After three public hearings and considerable public input, the commission approved the restricted access policy in June 1999.

California's Restricted Access Programs

The legislature, commission, and DFG have differing, but related roles in implementation of restricted access programs. Historically, most of California's programs were created through legislation. Examples include abalone (1977), salmon (1979), and pink shrimp (1994). Others such as herring (1986), sea urchin (1989), and the new pink shrimp program (2001) have been the responsibility of the commission. Since the passage of the Marine Life Management Act of 1998 and the commission's adoption of a comprehensive restricted access policy in 1999, more restricted access program responsibility has switched to the commission and department. The department works closely with constituent advisory committees and task forces to carefully design and evaluate restricted

access plans for submission to the commission. The commission then conducts hearings for further public input. The restricted access plan is then returned for any necessary revision by the department and advisory groups before going before the commission for a final decision. The legislature is kept informed and involved for fisheries that require legislation to implement restricted access.

Restricted access programs active through 2000 are summarized in the table below. Some of these programs are revised versions of earlier programs. Restricted access was discontinued in 1998 in the abalone fishery after that fishery was closed. Herring round haul permits were phased out by 1998.

California's Commercial Fisheries Restricted Access Policy

The commission adopted its policy in order to guide future restricted access programs. The commission believes that restricted access programs can offer at least four benefits:

- Fostering sustainable fisheries by offering a means to match the level of fishing with the capacity of a fish population and by giving fishermen a greater stake in maintaining sustainability;
- Providing a way to fund total costs for administration and enforcement of restricted access programs;

California Restricted Access Programs Through 2000

Permit	Type	Ldgs. Req. to Renew	Year Begun	No. Permits First Year	No. Permits in 1992	No. Permits in 2000	Current Mgmt. Authority
General Gill/Trammel Net	Person	no	1985	1052	376	223	Commission
Drift Gillnet	Person	every other year	1984	226	149	126	Legislature
Dungeness Crab (Resident)	Vessel	no	1995	614	N.A.	589	Legislature
Dungeness Crab (Non resident)	Vessel	no	1995	67	N.A.	69	Legislature
Finfish Trap	Person	yes	1996	316	N.A.	142	Legislature
Herring Gillnet (Resident)	Person	no	1986	339	323	335	Commission
Herring Gillnet (Non resident)	Person	no	1986	72	97	121	Commission
Lobster Operator	Person	no	1996	298	351	251	Commission
Market Squid Vessel	Vessel	no	1998	242	N.A.	198	Legislature
Market Squid Light Boat	Vessel	no	1998	53	N.A.	49	Legislature
Salmon Vessel	Vessel	no	1983	5964	2974	1704	Legislature
Sea Cucumber Diver	Person	no	1997	111	N.A.	101	Legislature
Sea Cucumber Trawl	Person	no	1997	36	N.A.	30	Legislature
Sea Urchin Diver	Person	every other year	1989	915	537	407	Commission
Nearshore Fishery	Person	no	1999	1130	N.A.	1026	Commission
Pink Shrimp (discontinued)	Person	no	1994	307	N.A.	90	Commission
Pink Shrimp (new program in 2001)	Vessel	----	1994	8	N.A.	101	Commission

Source: California Department of Fish and Game License Branch Statistics

- Providing long term social and economic benefits to the state and fishermen, and;
- Broadening opportunities for the commercial fishing industry to contribute to management of the state's commercial fisheries.

The key elements of the policy are summarized below. A complete copy of the policy is contained in *Guide to California's Marine Life Management Act* by M. L. Weber and B. Heneman. It is also available at the commission's Web site at www.dfg.ca.gov/fg_comm/index.html

General: Restricted access is one of a number of tools for conserving and managing fisheries as a public trust resource, and may be adopted to achieve several purposes, including sustainable and orderly fisheries, conservation, and long-term economic viability.

Development: Fishermen and other citizens must be involved in the development of restricted access programs. The specific needs of a fishery must be balanced with the goal of increasing uniformity among such programs.

Review: Restricted access programs in individual fisheries and the Commission's policies on restricted access should be regularly reviewed.

Capacity Goal: Any restricted access program that does not assign harvest rights to individual fishermen must identify a "capacity goal" for the fishery to try to match fishing power to the resource. This goal, which should be developed collaboratively, may be expressed in such terms as size or power of vessels or number of permits. Where a fleet is above its capacity goal, the program must include a means of reducing the capacity in the fishery. A new restricted access program is not to allow fishing effort to increase beyond recent levels.

Participation: Eligibility for participating in a restricted access fishery may be based on the level of historical participation or on other relevant factors. In issuing permits, certain priorities should be followed. For instance, first priority should be given to licensed commercial fishermen or vessels with past participation in that fishery. In addition, fishermen licensed in California for at least 20 years may be included in new restricted access programs with qualifying criteria determined for each program by the commission. New permits should be issued only if a fishery is below its capacity goal.

Permit Transferability: Where appropriate, permits may be transferable between fishermen or vessels, as long as there is a capacity goal and a program for achieving that goal in the fishery. Under certain conditions, permits may be transferred from retired to new vessels. Fees to offset the costs of management may be imposed on the transfer of permits.

Harvest Rights: In establishing restricted access programs based on the allocation of harvest rights to individual fishermen or vessels, the state should insure the fair and equitable initial allocation of shares, resources assessments, cost recovery, limits on aggregation of shares, and consider recreational fishing issues.

Costs and Fees: Administrative costs are to be minimized. Review or advisory boards may be established. Funds from restricted access programs may be deposited in a separate account of the Fish and Game Preservation Fund. Restricted access programs should deter violations, while minimizing enforcement costs through the use of new technologies or other means. Administrative and enforcement costs are to be borne by each restricted access program.

The first restricted access program adopted under the commission's new policy is for northern pink shrimp fishery. This program, which replaced the pink shrimp program initiated by the legislature in 1994, took effect in 2001. It includes transferable and non-transferable vessel and individual permits.

Currently, there are restricted access plans under development and review for the nearshore finfish fishery, market squid, the spot prawn trap fisheries. These plans are created collaboratively by teams of constituents and DFG staff convened by the director.



Commercial fishing vessels in Bodega Bay.
Credit: Chris Dewees

Federal Restricted Access Programs

The federally managed groundfish fishery (includes 83 species) off Washington, Oregon and California is managed, in part, under a limited entry program developed by the Pacific Fishery Management Council (PFMC) and implemented by the National Marine Fisheries Service (NMFS) in 1993. The federal program has issued gear-specific permits to vessels using trawl, fixed longline and fishpot and allocates a proportion of the catch to each gear type. Those fish not allocated to the limited entry fleet continue to be allocated to open access vessels (primarily hook-and-line and fishpots) and those who take groundfish incidentally in other fisheries. NMFS was authorized by Congress in December 2000 to develop regulations for the limited entry fixed gear sablefish fishery which allow for stacking of up to three permits with cumulative landing limits. These management regulations would have effects similar to those of harvest rights systems.

Future Actions

The Marine Life Management Act (MLMA) requires evaluation every five years of existing restricted access programs and this will be an ongoing activity of the department and the commission. These evaluations and the increasing demand for restricted access programs means that the department will need expanded capabilities to collect and analyze economic and social data related to fisheries. These data, combined with biological data about fishery resources, will be critical in developing and evaluating restricted access policy options on a fishery-by-fishery basis. Restricted access will likely be an important component of fishery management plans required under the MLMA.

Experience with restricted access is growing statewide, nationally and internationally. As our knowledge base grows, new techniques for managing access to fisheries will become available. There is a growing trend toward implementing harvest rights systems in the form of individual and community-based quotas as currently used in Alaska, Canada and overseas. Transferable gear certificate programs are in place in trap fisheries in Florida and Georgia and this tool may have potential in California.

It will be important that DFG and the PFMC work closely to ensure consistency of state and federal restricted access programs affecting fisheries managed jointly off the California coast.

California needs to understand the interaction of restricted access programs with other primary types of fishery management systems such as marine reserves, spatial management and local co-management schemes. Finally it is important to take into account how restricted access programs in one fishery affect participation and fishing effort in other fisheries.

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