FACT SHEET: TRAWL CATCH SHARES

FIRST, A LITTLE HISTORY

The story of catch shares begins in 2000, when the groundfish fishery was declared a Federal disaster. Several species had been declared overfished, and the Council used trip limits to manage the fishery for species other than whiting. (Trip limits set the amount of fish allowed to be landed in a given two-month period). Responding to the stock rebuilding requirements of the Magnuson Stevens Act, the Council reduced trip limits and closed large areas of the continental shelf to fishing.

These restrictive trip limits had a negative consequence: they forced vessels to dump excess fish overboard, mostly dead. This was a wasteful and widely unpopular practice that needed to be changed.

At the same time, shorter and shorter seasons were making the whiting fisheries inflexible and inefficient. (The catcherprocessor sector had formed its own private co-operative agreement in 1997, which was working well and was later included in the catch share program.)

The restrictions and closures to protect overfished species were very hard on the fleet and the communities that depended on a healthy fishing industry. Because the trawl fleet lands such a large amount of fish throughout the year, its health is critical to maintaining the fishing infrastructure (ice machines, hoists, processors) needed by other fisheries, including salmon, crab, shrimp, and others.

In 2003, a Federal buyout of trawl permits removed almost half of the capacity of the trawl fleet and allowed some trip limits to be increased. Although this helped somewhat, it did not solve the problem. Around that time, people began discussing the creation of a trawl catch share program.

Catch share programs can completely transform fisheries management. They have been used in many regions to solve problems related to too much effort pursuing too few fish. The Pacific Council designed its catch share program to balance the needs of the fishery with those of communities, new fishery entrants, and small boat fishermen. The goals included increasing individual accountability, reducing



The F/V Miss Berdie. Photo: Eric Weichmann.

bycatch, and improving economic efficiency, among others. Fishermen, processors, community representatives, the Pacific States Marine Fisheries Commission, the Pacific Fishery Management Council, West Coast states, nongovernmental organizations, and NOAA Fisheries all contributed to the program's successful development and implementation.

The trawl catch share program was put in place in 2011 after eight years of discussion and dozens of public meetings. The Council continues to make adjustments to improve the system.

THE GROUNDFISH FLEET

The non-tribal commercial groundfish fishery has four sectors: limited entry trawl (including vessels that deliver to processors on shore and those that deliver at sea), limited entry fixed gear endorsed for sablefish, and limited entry fixed gear not endorsed for sablefish, and open access. (The fishery is described in detail in our groundfish fact sheet.) On average, the groundfish fishery is the second most valuable fishery on the West Coast, in some years exceeding the most valuable fishery, Dungeness crab.

The limited entry trawl sector accounts for over 90% of the total weight of the groundfish fishery and is generally a mixed -stock fishery, which means that it is difficult to target any

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single species without also catching some other species, including overfished stocks. Of the trawl gears, bottom trawl gear is least selective, and midwater trawl gear targeting whiting is most selective (over 98% whiting).

Just before the catch share program was put in place, there were roughly 170 trawl permits, 160 sablefish-endorsed fixed gear permits, and 65 other fixed gear permits. There were as many as 700 or 800 open access participants, although only 200 or 300 were "substantially engaged" in any given year.

HOW THE PROGRAM WORKS

The catch share program included two major actions:

- Creating the catch share system itself (Amendment 20 to the Groundfish Fishery Management Plan, or FMP).
- Allocating among sectors the catch for many of the species covered under the quota system (Amendment 21 to the Groundfish FMP).

The catch share program created different

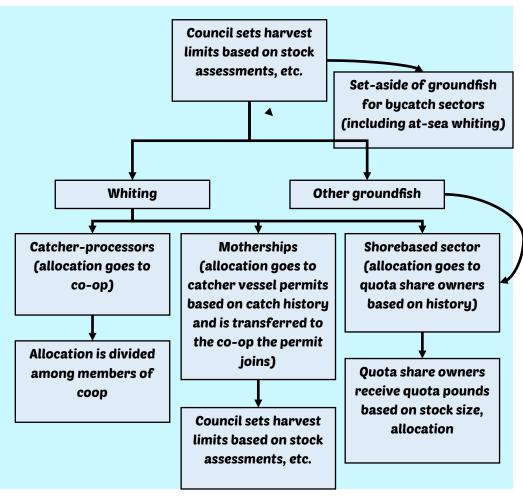
management systems for the three main trawl sectors:

- For vessels delivering to processors on shore, it created a system of individual fishing quotas (IFQs).
- For the at-sea mothership sector, it created catcher vessel co-ops. (Motherships are processors at sea that buy catch from shorebased vessels).
- For catcher-processors
 (vessels which both catch and
 process fish, usually whiting),
 it continued the existing fleet
 co-op.

Each year, the Council sets harvest limits for each managed species (or species complex) based on stock assessments. Whiting is divided among the three trawl sectors (shorebased, mothership, and catcher processors), while bycatch for the at-sea whiting fishery is generally subtracted from the available catch before it is allocated among sectors. Other groundfish species are allocated only to the shorebased trawl sector.

Once sector allocation is complete, the species allocations go to their respective sectors (see figure). Shares may not be transferred between these sectors.

One of the main goals of the catch share program was to make the fishery more efficient, which was expected to lead to fleet consolidation. The Council recognized that too much consolidation could harm communities and crew. Therefore, for each species in the shorebased IFQ program, the Council placed limits on the amount of quota shares an individual could control and the amount of quota pounds a vessel could fish. For the mothership sector, limits were placed on the amount of catch history any entity could own, the amount a vessel could catch, and the amount any single mothership processor could process. No limits were provided for the catcher-processor sector, since allocations for that sector



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went to the entire sector.

The Council also designed an "adaptive management" program. Ten percent of the shoreside nonwhiting quota shares are set aside into a public trust pool (adaptive management program quota shares) for use by managers to modify program impacts. These quota shares can be used to support community and processor stability, conservation, new entry, or unintended and unforeseen consequences. For example, if a certain port was likely to lose landings, these shares could be used to provide incentives to fishermen to continue to land in that port. To date, a need for this quota has not been identified and so the related quota pounds have been passed through to quota share owners.

SPOTLIGHT ON SECTORS

The Shorebased Sector

The shorebased program covers catcher vessels that deliver to traditional fishing ports, as opposed to catcher vessels that deliver to at-sea processors.

The shorebased IFQ program includes 29 different groundfish species and complexes (including whiting) that are harvested by trawlers delivering to processors on shore. Additionally, individual bycatch quota is required for Pacific halibut.

The catch shares allocated for each species for the long-term are called *quota shares*. At the start of the catch share program, quota shares were allotted to the owners of catcher vessel limited entry trawl permits based on their catch history and other factors. In addition, shorebased processors received 20 percent of the shorebased sector's whiting quota shares. Quota shares can be transferred among participants and to new entrants, including crew members, communities, processors, or any other entity eligible to own a U.S fishing vessel.

Each year, quota share owners receive an allocation of *quota pounds* that must be used to cover their catch. Vessels are then responsible for buying or leasing the quota pounds in order to cover their harvest. If their harvest exceeds their quota pound holdings, they may not continue to fish until they have acquired quota pounds to cover their deficit. Vessels with trawl permits are also allowed to use non-trawl gears to catch their trawl quota pounds (known as *gear switching*).

Shorebased vessels generally harvest a mix of species, though



The whiting catcher-processor Arctic Storm offloads whiting in Seattle. Photo: Sarah Nayani.

for whiting trips the incidental catch of other species is low. Their ability to harvest all of their allocations depends on their ability to control the mix of species in their catch. Some species are always likely to be in shorter supply and to limit overall harvest.

For example, quota pounds for overfished species are usually more expensive than for other species, because the allowed harvest is low and fewer quota pounds are issued. This creates an incentive to avoid known hotspots for these species and to develop gear to avoid them. Those who are best able to avoid the overfished species fare best economically, as they can land the rest of their quota without being shut down. If they can avoid catching overfished species, they can also generate revenue by leasing their unneeded quota to others.

More recently, sablefish has limited the catch of some complexes. While avoiding sablefish might allow more of those complexes to be harvested, they are a valuable stock, so avoiding sablefish could substantially decrease trip revenue.

The Mothership Sector

Motherships are at-sea processors that receive deliveries from other vessels. The mothership co-op program now covers only whiting, but it initially also covered four overfished rockfish species. Since those species have been rebuilt, the Council has recommended that they be managed with setasides rather than catch quota.

Owners of trawl permits who had sufficient participation

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history were allocated mothership quota as "catch history" rather than quota shares. While quota shares are divisible and can be owned by someone who does not own a trawl limited entry permit, mothership catch history cannot be divided and can only be transferred as a unit from one limited entry permit to another.

Unlike the shorebased IFQ program, where each vessel is responsible to the government for its own compliance, in the mothership program, individual vessels are responsible to the co-op and the co-op is responsible to the government for complying with its allocation. When a permit owner joins a catcher-vessel co-op, its whiting catch history is assigned to the co-op, and an annual allocation is made to the co-op based on the catch history of its members. Permit owners who do not join a co-op have their history assigned to an open fishery in which their vessels compete for the available harvest. Thus far, all vessels have chosen to form a single co-op serving all motherships. As part of the program, mothership processors were also issued mothership limited entry permits.

Catcher-Processor Co-ops

When the license limitation program was created in 1994, catcher processors bought permits from smaller vessels and combined them into larger permits to accommodate the catcher-processors. Ten such permits were created through this process. In 1997, these permits joined together in their own co-op. The catch share program protected the catcher-processor co-op by continuing an earlier limitation on new entrants to this sector. Each year, sector participants join to form a single co-op, which manages the sector's entire allocation of whiting. If at some time in the future the sector fails to form a single co-op, the system will convert to an IFQ program and quota shares will be allocated equally among all catcher-processor permits.

ONGOING PROGRAM DEVELOPMENT

When the program was put in place, many old trawl regulations remained that might no longer be needed. The Council has been looking at these old regulations and considering whether to change or remove them. For example, the Council extended the shoreside whiting season, eliminated several restrictive gear regulations, and allowed vessels to carry multiple trawl gear types at the same time. Additionally, the Council is finalizing recommendations to

eliminate the shelf area closure for the use of trawl gear. These "trailing actions" are described on the Council website.

EFFECTS

The catch share program substantially reduced bycatch, and efficiency for the fleet as a whole has increased. The fleet generally appears to be doing better economically, although the expected consolidation has taken place. Since, under the catch share program, fishermen know exactly how many fish they are allowed to take before the season begins, they can plan for the season and enter into more secure marketing and processing arrangements. They also have the flexibility to time landings to the best market conditions. They have more freedom to streamline their businesses and are held individually accountable for every fish brought on board their vessels. Catch shares provide a clear economic rationale for conserving resources. Just as shareholders in a company want the business to prosper so their shares gain value, fishermen in catch share systems need the fishery to remain sustainable.

On the other hand, it appears that many available species are being under-harvested, likely due to concerns about catching overfished species. This effect may decline as species are rebuilt.

For more information on the effects of the program, see the five-year catch review finalized in 2017.

Updated February 21, 2019