CALIFORNIA RISK POOL:

A co-management model to advance fisheries resource stewardship

Background: The West Coast groundfish fishery has historically served as the economic backbone of fisheries along the central coast of California. The fishery is a federally managed complex of over 90 species, including sablefish, whiting, and flatfish and rockfish species. In the late 1990's the fishery collapsed due to interrelated environmental and economic problems. In short, the fishery was overinvested in a business model focused on catching high volumes of fish and selling them for low values. Consequently, the decline of the groundfish fishery resulted in significant negative economic impacts along the central coast, as local port businesses and processors started to close due to significant reductions in landings and revenue.


© Bridget Besaw

The Nature Conservancy of California responded to the collapse of the groundfish fishery by establishing its Central Coast Groundfish Project in 2004 to work with fishermen and coastal communities to develop sustainable ways to catch groundfish and to support the local economy and the ocean simultaneously.

In 2011, the groundfish fishery transitioned into an Individual Fishing Quota – or "catch share" – system. Under this system, the annual total allowable catch for each species is divided into transferable quota shares and allocated among individual fishermen.

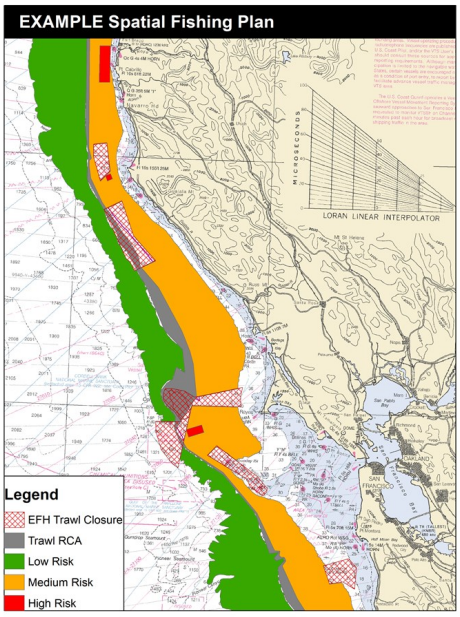
A key challenge for the entire fishery under the catch share system is the extremely limited supply of "**overfished species**" quota that constrains the harvest of more abundant species and the economics of the fishery. There are seven federally designated overfished species in the West Coast groundfish fishery, and in order to rebuild these species, fishery managers have set very low annual total allowable catches for them, resulting in very small amounts of quota being allocated across the fishery. Fishermen are at high risk of exceeding their quota for these overfished species while attempting to harvest more abundant target species. If they do, they must either purchase additional quota (which can be very expensive) or stop fishing for the season.

The California Risk Pool:

The Nature Conservancy (TNC) pursued an innovative solution to the overfished species challenge that addresses both the livelihoods of fishermen and conservation goals. In 2011, TNC partnered with two fishermen's associations – the Fort Bragg Groundfish Association and the Central California Seafood Marketing Association – to create the California Risk Pool, which is an agreement to pool fishing quota and manage the risk of catching overfished species. The goal of the California Risk Pool is to maximize conservation and economic opportunities and retain local access to fish.

By establishing the risk pool, fishermen combine their quota of overfished species to reduce the risk to individual fishermen. Members of the risk pool who catch overfished species are covered by the pool's quota (made up of the combined quotas owned by TNC and individual fishermen), in return for adhering to spatial fishing plans covering the 15 million acre project region and the use of **eCatch**, an electronic logbook system developed by TNC.

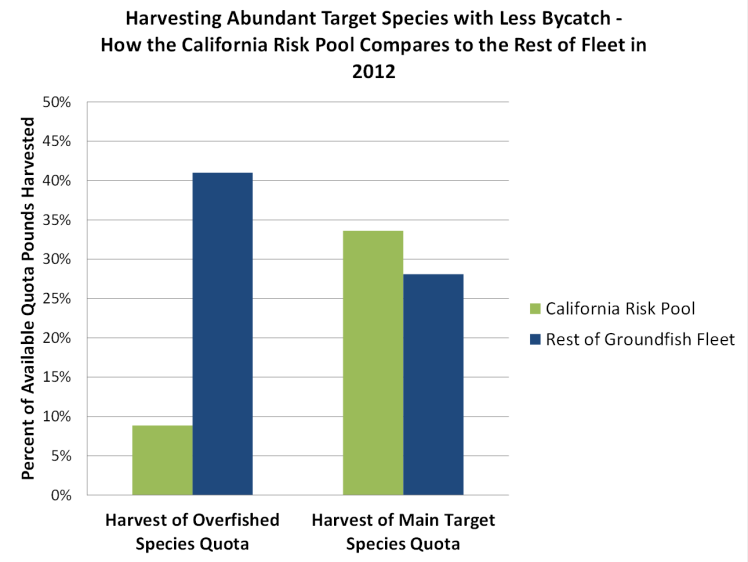
Fishermen in the California Risk Pool create spatial fishing plans in partnership with TNC to target healthy, abundant stocks while avoiding vulnerable overfished species. The spatial fishing plans combine the best available science and technology with fishermen's knowledge, past fishing history, and habitat information to spatially delineate risk zones (high, medium and low) as well as voluntarily closed areas. When catches of overfished species do occur, the risk pool agreement ensures that spatial information and details of the catch are shared across the membership.



The California Risk Pool uses eCatch (www.ecatch.org), an application developed by TNC that allows fishermen to capture, visualize, and share logbook information and provides high spatial and temporal resolution data on fishing activity. Using an iPad, fishermen record fishing event locations with latitude and longitude (start and end locations recorded for each set) and estimates of retained catch at each location. Fishing data logged in eCatch are then used to update and adapt fishing plans. The California Risk Pool is also exploring how logging and managing fisheries data with technology is creating opportunities for capturing greater market rewards through certifications, such the Seafood Watch program, or other differentiators that may provide higher market returns back to harvesters.

The California Risk Pool is also participating in collaborative fisheries research with TNC and agency partners. In 2013, we completed predictive maps of 15 groundfish species (including overfished species) and the second year of a three-year study groundtruthing the predictive maps using directed fishing and video surveys in a large, federally mandated fishing closure. This research is examining the role of the closed area in rebuilding overfished stocks and to determine if abundant target stocks can be fished with minimal bycatch.

The California Risk Pool has operated since July 2011 and has recently added a third fishing association: the Half Moon Bay Groundfish Marketing Association. The California Risk Pool has had between 10-12 member vessels that use different gear types (trawl, Scottish seine, traps, and bottom longline) that together manage the fishing rights for over 10 million pounds of groundfish annually. Since launching, the California Risk Pool has reduced bycatch of overfished species, increased target species harvests, and improved the tracking and sharing of fishing information. The California Risk Pool demonstrates a fisheries co-management model in which fishermen work with TNC on collaborative harvest planning and spatial fishing plans to reduce fishing footprint and bycatch, and shows that a cooperative business model can be economically viable and successful.



For more information, contact Kate Labrum (klabrum@tnc.org).