

The Western Pacific Regional Fishery Management Council offers options to end bigeye tuna overfishing

Since the late 1990s, bigeye tuna in the western and central Pacific Ocean (WCPO) has been experiencing overfishing. Tuna fisheries operating in the WCPO include longliners and handliners targeting adult bigeye and purse seiners targeting skipjack and incidentally catching juvenile bigeye.

International management of tuna and other highly migratory pelagic fisheries in the WCPO is conducted by the Western and Central Pacific Fisheries Commission (WCPFC). This regional fishery management organization was formed by an international agreement to which the United States is a party. Despite years of negotiation and adoption of conservation and management measures (CMMs), the WCPFC has been unable to find a solution to end bigeye tuna overfishing that will satisfy both the longline and purse-seine fleets.

At its 9th regular session in December 2012, the WCPFC agreed on CMM 2012-01, which established a goal of reducing bigeye mortality to a level no greater than $F/F_{MSY} \leq 1$.¹ CMM 2012-01 maintained bigeye tuna limits for longline fleets, including the US/Hawaii limit of 3,763 metric tons, but did not provide annual longline bigeye catch limits for any of the participating territories or small island developing states. CMM 2012-01, among other things, also increased the fish aggregation device (FAD) closure by a month, requiring a four-month purse-seine FAD closure or equivalent reduction in purse-seine FAD sets. CMM 2012-01 directed WCPFC members to cooperate on developing a more comprehensive measure.

The Western Pacific Regional Fishery Management Council at its 157th meeting, held in Honolulu, June 26–28, 2013, addressed the prolonged overfishing of WCPO bigeye tuna. It recommended that NMFS, in consultation with the Council, develop management options that would end bigeye tuna overfishing by restricting FAD use, using spatial management and reducing fishing capacity and to propose these options to the WCPFC. The Council and NMFS are members of the US delegation to the WCPFC, which will hold its 10th regular session (WCPFC10) December 2 to 6, 2013, in Cairns, Australia.

The options the Council is promoting address the increasing impact the purse-seine fishery has had on the stock. Purse seines account for approximately 67 percent of WCPO bigeye tuna overfishing, according to the WCPFC Science Committee. Purse-seine effort on FADs in 2011 was at an all-time high, up 43 percent from 13,000 FAD sets in 2010 to approximately 21,500 observed FAD sets in 2011, not including Philippines and Indonesia domestic tuna fisheries. The result was



Bigeye caught by the Hawaii longline fishery at the Honolulu fish auction (image: Sylvia Spalding).

a record incidental catch of bigeye tuna by purse seiners. By comparison, the targeted catch of bigeye by the longline fishery was below its 10-year average. The purse-seine catch occurred primarily around FADs and equaled the targeted fisheries' bigeye catch in weight but was 10 to 20 times higher than the targeted fisheries' haul in the number of individual bigeye caught.

If the purse-seine fishery were held to the 2010 number of total annual FAD sets and longline catches were maintained at current levels, overfishing of bigeye would be eliminated within 10 years, according to stock assessment models by the Secretariat of the Pacific Community.

While the Hawaii and American Samoa longline and handline fisheries combined account for only 3 percent of the total WCPO bigeye catch, the bigeye tuna fishery is of extreme importance to the Council and the fishermen and consumers it serves. Honolulu consistently ranks among the nation's top 10 fishing ports in value landed because of its longline landings of sashimi-quality bigeye. Eighty percent of the Hawaii longline catch stays in the State, where tuna tops the list of seafood consumed with an annual average of 12.72 pounds² per capita. By comparison, shrimp ranks first for the rest of the nation (4.08 pounds per capita) and canned (principally skipjack) tuna ranks second (2.80 pounds per capita).

Source: Pacific Islands Fisheries News, Summer 2013 <http://www.wpcouncil.org/2013/09/17/summer-2013-pacific-islands-fishery-newsletter/>

¹ F = Current fishing mortality; F_{MSY} = fishing mortality at maximum sustainable yield (MSY).

² 1 pound = 0.45 kg.