

CALIFORNIA DEPARTMENT OF FISH AND GAME REPORT ON RETENTION OF
SHELF ROCKFISH IN THE COWCOD CONSERVATION AREA IN 2013-14

Proposed Change

The California Department of Fish and Game (CDFG) requests a modification to existing regulations for recreational groundfish fishing within the Cowcod Conservation Areas (CCA) to reduce discarding; specifically, an allowance for retention of shelf rockfish taken during the open season for groundfish within the existing depth constraint of 20 fm. This action will not result in any additional cowcod impacts.

Background

Current recreational regulations prohibit retention of shelf rockfish within the CCA. Meanwhile, regulations authorize the take of nearshore rockfish, cabezon, California scorpionfish, lingcod, greenlings of the genus *Hexagrammos*, several state-managed species, and some species of sharks, skates, and flatfish within the depths and season open to recreational groundfish fishing in the CCA.

In 2001, the CCAs were implemented, and targeting of groundfish was prohibited within the CCA boundaries. However, an exception to the rule was made for CCA waters less than 20 fm in depth, so that take of nearshore rockfish and other nearshore species (listed above) was authorized¹. Prohibiting retention of shelf rockfish was initiated to help rebuild bocaccio and cowcod which had recently been declared overfished. The California Fish and Game Commission (Commission) also believed that prohibiting shelf rockfish retention would discourage fishing for rockfish in deeper waters (outside legal depths) where bocaccio and cowcod may be found.

For several years, constituents have reported that prohibiting shelf rockfish retention results in wastage while fishing for target species. Part of the anglers' reasoning is that the CCA is the only place in the state where shelf rockfish are prohibited but nearshore rockfish can be retained. These shelf rockfish amount to "regulatory discards"² which represented foregone catch that is usually replaced by another fish to fill the 10 fish rockfish, cabezon and greenling (RCG) bag limit.

While developing 2011-2012 federal and state regulations, the Pacific Fishery Management Council (PFMC) recommended, and the Commission adopted, changes to recreational regulations to allow retention of shelf rockfish in the CCA while fishing in allowed depths (20 fm or less), during the open season, in part to reduce regulatory discarding. However, the National Marine Fisheries Service disapproved this change. As a result, the Commission reconsidered its initial decision and ultimately decided not to implement the change to maintain consistency with federal regulations.

¹ Take of non-groundfish species (highly migratory species, white seabass, etc) is currently allowed in all depths inside the CCA.

² Discards include fish released alive or dead.

Based on strong public support³ and continued concerns with discards, CDFG again proposes allowing shelf rockfish retention within allowed depths (20 fm or less) in the CCA when the fishery for groundfish is open⁴. Removing the prohibition will also make regulations more consistent with those in other management areas and other fisheries (e.g., commercial fishery participants are allowed to retain shelf rockfish, including bocaccio, in depths of 20 fm or less in the CCA).

CDFG previously prepared an analysis of the estimated impacts of the proposed regulatory change for the 2011-2012 Federal Environmental Impact Statement (FEIS; PFMC and NMFS, 2011). This report provides additional information for consideration in 2013-14.

Methodology

California Recreational Fisheries Survey (CRFS) sample data were used to analyze rockfish catch within the CCA from 2005 through 2010. Using depth information from CRFS sample data, encounters of nearshore and shelf rockfish species were stratified by depth. Depth and location information used in the analysis are assumed to be reasonably accurate since the majority are global positioning system (GPS) coordinates taken by trained CRFS samplers on CPFVs. These data were then used to 1) evaluate current fishing activity in depths of 20 fm or less, 2) evaluate impacts to shelf rockfish, and 3) evaluate impacts to overfished species, as a result of allowing retention of shelf rockfish in depths of 20 fm or less in the CCA.

Results

A total of 884 rockfish were encountered (kept/retained or released) in all depths in the CCA from 2005 through 2010 based on interviews with 323 anglers, which included 35 CPFV fishing trips. Approximately 60 percent (526 fish) of those rockfish encounters occurred in depths less than 20 fm. Of these, 276 encounters (52 percent) were shelf rockfish, and 250 encounters (48 percent) were nearshore rockfish (Table 1). Vermilion and bocaccio rockfish were the most frequently encountered shelf species (Table 1). Zero cowcod were encountered.

³ The Fish and Game Commission received over 300 letters from the public during development of the 2011-12 regulations in support of allowing retention of shelf rockfish within the CCA.

⁴ Retention of bronzedspotted, canary, cowcod, and yelloweye rockfish would still be prohibited statewide.

Table 1. Encounters of Nearshore and Shelf Rockfish (Numbers of Fish) in depths of 20 fm or less in the Cowcod Conservation Area from 2005 through 2010 (CRFS Sample Data).

Species	Total	
Vermilion rockfish	173	
Copper rockfish	149	
Bocaccio	72	
Blue rockfish	20	
Gopher rockfish	20	
Olive rockfish	17	
Treefish	17	
Kelp rockfish	15	
Starry rockfish	13	
Other nearshore rockfish	12	
Rosy rockfish	11	
Other shelf rockfish (non overfished)	7	
Total	526	
		% total
Nearshore rockfish total	250	48%
Shelf rockfish total	276	52%
Total	526	100%

Analysis/Implications of Proposed Action

Potential for increased fishing effort within the CCA

It is highly unlikely that increased fishing effort in the allowed depths of the CCA would result from the proposed action, due to the remoteness of fishing locations (40 to 100 miles from port). The 60 fm depth restriction in the Southern Management Area (SMA) beyond the CCA provides considerably more opportunity to target shelf rockfish in deeper water closer to shore. Any change in fishing effort in the CCA is expected to result from anglers that are already pursuing non-groundfish targets in the CCA, rather than as a result of the new opportunity to target and retain shelf rockfish in depths of 20 fm or less when the groundfish fishery is open.

Fishing activities in depths of 20 fm or less, specifically within the CCA, are comprised of non-groundfish and groundfish target strategies, although the number of anglers directly targeting groundfish is small. Based on CRFS data extracts, only a small number of anglers and CPFVs specifically travel to the CCA to directly target nearshore groundfish in depths of 20 fm or less. Only 26 percent of the anglers fishing in these depths reported “bottomfish” as their target fishery. Although the “bottomfish” effort category includes rockfish, it also includes other desired species such as lingcod and halibut.

Effects on target species

Shelf Rockfish

Since shelf rockfish encounters represent 52 percent of the rockfish encounters in depths of 20 fm or less in the CCA (Table 1), allowing retention will likely result in a small increase in impacts to shelf rockfish by converting discards⁵ into landed catch (100 percent mortality rate). However, the risk of exceeding the minor shelf rockfish Annual Catch Limit (ACL)⁶, as a result of this proposed action is extremely low.

Nearshore Species

Total mortality of nearshore rockfish, cabezon or greenling may decrease as a result of the proposed action because some anglers may prefer to fill their 10 fish RCG bag limit with larger shelf rockfish species.

Potential for increased conservation risk to overfished species

Bocaccio

Although bocaccio could be retained under the proposed action⁷ and presently they cannot, CDFG does not anticipate any increase in bocaccio impacts above those previously reported in the 2011-12 FEIS (55.4 mt). The RecFISH model overestimates impacts occurring in the CCA because it assumes the depth restriction in the entire SMA is 60 fm, including inside the CCA. It also assumes the two fish sub-bag limit on bocaccio applies in the CCA. Therefore, the projected bocaccio impacts which have been “attributed” to the SMA are an overestimate because bocaccio retention is prohibited at all depths in the CCA under current law. As a result under the proposed action, retention of bocaccio could occur and modeled impacts would not change.

If the same harvest level remains in place for 2013-14⁸, the risk of exceeding the recreational harvest guideline, let alone the entire bocaccio ACL, is extremely low.

Cowcod

As stated previously, zero cowcod were encountered in depths of 20 fm or less in the CCA. One encounter of cowcod by a PC angler targeting yellowtail (*Seriola dorsalis*) was observed deeper than 20 fm in the CCA between 2005 and 2010. The encounter was observed by a sampler onboard a CPFV, where the reported depth was approximately 58 fm (350 ft); the cowcod was released alive. The presence of only one cowcod in six years (outside the allowable depths) suggests that the encounter rate is very low. Projected impacts for cowcod for the entire California recreational fishery for 2011-12 are 0.2 mt and are not expected to increase as a result of this proposed action. The risk of exceeding a cowcod ACL of 3 mt or higher, as a result of this proposal, is also highly unlikely.

⁵ The discard mortality rate varies depending on the individual species and depth encountered.

⁶ In September 2011, the PFMC limited the scope of harvest specifications for 2013-14 in order to more closely reflect those in place for 2012. Therefore, it is likely that the 2013-14 shelf rockfish ACL will be the same as in 2011-12.

⁷ Anglers would still have to abide by current regulations, including sub-bag limit, size limit, and season restrictions.

⁸ Applying the status quo harvest rate (77.7%) in the 2011 rebuilding analysis results in higher ACLs for 2013-14 (320 mt and 337 mt, respectively) compared to the 2012 ACL (274 mt). If the PFMC maintains a similar non-trawl apportionment, the buffer between projected impacts and recreational apportionment is expected to increase for 2013-14.

In the 2011-12 FEIS, a 3 mt ACL was implemented for cowcod, of which 0.9 mt was allocated to the non-trawl fishery - including the recreational fishery. Since only de minimis take of cowcod has been observed by West Coast Groundfish Observer Program in the non-trawl commercial fisheries, a sufficient buffer exists to accommodate any unanticipated increase in impacts from the proposed action. In the unlikely event that cowcod catches might exceed the non-trawl allocation, inseason action could be taken to close the fishery or modify the allowable fishing depths in the SMA to prevent exceeding the ACL.

Reduced Discarding

Since shelf rockfish encounters represent 52 percent of the rockfish encounters in depths of 20 fm or less (Table 1), discarding would be reduced because these fish could now be included within the 10 fish RCG bag limit.

Improved Public Perception Regarding Discarding and Wastage

Strong public support for this measure at the state level suggests improved public perception that wastage of fish is being minimized.

Implications of status quo management

Fishing effort within the CCA

Fishing activity in the entire CCA is mainly comprised of recreational targeting of non-groundfish species (e.g., tuna, yellowtail, and white seabass) that occur at various depths depending on the target. These non-groundfish fisheries incidentally encounter rockfish while in pursuit of their target species, but retention of nearshore rockfish is only allowed in depths of 20 fm or less during the open season under existing law. As such, under current legal fishing practices, some discarding of rockfishes does occur in pursuit of other target species and will continue under status quo⁹.

Effects on target species

Shelf Rockfish

Shelf rockfish are managed north and south of 40°10' N latitude (near Cape Mendocino) and total mortality of the complex south of 40°10' N latitude from recreational and commercial fisheries combined has been far below the ACL from 2006 through 2010 (Table 3).

⁹ Fishing activities in depths greater than 20 fm are outside the scope of this analysis and CDFG is not proposing any changes to regulations governing these fisheries. Impacts to nearshore and some shelf rockfish species (including overfished species) as a result of these activities are already accounted for in model projections.

Table 3. Estimated total fishing mortality of shelf rockfish south of 40°10' N latitude from 2006 through 2010 as reported by the West Coast Groundfish Observer Program.

Year	Total Mortality (mt)	ACL (mt)	% ACL
2006	334	714	46.8%
2007	365	714	51.1%
2008	212	714	29.7%
2009	273	714	38.2%
2010	211	714	29.6%

Between 2006 and 2010, total recreational shelf rockfish impacts south of 40°10' N latitude ranged from 171 mt to 308 mt. In the SMA south of 34°27' N latitude (Point Conception)—including the CCA—they ranged from 72 mt to 122 mt (Table 4).

Table 4. Shelf rockfish impacts (mt) in the recreational fishery by area, south of 40°10' N latitude from 2006 through 2010.

Year	40°10' - 34°27'	south of 34°27'	Total
2006	203	72	275
2007	186	122	308
2008	80	91	171
2009	159	87	246
2010	110	101	211

As stated previously, shelf rockfish represented 52 percent of the encounters with rockfish in depths of 20 fm or less in the CCA (Table 1). Under status quo, total impacts of shelf rockfish in the SMA are expected to be similar to those in previous years¹⁰. It is also expected that the bycatch and discard of shelf rockfish species will continue while fishing in depths greater than 20 fm, along with the consequent mortality for some percentage of these discarded fish.

Impacts to overfished species

Bocaccio

Seventy-two bocaccio were encountered by CRFS samplers in depths of 20 fm or less in the CCA from 2005 to 2010. For the entire area south of 40°10' N latitude, the projected recreational impact to bocaccio¹¹ in 2012 under status quo is 55.4 mt (PFMC and NMFS, 2011).

Bocaccio encounters are anticipated to increase throughout southern California in 2013 due to a strong 2010 year class. If this year class is as strong as projected, under status quo some

¹⁰ The CDFG uses its RecFISH model to project impacts to nearshore and overfished species based on a specified depth and season structure. It is not specifically designed to project impacts on non-overfished shelf rockfish species.

¹¹ The CDFG currently uses its RecFISH model to estimate impacts on overfished species. The model incorporates historic fishery data throughout the SMA, including data prior to implementation of the CCA when the fishery was less regulated, to inform future impacts. The model currently assumes all rockfish are taken in depths of 60 fm or less throughout the entire SMA when projecting impacts; impacts inside the CCA are not modeled separately from those in other areas. In other words, the model already assumes the recreational fishery operates to depths of 60 fm inside the CCA, rather than only 20 fm; so projected impacts are overestimated by the model.

increased encounter rate (and discarding) would be expected within the CCA in depths of 20 fm or less, although it cannot be quantified. In its report under Agenda Item E.4.b (November 2011), the Groundfish Management Team concluded that any increase in bocaccio impacts in 2013, as a result of the 2010 year class, is not expected to exceed the 2011 California recreational harvest guideline (131 mt).

If the 2010 year class is not as strong as projected, impacts under status quo would likely be similar to previous years.

Cowcod

Zero cowcod were encountered by CRFS samplers in depths of 20 fm or less in the CCA under current fishing practices from 2005 through 2010. Under status quo, impacts in depths of 20 fm or less are expected to be the same - zero. Projected impacts for cowcod for the entire California recreational fishery for 2011-12 under status quo regulations are 0.2 mt¹².

Reduced Discarding

Under status quo, it is expected that bycatch and discard of shelf rockfish species will continue along with the consequent mortality for some percentage of these discarded fish.

Improved Public Perception Regarding Discarding and Wastage

Under status quo, anglers will continue to perceive that there is a lack of concern on the part of policymakers for discarding fish.

Consistency in Regulations

Under status quo, recreational regulations between other management areas and regulations governing recreational and commercial fisheries in the CCA will continue to differ in reference to shelf rockfish retention. Public confusion regarding species retention regulations is expected to continue.

Summary

Removing the prohibition on shelf rockfish retention in depths of 20 fm or less in the CCA when fishing for rockfish is open will reduce discard mortality that currently occurs while in pursuit of other species within the 10 fish RCG bag limit. There will not be any additional cowcod impacts. Under the proposed action, recreational anglers will meet their RCG bag limit sooner and with less discarding. In addition, they should gain some satisfaction knowing that they are minimizing wastage of fish. Also, this change will make regulations more consistent with those in other management areas, and other fisheries. Increased impacts to shelf rockfish are expected to be minimal and can easily be accommodated within the recreational harvest guideline with a minimal risk of exceeding the ACLs. The take of bocaccio is not expected to increase; any minimal increase that may occur can be accommodated within the non-trawl allocation. No ACLs for target or overfished species are expected to be exceeded as a result of this action.

Reference

PFMC (Pacific Fishery Management Council) and NMFS (National Marine Fisheries Service). 2011. Proposed Harvest Specifications and Management Measures for the 2011-2012 Pacific

¹² See Footnote 7

Coast Groundfish Fishery and Amendment 16-5 to the Pacific Coast Groundfish Fishery Management Plan to Update Existing Rebuilding Plans and Adopt a Rebuilding Plan for Petrale Sole; Final Environmental Impact Statement. Pacific Fishery Management Council, Portland, OR. February 2011.