

**California Department of Fish and Game (CDFG) Report on
Rockfish Conservation Area Management Alternatives for
2007-2008 Groundfish Management**

Cowcod Conservation Area (CCA) Perimeters

Options for Consideration

The California Department of Fish and Game (CDFG) has received requests from both commercial and recreational fishermen to modify the boundaries of the Cowcod Conservation Area (CCA) for 2007-2008. Recreational fishermen have requested a modification to the inner perimeter to allow access to additional fishing areas nearshore. Commercial fixed gear fishermen have requested access to deeper waters within the current CCA boundaries to restore access to former slope rockfish target opportunities, primarily for blackgill rockfish.

Background and Purpose of CCA

The Cowcod Conservation Area (CCA) closures in the area south of 34°27' N. latitude were established in 2001 in response to an overfished determination for the cowcod rockfish stock, and a federal requirement to restore the population to a healthy status. The intent of the CCAs was to reduce the cowcod catch so that the rebuilding Optimum Yield/Total Allowable Catch (OY/TAC) will not be exceeded. Rebuilding analyses suggest that recovery would be jeopardized if rebuilding OY/TACs are exceeded by any significant amount. The cowcod stock was reassessed in 2005, which indicated that cowcod biomass size is in slightly better shape than the last assessment (18% versus 7% of unfished biomass). This was reflected in a higher Conception area ABC for 2007-2008, though results of the new rebuilding analysis confirm suggestions from previous analysis that rebuilding of cowcod may take several decades. A new series of annual rebuilding OY/TACs have been calculated for future years, beginning in 2007-2008.

The CCA closures are primarily located far offshore where cowcod catches and catch rates remained historically high, but where total groundfish effort had been much lower than for fishing grounds closer to the mainland shore. Therefore, the CCA closures were initially adopted because they were less disruptive to southern California fisheries than alternative measures that would have been applied across the board to all shelf fishing grounds. These area closures were established prior to the implementation of depth-based RCAs along the coast that provided new protection to the primary depths of overfished shelf species, such as cowcod. The biggest difference between the RCAs and the CCAs was that the CCAs were expected to remain unchanged for many years based on the need to keep cowcod mortality within the rebuilding limits from the first stock assessment, although they were never intended to serve as reserves or marine protected areas (MPAs). Given that the recent assessment shows a more optimistic rebuilding picture, this proposal provides consideration for adjustment of the CCA boundaries.

When the CCAs were first established, enforcement concerns dictated the outer boundaries to be long, straight lines rather than following irregular depth contours so that enforcement by aircraft could be effective. This resulted in inclusion of deep water (slope) habitat in the closure, where cowcod are less commonly found, and thus access to slope fishing grounds was omitted. Since the CCA's adoption, an electronic Vessel Monitoring System (VMS) has been adopted by the Pacific Fishery Management Council (PFMC) for commercial groundfish vessels, which is intended to provide effective enforcement without the need for long straight boundaries for offshore area closures. VMS should allow for more effective enforcement of irregular offshore boundaries. And, the overly-precautionary area management should be able to accommodate some risk of bycatch on the deeper fringes of cowcod depth distribution. .

Outer CCA Perimeter Alternatives

For the 2007-2008 management cycle, alternative outer boundaries for the CCAs are proposed for consideration, to preserve the original intent of maintaining cowcod fishing mortality levels within the rebuilding OY/TAC while restoring fishing access to target species generally outside of cowcod depth zones for non-trawl vessels only. Prior to implementation of the CCAs, the area was accessed by vessels fishing with hook and line gear to target primarily blackgill rockfish, along with other slope rockfish.

Three alternatives to status quo are presented for consideration.

Option 1 (= "Action Alternative 2" Chapter 2, DEIS): modify depth boundaries to allow fishing deeper than 175 fm.

For non-trawl vessels that employ VMS, the CCA closure areas would be limited to the primary depth range that is utilized by cowcod, which would remove current bottom fishing restrictions from a large area of fishing grounds that are too deep to be considered primary cowcod habitat. Alternative 1 redefines the CCA outer perimeters as a series of waypoints that fall within (or beyond) the cowcod depth range, centering on the 175 fathom contour. This alternative refines the area management of cowcod intended when the CCA was established while preserving the original intent of the CCA with less impact to fisheries for other healthy stocks. Some additional considerations would be necessary to provide effective enforcement for this alternative:

- Only vessels with VMS would be eligible to fish between the current CCA boundaries and the new outer perimeter lines. For all vessels except those carrying VMS, the current boundaries and restrictions for the CCAs would be maintained.
- CDFG enforcement of Alternative 1 waypoints would rely on timely access to VMS information, and the ability to use that information in state court to prosecute violations. Without VMS access, or federal enforcement of boundaries, effective enforcement and thus management integrity could not be ensured.
- Vessels intending to fish using Alternative 1 boundaries would be required to declare their intent prior to departure from port for each trip.
- End buoys for longline sets would be required to employ radar reflectors and strobe lights. Also, the practicality of employing transponders (or other technologies) similar to VMS for the end buoys would be considered as a regulatory requirement.

Option 2 (= “Action Alternative 1”, Chapter 2, DEIS): establish specific rockfish fishing areas within the CCA.

Four deep-water rockfish fishing areas (RFAs) within the existing CCA boundaries would be specified for commercial fishing with hook and line gear. This is similar to Alternative 1, except areas open to fishing would be limited to fishing grounds within four new defined RFAs and, within those RFAs, to areas that are deeper than the 175 fathom contour, as approximated by a series of waypoints within the RFA polygons. All other conditions would be as specified under Alternative 1. The limited number of fishing locations in Alternative 2 are intended to improve enforceability of the regulations compared to Alternative 1 while providing some access to slope target species deeper than habitat preferred by cowcod.

Option 3 (= “Action Alternative 3” Chapter 2, DEIS). Eliminate the CCAs and employ depth-based management under normal Rockfish Conservation Area (RCA) regulations.

This alternative would provide for management of the CCA areas as part of the routine groundfish management process. Any depth and area restrictions would be developed and adopted under the RCA regulations, which are currently closed to 150 fm in the area south of 34°27' N latitude.

Option 4. Status quo (no action alternative)

Maintain the current boundaries and restrictions for the CCAs. This alternative provides boundaries that have been shown to be easily understandable to fishers and enforcement. Conservation for cowcod and other overfished groundfish that are found within the area is achieved. However, fishing opportunities previously afforded to fixed gear vessels for target slope species are not realized.

Analysis of Impacts for Outer Perimeter Alternatives

Available depth distribution information for cowcod and blackgill rockfish are provided in Table 4-1 in Chapter 4 of the 2007-2008 DEIS contained in the June 2006 Briefing Book. The provided depth range of highest cowcod density is 100 -130 fm with an overall depth range of 22 - 203 fm. Depth distribution information for blackgill, the primary slope target species, is 125 - 300 fm for common depth (or highest density). While there is some overlap of the proposed open depths with the deeper ranges where cowcod has been observed, all of the outer perimeter alternatives would be expected to maintain the total cowcod catch within the rebuilding OY for 2007-2008. Prior to adoption of the CCA, less than ten vessels fished for blackgill rockfish in these areas. While CDFG recognizes there is no way to predict the likelihood of increased open access opportunity in areas reopened to the hook and line fishery under these alternatives, few open access vessels currently participate in slope rockfish fishing in areas open outside the non-trawl RCA boundaries.

All of the Outer Perimeter Alternatives would be expected to maintain the total cowcod catch within the rebuilding OY for 2007/2008. In 2000, an OY of 2.4 mt was established for the Conception area, which was roughly one-half the level of the total commercial catch from trawl and non-trawl vessels during the preceding years when there were few if any constraints on cowcod fishing. Since then, access to shelf habitat has been restricted by implementation of depth-based Rockfish Conservation Areas (RCAs), and the cowcod bycatch mortality has been

coming in under the current rebuilding OY of 2.1 mt.. The majority of catch has come from the trawl sector north of Pt. Conception, which currently has a separate OY of 2.1 mt. When comparing current catch estimates from the non-trawl commercial sectors to the OYs combined from both areas are 0.2 mt, representing 5% of the two area OYs combined (=4.2mt). For 2007-08, the Council-preferred OY alternatives combine the two OY management areas for a single OY that includes a near-status quo level and a higher level (4.0 mt or 8.0 mt for both areas combined). The trawl and non-trawl RCAs have provided protection of cowcod in addition to the CCA and total catch for cowcod in all commercial and recreational sectors has successfully reduced impact to approximately 20% below the current OYs, with an RCA boundary at 150 fm. A combination of 150 fm RCA boundaries and maintained CCA closure in waters less than 175 fm (under Action Alternatives 1 and 2) should therefore preserve successful management of bycatch levels of cowcod rockfish below the proposed low OY option for 2007-08. From a biological perspective, any of the alternatives to status quo meet the intent of the CCAs; however, from an implementation perspective, the option contained in Option 2 (Action Alternative 1) best achieves enforcement goals. Relative to concerns expressed over the potential impact on continued fishery-independent research within the CCA, a new survey using submersibles to survey cowcod within the CCA was conducted and used as a survey source in the 2005 cowcod stock assessment. Some areas contained in alternatives may overlap with survey areas, although we have not compared to actual transect locations. Depending on the alternative chosen, CDFG recognizes that it might affect comparability of the one past survey with future surveys repeated in the area.

The actual impact to cowcod of any changes could be evaluated in the future to consider whether the blackgill fishery should continue in that areas, if new observer data from fishing deeper than 175 fm in the CCA became available. While the West Coast Groundfish Observer Program was implemented after the closure of the CCA, observations south of Pt. Conception have been minimal to this point.

Inner CCA Perimeter Alternatives

For 2007-08, constituents have requested the opportunity for recreational fishing deeper than the currently-specified 20 fm depth closure.

Alternative 1: Extend fishing depth from 20 fm to 30 fm.

Alternative 2: Extend fishing depth from 20 fm to 40 fm.

Sub-options for Alternatives 1 and 2: Consider allowing retention of shelf rockfish species

Alternative 3 (CDFG preferred alternative): Status quo (no action). Maintain the current boundaries and depth and species restrictions for the CCAs.

Analysis of Impacts from Inner Perimeter Alternatives

The current 0-20 fathom shallow fishing opportunity within the CCA is limited to nearshore species and does not provide for retention of shelf species. Both of these provisions were established to eliminate the risk of interactions with cowcod. Fishing deeper than 20 fathoms would not provide additional fishing opportunities unless we allowed retention of shelf species. .Allowing retention of shelf species would increase the likelihood that an unquantifiable amount of cowcod would be discarded, thus undermining the intent of the CCAs. Allowing increased fishing opportunities for the recreational and commercial fisheries in an area of expected cowcod interactions is not supportable given the continued low OY options. Therefore, the CDFG does not recommend any change from status quo for inner CCA boundaries.

Proposed Creation of Darkblotched Rockfish Conservation Areas (DRCAs) between 40°10' N latitude and 38° N latitude for Limited Entry Trawl Groundfish in 2007-2008

Background:

California Department of Fish and Game (CDFG) is proposing two areas for possible new Darkblotched Rockfish Conservation Areas (DRCAs) between 40°10' N. latitude and 38° N. latitude. This area represents the southern end of the distribution of this rebuilding species. Although catch rates are lower in this area when compared to catch rates in the area north of 40°10' N. latitude, some large catches have occurred in past years, and as a result there is uncertainty in predictability of catches in this area. Slope rockfish represents an important target species group for trawl vessels operating in this area, and cumulative trip limits previously were the same from 40°10' N. latitude to the US/Mexico border. However, due to uncertainty relative to possible darkblotched rockfish in this area when targeting slope rockfish, cumulative trip limits have been reduced to a level intermediary between low levels N. of 40°10' and limits south of 38° N. latitude. Available data was analyzed to evaluate whether specific areas of higher concentration (i.e., catch-per-unit-effort) could be identified for potential closure to provide a reasonable expectation of lower bycatch than current rates being assumed for the area.

Data Reviewed:

Data from several sources were reviewed through a collaborative effort between NMFS and CDFG. Fishery-independent data from the triennial, slope, and combined surveys were provided by AFSC and NWFSC, and analysis conducted by John Field, NMFS Santa Cruz and Jan Mason, NMFS Pacific Grove. Fishery-dependent location data were derived from trawl logbook data and analyzed by Jan Mason and Gerry Kobylinski, CDFG. Data from identified areas was compared to observer data from the West Coast Groundfish Observer Program (WCGOP) by Jim Hastie. A complete review of the analysis will be provided at the June Council meeting.

Proposal:

Five areas reflecting higher concentrations of darkblotched rockfish in one or more years from 2000-2005 were identified and analyzed. Of these, two areas appeared to have the greatest amount of overlapping data between data sources. WCGOP data did not conflict with these findings. Should the areas be adopted for use in 2007-2008 groundfish management, their appropriate application needs to be explored. The areas could be used year-round, or part of the year, or used when needed inseason. The two areas for consideration are as follows:

Alternative 1: DRCA at Spanish Canyon near Shelter Cove (Figure 1)

Coordinates for Area 1 (Map attached):

#	Latitude		Longitude	
	Degrees	Decimal Minutes	Degrees	Decimal Minutes
1	40	6.22	124	17.78
2	40	2.96	124	15.49
3	40	2.42	124	13.69
4	40	2.23	124	13.66
5	40	2.57	124	16.53
6	40	4.85	124	17.99
7	40	6.22	124	17.78

Alternative 3: DRCA west of Pt Arena (Figure 2)

Coordinates for area 3 are as follows (Map Attached):

#	Latitude		Longitude	
	Degrees	Decimal Minutes	Degrees	Decimal Minutes
1	38	56.36	123	59.33
2	38	56.98	123	56.73
3	38	53.7	123	56.35
4	38	50.07	123	53.6
5	38	50.02	123	55.32
6	38	56.36	123	59.33

Darkblotched Rockfish high catch areas
Draft for Review, 5-24-2006

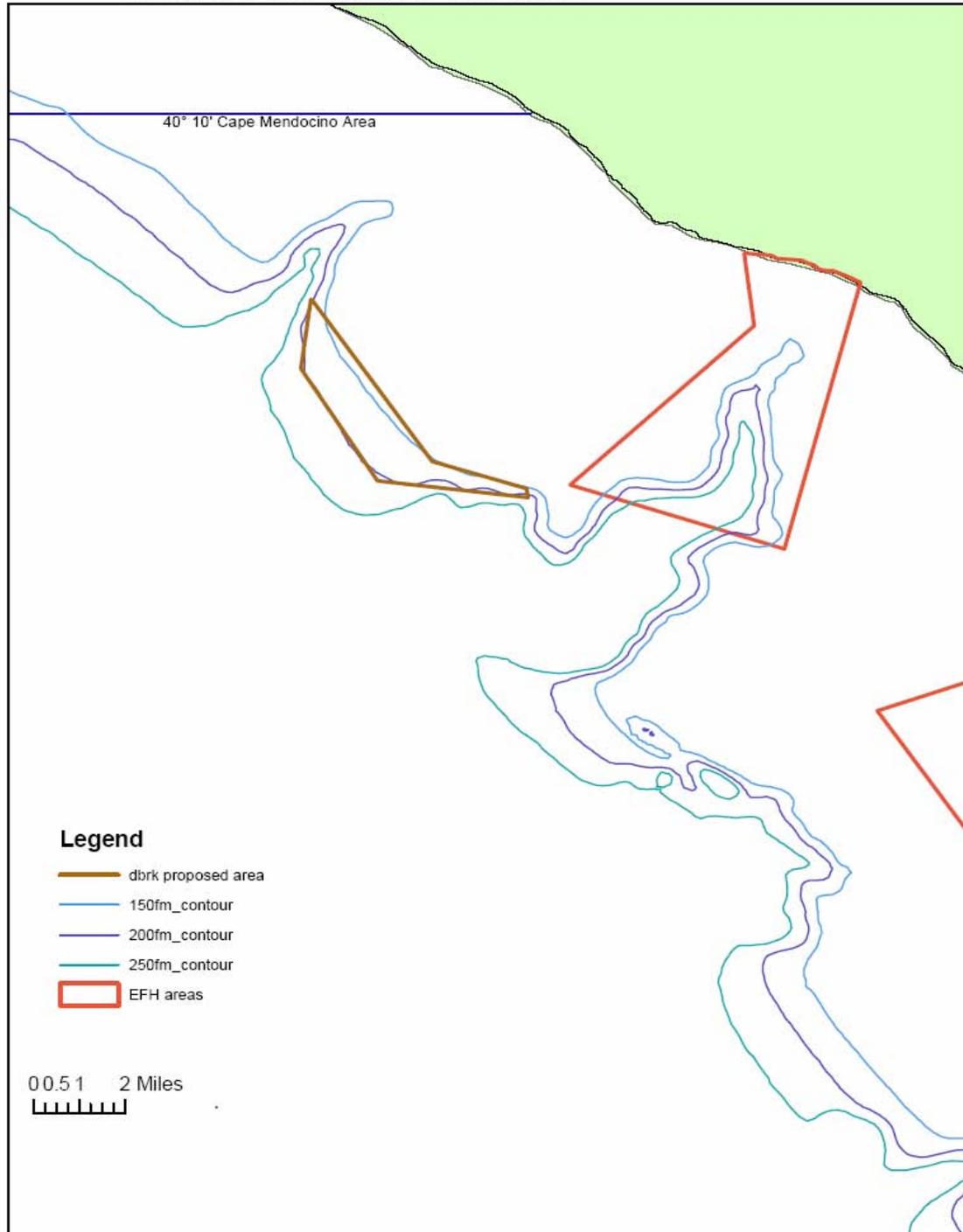


Figure 1. Proposed darkblotched RCA at Spanish Canyon near Shelter Cove.

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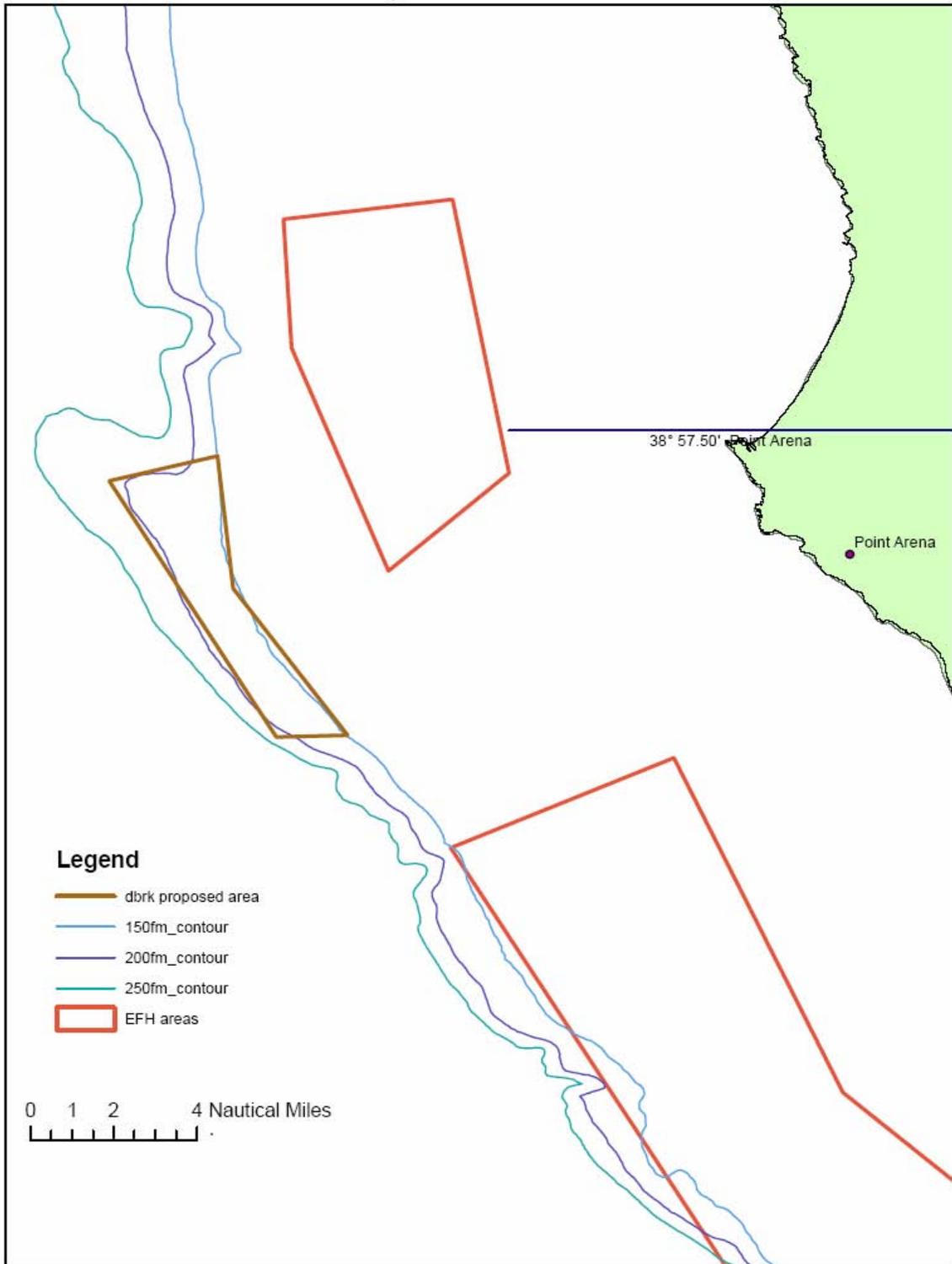


Figure 2. Proposed darkblotched RCA west of Point Arena.