

**DRAFT 2: REPORT TO GMT REGARDING
INSEASON MANAGEMENT PROPOSALS FOR THE 2005 CALIFORNIA RECREATIONAL
FISHING SEASON USING PROJECTIONS FROM 2004 CRFS ESTIMATES**

Susan Ashcraft, Debbie Aseltine-Neilson, CDFG

BACKGROUND AND PROPOSED ACTION:

At the March 2005 Pacific Fisheries Management Council (Council) meeting, the California Department of Fish and Game (CDFG) provided an Informational Report which summarized the California Recreational Fishery Survey (CRFS) program implementation and validation process, and provided recreational groundfish catch and effort estimates by mode for 2004 (Informational Report 2: CDFG 2004 Recreational Fisheries Data, March 2005). California recreational harvest guidelines or allocations for overfished species were not exceeded in 2004. Based on these results, in conjunction with the improved ability for real-time inseason catch monitoring, the Council conveyed its willingness to consider CRFS estimates to support inseason fishery actions in 2005. Following the March Council meeting, the CDFG used 2004 CRFS data to project fishing impacts for 2005, and derived options for a modified 2005 season structure which allows greater fishing opportunities while achieving the goal of keeping projected impacts within recreational harvest guidelines or allocations for overfished and constraining species. Upon receiving guidance provided by the California Fish and Game Commission (FGC) in light of constituent input and public testimony, the Director of the CDFG is considering immediate action, through the authority of existing state regulations (Section 27.82(e), Title 14, California Code of Regulations), to implement a modified recreational groundfish fishing season in state waters.

We request that the GMT and Council consider adopting these inseason management measures in federal waters for 2005. The proposed season structure is provided in Attachment 1.

REASONS FOR CONSIDERATION OF INSEASON ADJUSTMENTS:

Several considerations lead the CDFG to conclude that modification of the 2005 season structure is warranted:

- The current 2005 season structure was based on catch projections pre-dating the CRFS program (i.e., MRFSS catch estimates prior to 2004 were applied in a decay model).
- The CRFS program has been designed to provide more accurate and precise annual catch estimates than the previous program, and is the most readily available data source for inseason management.
- As discussed at the March Council meeting, the 2004 catch estimates from CRFS were within annual targets and limits established by PFMC for constraining species and overfished species.
- The current 2005 season structure was designed as more restrictive than the 2004 season structure due to catch projections from the MRFSS-derived model. In light of 2004 season catch estimates from the CRFS program, revised projections suggest that the current season may be more restrictive than what is needed to keep take of species of concern within acceptable limits. Such restrictions have the potential of creating economic hardship for the industry and fishing communities.
- Monthly catch estimates provided by CRFS for six regions in California provides for careful and detailed inseason monitoring by the state as a safe-guard, if rapid inseason response is needed due to higher-than-anticipated catch levels.

DATA EXAMINED AND METHODS USED FOR PROJECTING 2005 SEASON IMPACTS USING CRFS:

- Analysts: CDFG analysts for this task were Debbie Aseltine-Neilson and Tom Barnes
- Data Source: CRFS catch estimates contained in the RecFIN website were examined. Estimates of recreational catch for 2004 by district (region) and month for each species were extracted from the RecFIN/CRFS website (www.psmfc.org/recfin/forms/est2004.html) and used for projection of impacts under proposed options for 2005 inseason changes.
- Methodology:
 - Estimation of impact for months or depths in 2005 season: Catch estimates for months and depths open in 2004 were used to project impacts for the same months and depths in 2005. For months or depths that were closed in 2004, ratios from the catch projection model (originally used to generate 2005-06 management specifications) were applied.
 - Projected impact for closed months: Expansions for proposed months were derived from ratios in the 2005-06 Catch Percent by Wave tables.
 - Projected impact for closed depths: Expansions for proposed depth changes were derived from ratios in the 2005-06 Catch Percent by Depth tables from the same model.
 - Effort Shift Adjustment: Catch ratios in the 2005-06 catch projection model incorporated effort shifts for fishing less than 40 fm. Therefore, areas in 2004 requiring effort adjustments before expanding to all depths were modified using effort shift adjustment factors for 20 fm (1.393) and 30 fm (1.276).
 - Combining impacts across waves and depths: The resulting estimates from all districts were then combined or divided, where necessary, to provide estimates of impacts for the proposed management structure in the four regions with separate management specifications in 2005.

REVISED SEASON STRUCTURE OPTIONS RELATIVE TO 2004 SEASON:

The CDFG considered the 2004 season structure as a starting point for consideration of a revised 2005 season, given that catch estimates from the 2004 season were at acceptable levels. The proposed season structure for 2005 assumes implementation in April. While opening January through March is no longer an option, it does sufficient catch savings relative to 2004 to consider additional opportunities in the 2005 season proposed for April through December. The following provides a summary of changes in season structure in each region that could be accommodated while keeping projected harvest below targets for overfished species.

Regional Proposals:

- North Coast (40°10' N. lat to CA/OR border): Same as 2004 **plus** black rockfish retention allowed in all open months, **plus** 1 month lingcod added
- Central Coast (40°10' N. lat to 36° N. lat): Current 2005 season **plus** December at same depth
- South-Central Coast (36° N. lat to 34°27' N. lat): Current 2005 season **plus** shallow water access
- South Coast (34°27' N. lat to US/Mexico border): Same as 2004; CA scorpionfish same as 2005 with depth adjustments

Limitations and Considerations:

- Central Coast: Catch levels of minor NS RF in 2004 reached 96.5% of the recreational HG for this area. Canary RF is also an issue. Therefore, even with the CRFS adjustments, it did not allow for additional opportunity. Consequently, there is limited ability to add more than 1 mo or allow deeper fishing depths (despite constituent concerns over concentration of fishing in shallow depths).
- South Central Coast: Same minor NS RF consideration as for Central Coast. Closure of July could have allowed for fishing through December but constituents considered opening that month a priority.
- Lingcod season: retention allowance during proposed rockfish season for each area, except for spawning closure (December through March). Careful inseason monitoring will be necessary due to recruitment into the fishery; may need to consider further inseason non-retention in the fall.
- Salmon fishing opportunities: A poor salmon season predicted for 2005 may lead to increased targeting of groundfish in some areas of the coast, although this effect cannot be calculated at this time.
- According to CRFS catch estimates, both cabezon and greenling catches in 2004 were lower than their respective targets for 2005. This is the case despite a reduction in the cabezon OY in 2005 from new stock assessment results. Nonetheless, as the cabezon and greenling season coincides with rockfish seasons and depths, these catches will need to be monitored closely this year. Should early attainment be projected, non-retention is a reasonable action given the high survivability of these species.

ESTIMATED IMPACTS RESULTING FROM ACTION:

Total Bycatch Estimate (mt) for Overfished Species relative to target (OY/HG)

	Bocaccio	Canary	Cowcod	Dkbl	Lingcod	POP	Widow	Yeye
Total 2005 Catch Estimate	60	9.1	0.4	0	<422	0	9.4	<3.7
HG ¹ or updated impact estimate ²	77 ²	9.3 ¹	1.8 ¹	0 ²	422 ¹	0 ²	9.4 ^{2,3}	3.7 ¹

1 – Harvest Guideline (HG) established in Federal Regulations

2 – Best estimate of recreational impact in 2005

3 – Widow estimate was updated relative to bycatch scorecard value (as updated in March 2005) by adjusting projections for temporary targeting that occurred in 2004.

Total Catch Estimate (mt) for Other Species [e.g., Target Species/Species Group, Species with Harvest Guideline (HG), Constraining Species]:

	Blaek Rockfish (RF)	Minor Nearshore RF North (40°10' - CA/OR border)	Minor Nearshore RF South (40°10' - US/Mexico border)
Total 2005 Catch Estimate	137	11	383
HG ¹ , updated impact estimate ² , or HT ³	175 ³	11 ²	383 ²

1 – Harvest Guideline (HG) established in Federal Regulations

2 – Best estimate of recreational impact in 2005

3 – Harvest Target (HT): For black rockfish, this is the state-derived recreational harvest target within the Federal HG for CA recreational and commercial catch, combined. The black rockfish recreational target is derived from CA Fish and Game Commission allocation guidance between recreational and commercial sectors.

AREAS OF UNCERTAINTY IN THE USE OF CRFS DATA FOR INSEASON MANAGEMENT:

The CDFG evaluated risks associated with using uncalibrated 2004 CRFS data for inseason management in 2005 and in particular considered the following:

1) AREAS OF UNCERTAINTY: Risk to the Resource

The risk of using uncalibrated CRFS data for inseason management during 2005 may not be the same for all species. With respect to data quality, there are two general types of stocks under groundfish management:

- Data-poor unassessed stocks
- Data-moderate stocks that have been formally assessed

Unassessed Stocks

It is not possible to properly determine the risk of using CRFS data to manage unassessed stocks at this time.

- Catch history is critical for setting HG/OYs.
 - For all species, the historical catch from the recreational sector was obtained from the MRFSS program.
- Initial indications suggest that the CRFS catch estimates for most species may be systematically lower than corresponding MRFSS estimates.
 - Calibration is the answer to dealing with systematic differences between MRFSS and CRFS. However, sufficient data for statistically valid calibration of MRFSS to CRFS are currently unavailable.
- The risk to the resource associated with the use of 2005 CRFS catch estimates to fill MRFSS-based HG/OYs is dependent upon three factors: 1) whether or not any of the HG/OY is left uncaught using the CRFS catch estimates; 2) the relative size of the recreational fishery compared to the commercial fishery during the period that was used for calculating the HG/OY; and 3) the degree to which the MRFSS program may have overestimated catch compared to the CRFS program.

Assessed Stocks

Some assessed species may be able to better handle the risk than the unassessed species, because their HG/OYs are based on stock assessments that include many kinds of data, not just the catch history. In particular, assessment results for canary rockfish, bocaccio and black rockfish would be expected to exhibit only minor effects from any potential change in the recreational catch history from California.

- In the case of these three species, the risk of jeopardizing the health of the stock associated with using the CRFS data for inseason management is thought to be low.
 - For bocaccio and canary rockfish, the California recreational fishery was probably too small to significantly change the assessment results if the historical values were to be adjusted for bias.
 - For black rockfish, the California recreational fishery accounted for a somewhat larger share of combined Oregon/California landings since 1980; however the age composition from the Oregon fishery in the 1980's and 1990's had the greatest effect on the assessment results. Also, the black rockfish assessment found the stock to be healthy, and therefore is more resilient to changes in harvest rate.

2) AREAS OF UNCERTAINTY: Risk to fishing opportunities of other fisheries and sectors

During the past few years, the Council has chosen to close fishing opportunities inseason for both commercial and recreational fisheries in response to fishing overages in other sectors, particularly as some OYs have been set at very low levels under rebuilding plans. The variable nature of recreational fishing effort was considered, and the level of uncertainty relative to employing CRFS data when only a single year of data are available. These risks may be mitigated by the enhanced monitoring capabilities of the CRFS program, which provides regional catch and effort estimates on a monthly basis and will allow managers to monitor catches inseason and slow down or shut down fishing if needed, through state action.

3) AREAS OF UNCERTAINTY: Risk of technical errors in survey inputs from first year of program implementation

The CDFG "Informational Report 2" from the March 2005 Council meeting outlined the range of program elements that have been implemented in CRFS, including, for example, technical elements such as production of expansion programs to generate catch and effort estimates, and implementation of a limited Angler License Database (ALD) to provide effort estimates for angler activities that cannot be estimated by direct observation. As with any new program involving sampling and expansions, the risk exists that technical errors may be identified throughout the implementation. The CDFG continues to work with the RecFIN Technical Committee and RecFIN Statistical Sub-committee in fine-tuning the program, and in identifying and addressing data shortcomings. The RecFIN Statistical Sub-committee met recently, and evaluated the data inputs from the first year of the CRFS sampling program, including errors that could potentially impact the catch estimates generated for 2004. Their concerns were primarily focused on sampling errors in the ALD survey. Specifically, "sampling without replacement" was employed rather than "sampling with replacement", causing statistical problems and biases in the estimate.

- Contribution of ALD survey to groundfish catch estimates: Wade Van Buskirk at Pacific States Marine Fisheries Commission estimates that the ALD is used to generate about 10% of the overall catch and effort for all sportfishing in California. It is used to estimate catch for the following modes: private access boats, beach/bank, and nighttime fishing components of the private boat, man made and beach/bank modes. Beach and bank anglers represent the majority of the anglers in the 10% mentioned above and do not catch significant numbers of groundfish (For example, about 1% of the total gopher catch estimated in CRFS is derived from these modes).
- Adjustments in the CRFS program: Adjustments have been made to account for sampling biases identified from 2004, through a methodology derived by Wade Van Buskirk, which involved comparison of ALD effort estimates with the MRFSS telephone effort survey conducted concurrently in 2004. According to Wade, the CRFS ALD trips-per-angler matched up with three waves of the 2004 MRFSS telephone effort survey for trips-per-angler. For the other three waves, CRFS overestimated trips-per-angler by 25% in two of the waves and by 100% in one of the waves. The fact that trips per angler matched closely in five of the six waves (Wave 6 was the problem) suggests that adjustments made to the ALD have corrected most of the problem.

MEASURING PROGRESS: IMPROVED INSEASON MONITORING AND ACTION MECHANISMS

- Inseason catch and effort estimates: The CDFG is committed to producing timely, precise, and accurate catch and effort estimates for California's recreational fishery each month.
- Monthly review of catches and effort: Specific staff are assigned to review monthly catch estimates, provide RecQSM to the GMT, compare catch rates with projected catch for time period, inform CDFG Groundfish Team about species catches that appear high, and provide information through a communication network with industry (described below) for voluntary fishing behavior change if needed.
- Assuring data quality and usefulness: The CDFG will continue to validate the CRFS catch estimates and continue to develop a way to calibrate these data with the MRFSS time series.
- Response to 2005 CRFS data: The state will take appropriate action to slow down or close if CRFS data in 2005 indicate potential overages, and will keep agency representatives informed. (Mechanisms to slow-down or shut-down appropriate regions are described in the 2005-2006 Groundfish Annual Specifications and Management Measures.)

Inseason Communication Plans:

- Educational Outreach and Industry Contributions:
 - Flyers with information about the fishing season and about overfished and prohibited rockfish species will continue to be distributed and posted at harbors and shops for improved compliance with regulations.
 - A Communication Network has been established with approximately 20 recreational angling associations, clubs, and CPFV operators, to keep anglers informed and assist with rapid distribution of concerns or requests to slow fishing (This successfully stopped the targeting of widow rockfish in Southern California waters during 2004).
- RecFIN report access: CDFG is working with RecFIN staff to provide monthly regional catch estimates on the RecFIN website.
- Notification of inseason state actions: The CDFG will notify the Council of intended actions.

AREAS WHERE GMT INPUT IS REQUESTED:

1. Can we identify any biological, statistical, or management concerns not considered by CDFG associated with these proposals?
 2. Does the GMT consider the inseason tracking mechanisms in place to be sufficient to respond to early attainment of recreational harvest targets inseason?
 3. Are key inseason review times necessary to identify?
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GMT REVIEW

Date of GMT Review: _____

GMT Discussion Points:

GMT Recommendation:

Rationale:

**CALIFORNIA RECREATIONAL REGULATIONS BY REGION IN 2005 – ATTACHMENT 1
CDFG Draft IN-SEASON PROPOSALS**

Key:

	Allowed in all waters
20	Depth closed > 20fm
30	Depth closed > 30fm
40	Depth closed > 40fm
60	Depth closed > 60fm
20-40	Depth open between 20-40fm
30-60	Depth open between 30-60fm
	Closed

NORTH COAST
(CA/OR Border to 40° 10' N Lat)

North Coast 2005

Species	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec
Nearshore rockfish							40	40	40	40		
Black rockfish ²							40	40	40	40		
California sheephead							40	40	40	40		
Cabazon							40	40	40	40		
Greenlings (rock, kelp)							40	40	40	40		
Ocean Whitefish							40	40	40	40		
Shelf rockfish							40	40	40	40		
Lingcod							40	40	40	40		

North Coast 2005 (In-Season Proposal)

Species	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec
Nearshore rockfish					30	30	30	30	30	30	30	30
Black rockfish ²					30	30	30	30	30	30	30	30
California sheephead					30	30	30	30	30	30	30	30
Cabazon					30	30	30	30	30	30	30	30
Greenlings (rock, kelp)					30	30	30	30	30	30	30	30
Ocean Whitefish					30	30	30	30	30	30	30	30
Shelf rockfish					30	30	30	30	30	30	30	30
Lingcod					30	30	30	30	30	30	30	30

NORTH-CENTRAL COAST
40° 10' N lat to Lopez Point (36° 00' N lat)

North-Central Coast 2005

Species	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec
Nearshore rockfish							20	20	20	20	20	
California scorpionfish							20	20	20	20	20	
California sheephead							20	20	20	20	20	
Cabazon							20	20	20	20	20	
Greenlings (rock, kelp)							20	20	20	20	20	
Ocean whitefish							20	20	20	20	20	
Shelf rockfish							20	20	20	20	20	
Lingcod							20	20	20	20	20	
Sanddabs												

North-Central Coast 2005 (In-Season Proposal)

Species	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec
Nearshore rockfish							20	20	20	20	20	20
California scorpionfish							20	20	20	20	20	20
California sheephead							20	20	20	20	20	20
Cabazon							20	20	20	20	20	20
Greenlings (rock, kelp)							20	20	20	20	20	20
Ocean whitefish							20	20	20	20	20	20
Shelf rockfish							20	20	20	20	20	20
Lingcod							20	20	20	20	20	
Sanddabs												

SOUTH-CENTRAL COAST
Lopez Point (36° 00' N lat) to Pt. Conception (34° 27' N lat)

South-Central Coast 2005

Species	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec
Nearshore rockfish					20-40	20-40	20-40	20-40	20-40			
California scorpionfish					20-40	20-40	20-40	20-40	20-40			
California sheephead					20-40	20-40	20-40	20-40	20-40			
Cabezon					20-40	20-40	20-40	20-40	20-40			
Greenlings					20-40	20-40	20-40	20-40	20-40			
Ocean Whitefish					20-40	20-40	20-40	20-40	20-40			
Shelf rockfish					20-40	20-40	20-40	20-40	20-40			
Lingcod					20-40	20-40	20-40	20-40	20-40			
Sanddabs												

South-Central Coast 2005 (In-Season Proposal)

Species	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec
Nearshore rockfish					40	40	40	40	40			
California scorpionfish					40	40	40	40	40			
California sheephead					40	40	40	40	40			
Cabezon					40	40	40	40	40			
Greenlings					40	40	40	40	40			
Ocean Whitefish					40	40	40	40	40			
Shelf rockfish					40	40	40	40	40			
Lingcod					40	40	40	40	40			
Sanddabs												

SOUTH COAST
Pt. Conception (34° 27' N lat) to US/Mexico Border

South Coast 2005

Species	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec
Nearshore rockfish			30-60	30-60	30-60	30-60	40	40	40			
California scorpionfish										40	40	20
California sheephead			30-60	30-60	30-60	30-60	40	40	40			
Cabezon			30-60	30-60	30-60	30-60	40	40	40			
Greenlings			30-60	30-60	30-60	30-60	40	40	40			
Ocean Whitefish			30-60	30-60	30-60	30-60	40	40	40			
Shelf rockfish			30-60	30-60	30-60	30-60	40	40	40			
Lingcod				30-60	30-60	30-60	40	40	40			
Sanddabs												

South Coast 2005 (In-Season Proposal)

Species	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec
Nearshore rockfish			30-60	60	60	60	60	60	30	30	60	60
California scorpionfish										30	60	60
California sheephead			30-60	60	60	60	60	60	30	30	60	60
Cabezon			30-60	60	60	60	60	60	30	30	60	60
Greenlings			30-60	60	60	60	60	60	30	30	60	60
Ocean Whitefish			30-60	60	60	60	60	60	30	30	60	60
Shelf rockfish			30-60	60	60	60	60	60	30	30	60	60
Lingcod				60	60	60	60	60	30	30	60	
Sanddabs												

