

GROUND FISH MANAGEMENT TEAM (GMT) REPORT ON 2005-06 GROUND FISH MANAGEMENT MEASURES

Based on the range of ABCs and OYs that the Council adopted, the GMT developed and discussed management measures for the 2005-06 commercial and recreational groundfish fisheries with the Groundfish Advisory Panel (GAP), and recommends the following:

CREATION OF NEW MANAGEMENT LINES

The GMT recommends that a new depth management line be created for the area south of 42° N. latitude (OR/CA border) at 40 fms. The GMT also recommends a new latitudinal management line be specified at Pigeon Point (37°11'N lat.).

CATCH SHARING AND HARVEST GUIDELINES

Based on the guidance provided by the Council and contained in the Allocation Committee report, the GMT has the following recommendations:

Black Rockfish Sharing Between Oregon and California

As in 2004, the GMT recommends carrying forward the black rockfish catch sharing recommendation of 58% to Oregon and 42% to California within the southern OY, and specifying those values as harvest guidelines in the federal regulations for the respective states. It is our understanding that the states of California and Oregon have factored in precautionary approaches in managing to these black rockfish targets.

Harvest Guidelines for Canary Rockfish

The GMT recommends that the Council set separate harvest guidelines for canary rockfish for the recreational fisheries, by state, which would be divided at the state borders (42° N latitude between CA and OR and at 46°16' N latitude between OR and WA). The harvest guidelines would be:

WA = 1.7 mt

OR = 6.8 mt

CA = 9.3 mt

These values would remain constant across all canary rockfish OY alternatives. The understanding would be for the states to manage their respective recreational fisheries to stay within those harvest guidelines specified. The management response expected to be taken when the state recreational canary harvest guideline is projected to be exceeded is described under the recreational fisheries section of this report.

Harvest Guidelines for Lingcod

The GMT recommends that the Council set separate harvest guidelines for lingcod for the state recreational fisheries for 2005-06, by dividing the harvest guidelines into North (OR & WA) and South (CA) areas. These harvest guidelines would be divided at the CA and OR border. The GMT notes that the stock assessment area was divided at Cape Blanco, Oregon (43° N. latitude) and the OR/CA border is at 42° N. latitude. The

GMT developed and recommends a formula based on the CPUE data from the Resource Assessment and Conservation Engineering (RACE) survey from 1995-2001 to account for the amount of lingcod that should be transferred from the southern area to the northern area to account for the line shift. Applying this calculation to the Council's preferred OY for lingcod, results in the following base harvest targets:

Council OY = 2,414 mt

North of 43° (1,142) + amount for 42°-43° (107) = 1,801 mt (OR and WA)

South of 42° (719) - amount for 42°-43° (107) = 612 mt (CA)

From these base values, the recreational harvest guidelines would be specified and subtracted from the respective areas and the understanding would be for the states to manage their respective recreational fisheries to stay within those harvest guidelines specified. The remaining amounts from the two areas would then be pooled. The catch projections to accommodate the limited entry trawl, fixed gear, and open access fisheries at 2004 levels, and tribal fisheries would then be removed from the combined pool and managed on a coastwide basis. The GMT notes that the trawl fishery would be constrained by canary rockfish bycatch impacts and the fixed gear and open access fisheries would be constrained by yelloweye rockfish bycatch impacts; therefore, the amount of lingcod needed to accommodate those fisheries would be less than the amount that could be taken without those constraints. This will likely result in a substantial difference between the overall total of catch projections and the Council OY.

Harvest Guidelines for Yelloweye Rockfish

In response to the Council guidance, the GMT does not recommend using the values in the September 2003 scorecard for yelloweye rockfish as these amounts have not been updated would not accommodate status quo fisheries. Current estimated impacts are roughly equivalent for the three states. The GMT believes that the catch projections for state recreational fisheries, which would continue to have no retention allowances for yelloweye rockfish, could be accommodated under the OY alternatives for 2005 (26 mt) and 2006 (27 mt) approved by the Council under Amendment 16-3. Under this approach, the GMT workload would not be increased by having state-specific harvest guidelines. The GMT would appreciate clarification on the range of options to be analyzed relative to state recreational harvest guidelines among: 1) no harvest guidelines (consistent with the Allocation Committee report); 2) dividing the catch shares north (OR and WA) and south (CA); and 3) among all three states for public review.

AREA-SPECIFIC MANAGEMENT MEASURES (i.e., "hotspots")

The GMT believes that more refined area-specific management should be considered for 2005-2006. Information collected through the federal observer program, state-sponsored EFPs, and data collected through other fishery dependent and independent sources continue to further define the locations of both target species and species of concern. Focusing fisheries in areas of high abundance of target species with relatively lower incidence of overfished species may provide both better fishing opportunity as well as conservation benefits than coordinates approximating broad depth strata. Additionally, the implementation of VMS provides us with a tool to accurately manage where fishing occurs.

The GMT plans to include a qualitative discussion of the use of “hotspots” for management in the 2005-06 Specifications Environmental Impact Statement (EIS). This analysis would include current descriptions of “hotspots,” such as the Yelloweye Rockfish Conservation Area in Washington and the Cordell Banks and Cowcod Conservation Area in California. The potential use of “hotspots” could also be considered as inseason measures during the 2005 and 2006 fishing periods. One inseason implementation of “hotspots” could include closing areas of higher widow rockfish encounters for the whiting fishery during the primary season.

COMMERCIAL MANAGEMENT MEASURES

Limited Entry Trawl

The GMT recommends that the commercial trawl trip limits described in Attachment 1 be approved for review. The GMT also plans to consider increasing incidental catch allowances for rebuilding species as a result of the effort reduction from the buyback program as a potential management approach for 2005-06. The GMT will explore setting trip limits that would accommodate incidental catch levels without encouraging targeted fisheries in an effort to reduce bycatch while meeting rebuilding needs.

Limited Entry Fixed Gear and Open Access

The GMT recommends status quo trip limits and management measures for the limited entry fixed gear and open access fisheries coastwide for 2005-06 with the exception of state-specific nearshore and shelf management measures (see Attachment 2).

Tribal Fisheries

The GMT requests the flexibility to analyze options for the tribal fisheries consistent with the Council guidance provided for 2005-06 management measures, to include managing for status quo harvest levels for lingcod, canary rockfish, and yelloweye rockfish.

Conversion of Exempted Fishing Provisions into Federal Regulations

During its meetings in September and October 2003, and in February 2004, the GMT discussed the conversion of fisheries conducted under past exempted fishing permits (EFPs) into federal regulations that would apply fleetwide. The GMT focused its discussion primarily on the former Oregon Selective Flatfish Trawl EFP and the current Washington Arrowtooth Flounder Trawl EFP. The GMT recommends that the provisions and allowances provided for under these EFPs be analyzed for the 2005-06 management period. The GMT has received presentations and written reports on the results from both of these EFPs and, because the data demonstrate that use of these gear configurations result in lower bycatch of overfished rockfish (particularly canary), the GMT believes these data should be used for management purposes.

The application of the new EFP bycatch rates, which are significantly lower in some cases than what is currently used in the bycatch model, will likely result in allowing higher trip limits for targeted flatfish species. The Oregon Selective Flatfish Trawl EFP results rely heavily on the use of the prescribed selective flatfish trawl gear used both in research activities and by EFP participants. The Washington Arrowtooth Flounder EFP also experimented with rockfish excluder devices with demonstrated success. Both of these EFPs allowed fishing in the trawl

rockfish conservation area (RCA) using bycatch caps for overfished rockfish, 100% observer coverage, and mandatory rockfish retention as additional tools to ensure that the rockfish bycatch was measured and accounted for. The GMT recommends that, if fishing with these selective gears and/or excluders were provided for within the RCA, the Council adopt measures similar to the EFP provisions for bycatch caps, observer coverage and rockfish retention.

If fishing were confined to the area outside the RCA (shoreward and/or seaward), then the GMT does not recommend additional observer coverage above what is provided by the NMFS West Coast Groundfish Observer Program. The GMT believes that monitoring of bycatch caps is not accomplishable without 100% observer coverage and therefore should also not apply while fishing outside the RCA. Mandatory rockfish retention could still be required, however, monitoring of rockfish retention would be limited. The GMT believes that fishing outside the RCA may work for the Selective Flatfish Trawl as some flatfish are available nearshore, however, this option is likely not feasible for targeted arrowtooth flounder fishing which occurs in deeper waters. The GMT also notes that providing a Selective Flatfish Trawl and an Arrowtooth Trawl fishery will require additional gear strata to be added to the NMFS Observer Program data analysis.

The GMT proposes that the shallow management line for the trawl RCA be moved seaward in 2005 and 2006 to 100 fms north of 40°10'. The only gears that would be permitted shoreward of the 100-fm boundary would be the Selective Flatfish Trawl (i.e., small footrope trawl as currently defined would not be allowed shoreward of the RCA). The GMT recommends maintaining differential trip limits (principally for DTS species) between Selective Flatfish Trawl and other trawl gear because canary rockfish impact modeling suggests this is needed to allow fishing with the Selective Flatfish Trawl out to depths where flatfish stocks are most abundant (100 fathoms in some periods). Further, fishers using the Arrowtooth Trawl could access the trawl RCA provided that the provisions of the Arrowtooth Trawl proposal are met (including mandatory observer coverage, bycatch caps, and rockfish retention). A full detailed description of the Selective Flatfish Trawl and the Arrowtooth Trawl proposals is captured in Exhibit C.10.a., Attachment 2.

The California Selective Flatfish EFP was conducted in 2003 and is planned for 2004; pending review of the results of the data collected, the GMT recommends that consideration be given to apply the Selective Flatfish Trawl provisions off California south of 40°10' inseason in 2005 or 2006.

Oregon DTS EFP Results

Oregon's Trawl Discard Reduction EFP for the DTS fishery is being conducted in 2004. Pending review of the results of the data collected, the GMT recommends that consideration be given to the potential for converting this EFP into regulation inseason for 2006.

OREGON NEARSHORE MANAGEMENT

During 2005-06, the potential exists for major increases in nearshore commercial lingcod harvest, primarily with hook and line gear. Excessive lingcod harvest in this area could result in localized reef depletions, undesirable sport and commercial fishery conflicts, and undesirable

bycatch impacts. Allowing too much harvest too quickly might also jeopardize the currently healthy stock status in the northern portion of the stock. The Oregon Department of Fish and Wildlife proposes the use of open access trip limits, differential lingcod size limits, or both, to limit increases in commercial lingcod harvest in nearshore rocky areas. In addition, ODFW will continue with the nearshore management strategies previously established for black rockfish, blue rockfish, other nearshore rockfish, cabezon and greenling for 2005 and 2006.

CALIFORNIA NEARSHORE MANAGEMENT

To simplify nearshore management and provide for a more stable fishery in 2005, it may be worthwhile to consider combining components of the shallow nearshore, deeper nearshore and CA scorpionfish complexes into a single nearshore rockfish complex. However, certain key species, such as black rockfish or black/blue rockfish may be considered for separate management. This would allow the nearshore fisheries to be managed on a finer geographic scale without creating an excessive number of harvest guidelines to track and manage.

Nearshore recreational fisheries in California have proved difficult to forecast in recent years, resulting in emergency actions by both state and federal jurisdictions. This has created a large workload for staff and has resulted in considerable confusion among the angling public. Inseason recreational management changes are difficult to convey to the public, resulting in low compliance with the modified regulations. Consequently, it may be advantageous to consider a season where the last 2 to 4 months of the year are closed. This could create a "buffer" against unexpectedly high inseason catches, provided that the open season was constructed so that the entire OY or HG was not expected to be taken within the proposed season. In this approach, if the fishery behaved as anticipated and did not exceed expected catches, then an in-season action would be taken to open the year-end months. This helps eliminate the problem with non-compliance in regard to inseason closures and other actions, and reduces staff workload compared to a closure.

RECREATIONAL MANAGEMENT MEASURES

As in 2004, the GMT believes that recreational fisheries measures for 2005 and 2006 should be intended to reduce take of overfished species, primarily bocaccio in the southern area, yelloweye rockfish in the northern area, and canary rockfish coastwide. Following advice received from the Council, the GMT recommends prohibiting retention of both canary and yelloweye rockfish. This prohibition is intended to discourage any targeting by recreational fisheries to reduce the potential of additional targeted catch of those species beyond true unavoidable catch, some of which would be expected to survive if encountered in shallow water. These prohibitions are recommended even in light of the fact that they result in creating some limited discard. This unavoidable discard mortality should be weighed against the benefit of removing incentives to target these species. The prohibitions are recommended to address the low and uncertain stock status of those species, the uncertainty in our ability to track actual removals in all fisheries and the disproportionate effects of recreational removals on rebuilding trajectories. Retention prohibitions for cowcod would also continue in 2005 and 2006.

Specific state recreational management measures include:

Washington

The Washington Department of Fish and Wildlife is proposing status quo regulations for its recreational fisheries in 2005 and 2006. These regulations are:

- 15 aggregate bottomfish bag limit
- 10 rockfish sublimit with no retention of canary or yelloweye rockfish
- 2 lingcod sublimit, with a minimum size limit of 24" and a status quo season
- Continuation of "C-Shaped" Yelloweye Rockfish Conservation Area off North Coast

If the harvest targets for canary and yelloweye specified for Washington are projected to be exceeded, the Washington Department of Fish and Wildlife would take action inseason to close all or portions of the recreational fishery deeper than 30 fms.

Oregon

The Oregon Department of Fish & Wildlife is proposing status quo regulations for its recreational fisheries in 2005 and 2006. These regulations are:

Status quo season: Open all year at all-depths except closed outside of the 40-fathom curve from June 1 through September 30. Pacific halibut will be open at all-depths during authorized seasons. Possession of groundfish prohibited in waters deeper than the 40-fathom curve during the June through September offshore closure period.

If canary rockfish or yelloweye rockfish harvest guidelines are projected to be attained inseason, the fishery will close to inside the 30-fathom line to reduce impacts on these species.

Daily Bag Limit: 10 marine fish including rockfish, greenling, cabezon, Pacific halibut and other species, not including salmon species, lingcod, perch species, sturgeon, sand dabs, striped bass, tuna, and bait fish (herring, smelt anchovies and sardines). No retention of yelloweye rockfish and canary rockfish.

- * Two lingcod daily bag limit

Minimum Length Limits:

- * Lingcod: 24-inches
- * Cabezon: 16-inches
- * Greenling species: 10-inches

Potential Inseason Changes: The effect of changes in the structuring of the recreational fishery for the 2004 fishery (offshore closures, harvest guidelines, etc.) will not be known at the time of adopting 2005-06 management measures. The following are suggested management measures that could be implemented inseason if the 2005 (or 2006) fishery does not proceed as expected.

1. Reduce the period of closure periods outside of 40-fathoms if duration of total season is reduced from 12 months due to management of nearshore species. Impacts not to exceed harvest guidelines on overfished species.
2. Implement gear restrictions and/or release techniques to reduce the impact of overfished rockfish species if successful techniques are developed, researched, reviewed, and accepted. Impacts not to exceed harvest guidelines on overfished species.
3. If information is available, move from large offshore RCA closures to closing hot spots of known canary rockfish and yelloweye concentrations OR open cold spots of areas known to have no or low concentrations of canary rockfish and yelloweye rockfish. Impacts not to exceed harvest guidelines on overfished species.

California

The California Department of Fish and Game is proposing options for structuring the 2005-2006 recreational groundfish fisheries in relation to concerns for staying within harvest guidelines (HGs), particularly for species under rebuilding plans. The range of options includes the following:

- Manage recreational fisheries through a regional management approach to address specific management and fishery needs in each of three Rockfish and Lingcod Management Areas (RLMAs): North (42° N. lat to 40°10' N. lat.); Central (40°10' N. lat to Pt. Conception); and South (Pt. Conception to Mexico border)
- In each management area, compose management groups from different combinations of nearshore species
- -Continued non-retention of cowcod, canary and yelloweye rockfish statewide
- Use a conservative management approach that incorporates preferred groundfish seasons, conservative regulations during non-preferred fishing time, and triggers within the regulations.
 - Establish triggers that are less than the harvest guideline that initiates a specified management response
- Establish regional regional harvest guidelines for the three management areas
- Within three RLMAs, use closed seasons, depth restrictions, bag limits, and size limits to manage recreational catch to specified harvest limits. Options to be considered include:
 - Some or all of spawning period closed for nesting species (lingcod, cabezon, greenlings (all species of the genus *Hexagrammos*))
 - For season and depth options, see Attachment x
 - Option 1: Divers and shore based fishing would be allowed during season closures
 - Option 2: Divers and shore based fishing would not be allowed during season closures
 - For bag limits:
 - Option 1: 20 finfish with 1 lingcod, 5 California scorpionfish, and 10 RCG (rockfish, cabezon, and greenling bag limit with sub-bag limit of 1 (south of 40° 10') - 2 (north of 40° 10') bocaccio, 3 cabezon, and 2 greenlings

- Option 2: Lingcod bag limit of 0 (low) to 2 (high), California scorpionfish bag limit of 5 (low) to 10 (high), and a RCG bag limit from 5 (low) to 10 (high) with sub-bag limit of 2 bocaccio, 3 cabezon and 2 greenlings
- Sub-option 2a: In addition to Option 2, explore possibility of including a sub-bag limit or separate bag limit for black rockfish
- Sub-option 2b: In addition to Sub-option 2a, explore possibility of including differential bag limits between recreational fishing sectors (shore based, private and rental boats, and party/charter boats)
 - For size limits:
 - Lingcod
 - Option 1: Status Quo (30 inches)
 - Option 2: 24-30 inches

Seasons

Option 1: Status Quo

Option 2: Range of from 2 months (low) to 10 months (high)

Sub-option 2a: structured to provide the most fishing opportunity

Sub-option 2b: structured around a preferred fishing season

Depth Restrictions

Option 1: Status Quo (0-30 fms)

Option 2: Within selected season structure, model fishing in 0-20 fms, 0-30 fms, 0-40 fms, 0-50 fms, or 0-60 fms

GMT Recommendations

1. Approve the new depth management line at 40 fms south of 42° N. latitude and the latitudinal line at Pigeon Point (37°11'N. lat.), California, for review.
2. Approve the GMT recommended recreational harvest guidelines for canary rockfish:
 - WA = 1.7 mt
 - OR = 6.8 mt
 - CA = 9.3 mt
3. Approve the GMT recommended catch sharing for the southern black rockfish OY of 58% to Oregon and 42% to California for review.
4. Approve the GMT recommended catch sharing formula based on the Allocation Committee guidance for lingcod between the north (OR and WA) and the south (CA) with a management line at 42° N. latitude.
5. Approve the GMT recommended formula for accounting for the line shift for lingcod from Cape Blanco, Oregon (43° N. latitude) to the OR/CA border (42° N. latitude) based on the RACE survey data.
6. Approve the GMT recommendations for catch sharing of yelloweye

rockfish and specify the options for the state recreational fisheries for public review.

7. Approve the GMT-proposed limited entry trawl, limited entry fixed gear, tribal, and groundfish-directed open access management measure alternatives for public review.
8. Approve the alternative to convert the Selective Flatfish Trawl EFP for public review.
9. Approve the alternative to convert the Arrowtooth Trawl EFP into federal regulations for public review, with the assumption that it would require a separate rule-making process.
10. Include an alternative that moves the shallow trawl RCA boundary to 100 fms north of 40°10', with the Selective Flatfish Trawl as the only gear that is allowed shoreward of the trawl RCA.
11. Approve the inclusion of the concept of "hotspot" area management as an alternative for possible inseason action for public review.
12. Approve the proposed state recreational management measure alternatives for public review.
13. Approve the proposed Oregon and California Nearshore management approaches for public review.
14. Identify Council-preferred management measures to help focus the analyses in the EIS.

Attachment 1, Table 1.--2005 trawl limits and catch projections, using regular trawl bycatch rates and the Low OYs

Trip limits	2-month period		RCA boundaries		Sablefish	Longspine	Shortspine	Dover	Arrowtooth	Petrale	Other flatfish	Slope rockfish	Chilipepper Lg. footrope	
	shallow	deep	shallow	deep										
N. of 40°10'	1	75	150	15,000	8,000	15,000	3,600	63,000	No limit	No limit	69,000	8,000		
	2	75	150	15,000	8,000	15,000	3,600	63,000	150,000	100,000	69,000	8,000		
	3	60	150	23,000	23,000	15,000	5,000	33,000	150,000	100,000	69,000	8,000		
	4	75	150	15,000	23,000	15,000	5,000	33,000	150,000	100,000	69,000	8,000		
	5	75	150	15,000	23,000	15,000	5,000	33,000	150,000	100,000	69,000	8,000		
	6	75	150	15,000	15,000	8,000	3,600	63,000	No limit	No limit	69,000	8,000		
small footrope	1	75	150	1,000	4,000	1,000	1,000	20,000	5,000	15,000	30,000			
	2	75	150	1,000	4,000	1,000	1,000	20,000	8,000	15,000	40,000			
	3	60	150	1,000	6,500	1,000	1,500	33,000	10,000	25,000	69,000			
	4	75	150	1,000	6,500	1,000	1,500	33,000	10,000	25,000	69,000			
	5	75	150	1,000	6,500	1,000	1,500	33,000	8,000	25,000	69,000			
	6	75	150	1,000	4,000	1,000	1,000	20,000	5,000	15,000	30,000			
38°-40°10'	1	75	150	19,000	11,500	19,000	4,300	63,000	No limit	No limit	69,000	40,000	10,000	
	2	75	150	19,000	11,500	19,000	4,300	63,000	10,000	20,000	69,000	40,000	10,000	
	3	100	150	19,000	19,000	11,500	4,300	40,000	10,000	20,000	69,000	40,000	12,000	
	4	100	150	19,000	19,000	11,500	4,300	40,000	10,000	20,000	69,000	40,000	12,000	
	5	75	150	19,000	19,000	11,500	4,300	40,000	10,000	20,000	69,000	40,000	10,000	
	6	75	150	19,000	19,000	11,500	4,300	40,000	No limit	No limit	69,000	40,000	10,000	
S. of 38°	1	75	150	19,000	11,500	19,000	4,300	63,000	No limit	No limit	69,000	40,000	10,000	
	2	75	150	19,000	11,500	19,000	4,300	63,000	10,000	20,000	69,000	40,000	10,000	
	3	100	150	19,000	19,000	11,500	4,300	40,000	10,000	20,000	69,000	40,000	12,000	
	4	100	150	19,000	19,000	11,500	4,300	40,000	10,000	20,000	69,000	40,000	12,000	
	5	75	150	19,000	19,000	11,500	4,300	40,000	10,000	20,000	69,000	40,000	10,000	
	6	75	150	19,000	19,000	11,500	4,300	40,000	No limit	No limit	69,000	40,000	10,000	
Total catch														
	N. of 40°10'				2,129	590	622	4,810	1,712	2,170	2,442	441		
	38°-40°10'				310	169	170	1,295	200	210	712	423		
	S. of 38°				218	116	112	709	12	26	71	51		
Total				2,658	875	904	6,814	1,923	2,406	3,225	915			
Landed catch														
	N. of 40°10'				1,440	483	371	4,273	958	2,080	1,724	203		
	38°-40°10'				194	145	118	959	7	203	530	346		
	S. of 38°				155	101	78	587	1	26	50	42		
Total				1,789	729	567	5,818	965	2,308	2,305	592			
Bycatch														
	N. of 40°10'				59.2	8.3	86.7	2.2	57.7	0.1	0.0	0.0		
	S. of 40°10'				19.9	0.4	0.0	0.1	11.2	0.1	38.7	0.3		
	Total				79.1	8.6	86.7	2.3	68.9	0.2	38.7	0.3		

Attachment 1, Table 2.--2005 trawl limits and catch projections, using regular trawl bycatch rates and the High OYs

Trip limits	2-month period		RCA boundaries		Sablefish	Longspine	Shortspine	Dover	Arrowtooth	Petrale	Other flatfish	Slope rockfish	Chilipepper Lg. footrope
	shallow	deep	shallow	deep									
N. of 40°10'	1	75	15,000	3,600	11,000	15,000	3,600	62,000	No limit	No limit	110,000	8,000	
	2	60	15,000	3,600	10,000	15,000	3,600	62,000	150,000	100,000	110,000	8,000	
	3	60	23,000	5,000	18,000	23,000	5,000	39,000	150,000	100,000	110,000	8,000	
	4	75	23,000	5,000	18,000	23,000	5,000	39,000	150,000	100,000	110,000	8,000	
	5	75	23,000	5,000	18,000	23,000	5,000	39,000	150,000	100,000	110,000	8,000	
	6	75	10,000	15,000	10,000	15,000	3,600	62,000	No limit	No limit	110,000	8,000	
small footrope	1	75	2,000	1,000	2,000	1,000	10,000	5,000	5,000	10,000	40,000		
	2	60	2,000	1,000	2,000	1,000	10,000	8,000	8,000	15,000	60,000		
	3	60	10,000	1,000	10,000	1,000	27,000	10,000	10,000	20,000	70,000		
	4	75	10,000	1,000	10,000	1,000	27,000	10,000	10,000	15,000	60,000		
	5	75	10,000	1,000	10,000	1,000	27,000	8,000	8,000	15,000	70,000		
	6	75	5,000	1,000	5,000	1,000	18,000	5,000	5,000	10,000	70,000		
38°-40°10'	1	75	14,000	19,000	14,000	19,000	4,300	62,000	No limit	No limit	120,000	40,000	10,000
	2	75	14,000	19,000	14,000	19,000	4,300	62,000	10,000	35,000	120,000	40,000	10,000
	3	100	14,000	19,000	14,000	19,000	4,300	45,000	10,000	35,000	120,000	40,000	12,000
	4	100	14,000	19,000	14,000	19,000	4,300	45,000	10,000	35,000	120,000	40,000	12,000
	5	75	14,000	19,000	14,000	19,000	4,300	45,000	10,000	35,000	120,000	40,000	10,000
	6	75	14,000	19,000	14,000	19,000	4,300	45,000	No limit	No limit	120,000	40,000	10,000
S. of 38°	1	75	14,000	19,000	14,000	19,000	4,300	62,000	No limit	No limit	120,000	40,000	10,000
	2	75	14,000	19,000	14,000	19,000	4,300	62,000	10,000	35,000	120,000	40,000	10,000
	3	100	14,000	19,000	14,000	19,000	4,300	45,000	10,000	35,000	120,000	40,000	12,000
	4	100	14,000	19,000	14,000	19,000	4,300	45,000	10,000	35,000	120,000	40,000	12,000
	5	75	14,000	19,000	14,000	19,000	4,300	45,000	10,000	35,000	120,000	40,000	10,000
	6	75	14,000	19,000	14,000	19,000	4,300	45,000	No limit	No limit	120,000	40,000	10,000
Total catch			2,650	590	2,650	590	626	5,031	1,712	2,066	4,106	441	
	N. of 40°10'		378	169	378	169	170	1,382	200	220	2,016	343	
	38°-40°10'		265	116	265	116	112	760	12	26	235	57	
	S. of 38°		3,293	875	3,293	875	908	7,172	1,923	2,312	6,357	841	
Landed catch			1,781	483	1,781	483	375	4,476	956	1,989	2,897	203	
	N. of 40°10'		236	145	236	145	118	1,021	7	212	1,498	284	
	38°-40°10'		189	101	189	101	78	628	1	26	165	48	
	S. of 38°		2,207	729	2,207	729	571	6,125	964	2,227	4,560	536	
Bycatch			Lingcod	Canary	POP	Widow	Darkblotched	Yelloweye	Bocaccio	Cowcod			
	N. of 40°10'		69.0	9.3	97.1	2.5	64.7	0.1	0.0	0.0			
	S. of 40°10'		36.7	0.8	0.0	0.1	13.3	0.1	52.0	0.5			
Total		105.6	10.1	97.1	2.6	77.9	0.3	52.0	0.5				

Attachment 1, Table 3.--2005 trawl limits and catch projections, using selective flatfish trawl bycatch rates and the Low OYs

Trip limits	2-month period		RCA boundaries		Sablefish	Longspine	Shortspine	Dover	Arrowtooth	Petrale	Other flatfish	Slope rockfish	Chilipepper Lg. footrope
	1	2	shallow	deep									
N. of 40°10'	1	75	150	15,000	8,000	15,000	3,600	63,000	No limit	No limit	69,000	8,000	
	2	75	150	15,000	8,000	15,000	3,600	63,000	150,000	69,000	69,000	8,000	
	3	100	150	150	23,000	15,000	5,000	33,000	150,000	69,000	69,000	8,000	
	4	100	150	150	23,000	15,000	5,000	33,000	150,000	69,000	69,000	8,000	
	5	100	150	150	23,000	15,000	5,000	33,000	150,000	69,000	69,000	8,000	
	6	75	150	150	15,000	8,000	3,600	63,000	No limit	No limit	69,000	8,000	
small footrope	1			1,000	4,000	1,000	20,000	20,000	5,000	15,000	30,000		
	2			1,000	4,000	1,000	20,000	20,000	5,000	17,000	40,000		
	3			1,000	6,500	1,000	33,000	33,000	6,500	27,000	69,000		
	4			1,000	6,500	1,000	33,000	33,000	6,500	27,000	69,000		
	5			1,000	6,500	1,000	33,000	33,000	6,500	27,000	69,000		
	6			1,000	4,000	4,000	1,000	20,000	5,000	17,000	69,000		
38°-40°10'	1	75	150	19,000	11,500	19,000	4,300	63,000	No limit	No limit	69,000	40,000	10,000
	2	75	150	19,000	11,500	19,000	4,300	63,000	10,000	20,000	69,000	40,000	10,000
	3	100	150	150	19,000	11,500	4,300	40,000	10,000	20,000	69,000	40,000	12,000
	4	100	150	150	19,000	11,500	4,300	40,000	10,000	20,000	69,000	40,000	12,000
	5	100	150	150	19,000	11,500	4,300	40,000	10,000	20,000	69,000	40,000	10,000
	6	75	150	150	19,000	11,500	4,300	40,000	No limit	No limit	69,000	40,000	10,000
S. of 38°	1	75	150	19,000	11,500	19,000	4,300	63,000	No limit	No limit	69,000	40,000	10,000
	2	75	150	19,000	11,500	19,000	4,300	63,000	10,000	20,000	69,000	40,000	10,000
	3	100	150	150	19,000	11,500	4,300	40,000	10,000	20,000	69,000	40,000	12,000
	4	100	150	150	19,000	11,500	4,300	40,000	10,000	20,000	69,000	40,000	12,000
	5	100	150	150	19,000	11,500	4,300	40,000	10,000	20,000	69,000	40,000	10,000
	6	75	150	150	19,000	11,500	4,300	40,000	No limit	No limit	69,000	40,000	10,000
Total catch				594	2,182	594	631	5,051	1,791	2,340	2,571	441	
	N. of 40°10'			169	318	169	170	1,294	199	214	724	423	
	38°-40°10'			116	224	116	112	709	12	27	72	51	
	S. of 38°			879	2,724	879	913	7,054	2,001	2,580	3,366	915	
Landed catch				485	1,501	485	375	4,474	1,023	2,237	1,798	203	
	N. of 40°10'			145	195	145	118	959	7	206	538	346	
	38°-40°10'			101	156	101	78	587	1	26	50	42	
	S. of 38°			731	1,852	731	571	6,020	1,031	2,469	2,387	592	
Bycatch				Canary	Lingcod	Canary	POP	Widow	Darkblotched	Yelloweye	Bocaccio	Cowcod	
	N. of 40°10'			6.3	58.7	6.3	92.9	2.3	69.3	0.2	4.0	0.0	
	S. of 40°10'			0.4	20.5	0.4	0.0	0.1	11.2	0.1	10.6	0.3	
	Total			6.6	79.2537	6.6	92.9	2.4	80.6	0.2	10.6	0.3	

Attachment 1, Table 4.--2005 trawl limits and catch projections, using selective flatfish trawl bycatch rates and the High OYs

Trip limits	RCA boundaries		Sablefish	Longspine	Shortspine	Dover	Arrowtooth	Petrale	Other flatfish	Slope rockfish	Chilipepper Lg. footrope
	shallow	deep									
N. of 40°10'	100	150	10,000	15,000	3,600	62,000	No limit	No limit	100,000	8,000	
	75	150	10,000	15,000	3,600	62,000	150,000	100,000	100,000	8,000	
	75	150	20,000	23,000	5,000	39,000	150,000	100,000	100,000	8,000	
	75	150	20,000	23,000	5,000	39,000	150,000	100,000	100,000	8,000	
	75	150	20,000	23,000	5,000	39,000	150,000	100,000	100,000	8,000	
	100	150	10,000	15,000	3,600	62,000	No limit	No limit	100,000	100,000	8,000
small footrope			2,000	1,000	1,000	10,000	6,000	15,000	50,000		
			2,000	1,000	1,000	10,000	8,000	20,000	60,000		
			10,000	1,000	3,000	27,000	11,000	20,000	75,000		
			10,000	1,000	3,000	27,000	11,000	20,000	75,000		
			10,000	1,000	3,000	27,000	11,000	17,000	75,000		
			5,000	1,000	1,000	10,000	8,000	15,000	75,000		
38°-40°10'	75	150	14,000	19,000	4,300	62,000	No limit	No limit	120,000	40,000	10,000
	75	150	14,000	19,000	4,300	62,000	10,000	35,000	120,000	40,000	10,000
	100	150	14,000	19,000	4,300	45,000	10,000	35,000	120,000	40,000	12,000
	100	150	14,000	19,000	4,300	45,000	10,000	35,000	120,000	40,000	12,000
	75	150	14,000	19,000	4,300	45,000	10,000	35,000	120,000	40,000	10,000
	75	150	14,000	19,000	4,300	45,000	No limit	No limit	120,000	40,000	10,000
S. of 38°	75	150	14,000	19,000	4,300	62,000	No limit	No limit	120,000	40,000	10,000
	75	150	14,000	19,000	4,300	62,000	10,000	35,000	120,000	40,000	10,000
	100	150	14,000	19,000	4,300	45,000	10,000	35,000	120,000	40,000	12,000
	100	150	14,000	19,000	4,300	45,000	10,000	35,000	120,000	40,000	12,000
	75	150	14,000	19,000	4,300	45,000	10,000	35,000	120,000	40,000	10,000
	75	150	14,000	19,000	4,300	45,000	No limit	No limit	120,000	40,000	10,000
Total catch			2,905	584	620	5,133	1,521	2,139	3,676	441	
			378	169	170	1,382	200	220	1,219	423	
			265	116	112	760	12	26	119	51	
			3,548	869	901	7,274	1,733	2,385	5,014	915	
			1,893	478	376	4,569	782	2,044	2,605	203	
			236	145	118	1,021	7	212	909	346	
Landed catch			189	101	78	628	1	26	84	42	
			2,318	724	572	6,218	789	2,282	3,598	592	
			88.8	9.8	93.5	2.6	74.4	0.3	44	0.0	
			27.2	0.6	0.0	0.1	12.4	0.1	12.3	0.4	
			116.0	10.3	93.5	2.7	86.8	0.4	12.3	0.4	
Bycatch											

Attachment 2, Table 1.--Proposed 2005 sablefish primary fishery tier limits and projected bycatch of depleted species associated with all sablefish catch in the limited entry fixed-gear fishery: **Low Sablefish OY**.

	Seaward boundary of the RCA at 150 fm (South of 40°10')			Seaward boundary of the RCA at 100 fm (North of 40°10')		
	Coastwide summary	Gear rates and bycatch Longline	Pot bycatch	Coastwide summary	Gear rates and bycatch Longline	Pot bycatch
Total catch allocated (mt)	2,120			2,120		
Observed sablefish discard rate	18.49%	19.24%	17.82%	15.6%	14.12%	18.01%
Discard mortality percentage of landed mt + discarded mt	4.3%	4.5%	4.2%	3.6%	3.2%	4.2%
Assumed discard mortality (mt)	92			76		
Landed catch target (mt)	2,028			2,044		
Amount allocated to:						
DTL (mt)	304			307		
Primary fishery (mt)	1,724			1,738		
Primary fishery tier limits (lb)						
Tier 1	53,147			53,576		
Tier 2	24,158			24,353		
Tier 3	13,804			13,916		
Percent of total catch, by area	10.5%	90%	10%	89.5%	60%	40%
Percent of area catch, by gear	222.61	200.34	22.26	1,897.44	1,138.47	758.98
Estimated distribution of total catch, by area						
Bycatch ratios ²						
Lingcod		0.391%	0.159%		0.400%	0.151%
Widow rockfish		0.001%	0.000%		0.001%	0.000%
Canary rockfish		0.041%	0.000%		0.042%	0.000%
Yelloweye rockfish		0.087%	0.000%		0.089%	0.000%
Bocaccio rockfish ⁴		0.000%	0.000%		0.000%	0.000%
Cowcod rockfish ⁴		0.000%	0.000%		0.000%	0.000%
Pacific ocean perch		0.017%	0.000%		0.017%	0.000%
Darkblotched rockfish		0.041%	0.009%		0.041%	0.009%
Projected bycatch impacts (mt)						
Lingcod		0.8	0.0		4.6	1.1
Widow rockfish		0.0	0.0		0.0	0.0
Canary rockfish		0.1	0.0		0.5	0.0
Yelloweye rockfish		0.2	0.0		1.0	0.0
Bocaccio rockfish ⁴		0.0	0.0		0.0	0.0
Cowcod rockfish ⁴		0.0	0.0		0.0	0.0
Pacific ocean perch		0.0	0.0		0.2	0.0
Darkblotched rockfish		0.1	0.0		0.5	0.1
Projected bycatch impacts (mt)						
Lingcod						6.5
Widow rockfish						0.0
Canary rockfish						0.6
Yelloweye rockfish						1.2
Bocaccio rockfish ⁴						0.0
Cowcod rockfish ⁴						0.0
Pacific ocean perch						0.2
Darkblotched rockfish						0.6

¹ As in previous years, the rate of mortality for discarded sablefish in the fixed-gear fishery is assumed to be 20%.

² The bycatch ratios are calculated by dividing the total catch of each species by the total poundage of sablefish that was caught.

³ Year specific tonnages combined using the following weights: 2003: 0.45, 2002: 0.35, 2001: 0.2.

⁴ Please note that the observer data on which these rates are based include no observations from south of Ft. Bragg, CA, so these are likely underestimates of true bycatch.

Attachment 2, Table 2.--Proposed 2005 sablefish primary fishery tier limits and projected bycatch of depleted species associated with all sablefish catch in the limited entry fixed-gear fishery: **Medium Sablefish OY.**

	Seaward boundary of the RCA at 150 fm (South of 40°10')			Seaward boundary of the RCA at 100 fm (North of 40°10')					
	Coastwide summary	Gear rates and bycatch Longline	Pot	Combined bycatch	Coastwide summary	Gear rates and bycatch Longline	Pot	Combined bycatch	Coastwide bycatch
Total catch allocated (mt)	2,494				2,494				
Observed sablefish discard rate	18.49%	19.24%	17.82%		15.6%	14.12%	18.01%		
Discard mortality percentage of landed mt + discarded mt	4.3%	4.5%	4.2%		3.6%	3.2%	4.2%		
Assumed discard mortality (mt)	108				89				
Landed catch target (mt)	2,386				2,405				
Amount allocated to:									
DTL (mt)	358				361				
Primary fishery (mt)	2,028				2,045				
Primary fishery tier limits (lb)									
Tier 1	62,531				63,035				
Tier 2	28,423				28,652				
Tier 3	16,242				16,373				
Percent of total catch, by area	10.5%	90%	10%		89.5%	60%	40%		
Percent of area catch, by gear	261.91	235.72	26.19		2,292.46	1,339.48	892.98		
Estimated distribution of total catch, by area									
Bycatch ratios ²									
Lingcod		0.391%	0.159%			0.400%	0.151%		
Widow rockfish		0.001%	0.000%			0.001%	0.000%		
Canary rockfish		0.041%	0.000%			0.042%	0.000%		
Yelloweye rockfish		0.087%	0.000%			0.089%	0.000%		
Bocaccio rockfish ⁴		0.000%	0.000%			0.000%	0.000%		
Cowcod rockfish ⁴		0.000%	0.000%			0.000%	0.000%		
Pacific ocean perch		0.017%	0.000%			0.017%	0.000%		
Darkblotched rockfish		0.041%	0.009%			0.041%	0.009%		
Projected bycatch impacts (mt)									
Lingcod		0.9	0.0	1.0		5.4	1.3	6.7	7.7
Widow rockfish		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Canary rockfish		0.1	0.0	0.1		0.6	0.0	0.6	0.7
Yelloweye rockfish		0.2	0.0	0.2		1.2	0.0	1.2	1.4
Bocaccio rockfish ⁴		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Cowcod rockfish ⁴		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Pacific ocean perch		0.0	0.0	0.0		0.2	0.0	0.2	0.3
Darkblotched rockfish		0.1	0.0	0.1		0.6	0.1	0.6	0.7

¹ As in previous years, the rate of mortality for discarded sablefish in the fixed-gear fishery is assumed to be 20%.

² The bycatch ratios are calculated by dividing the total catch of each species by the total poundage of sablefish that was caught.

³ Year specific tonnages combined using the following weights: 2003: 0.45, 2002: 0.35, 2001: 0.2.

⁴ Please note that the observer data on which these rates are based include no observations from south of Ft. Bragg, CA, so these are likely underestimates of true bycatch.

Attachment 2, Table 3.--Proposed 2005 sablefish primary fishery tier limits and projected bycatch of depleted species associated with all sablefish catch in the limited entry fixed-gear fishery: **High Sablefish OY.**

	Seaward boundary of the RCA at 150 fm (South of 40°10')			Seaward boundary of the RCA at 100 fm (North of 40°10')					
	Coastwide summary	Gear rates and bycatch Longline	Pot	Combined bycatch	Coastwide summary	Gear rates and bycatch Longline	Pot	Combined bycatch	Coastwide bycatch
Total catch allocated (mt)	2,665				2,665				
Observed sablefish discard rate	18.49%	19.24%	17.82%		15.6%	14.12%	18.01%		
Discard mortality percentage of landed mt + discarded mt	4.3%	4.5%	4.2%		3.6%	3.2%	4.2%		
Assumed discard mortality (mt)	116				95				
Landed catch target (mt)	2,549				2,569				
Amount allocated to:									
DTL (mt)	382				385				
Primary fishery (mt)	2,167				2,184				
Primary fishery tier limits (lb)									
Tier 1	66,798				67,337				
Tier 2	30,363				30,608				
Tier 3	17,350				17,490				
Percent of total catch, by area	10.5%	90%	10%		89.5%	60%	40%		
Percent of area catch, by gear	279.78	251.80	27.98		2,384.79	1,430.88	953.92		
Estimated distribution of total catch, by area									
Bycatch ratios ²									
Lingcod		0.391%	0.159%			0.400%	0.151%		
Widow rockfish		0.001%	0.000%			0.001%	0.000%		
Canary rockfish		0.041%	0.000%			0.042%	0.000%		
Yelloweye rockfish		0.087%	0.000%			0.089%	0.000%		
Bocaccio rockfish ⁴		0.000%	0.000%			0.000%	0.000%		
Cowcod rockfish ⁴		0.000%	0.000%			0.000%	0.000%		
Pacific ocean perch		0.017%	0.000%			0.017%	0.000%		
Darkblotched rockfish		0.041%	0.009%			0.041%	0.009%		
Projected bycatch impacts (mt)									
Lingcod		1.0	0.0	1.0		5.7	1.4	7.2	8.2
Widow rockfish		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Canary rockfish		0.1	0.0	0.1		0.6	0.0	0.6	0.7
Yelloweye rockfish		0.2	0.0	0.2		1.3	0.0	1.3	1.5
Bocaccio rockfish ⁴		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Cowcod rockfish ⁴		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Pacific ocean perch		0.0	0.0	0.0		0.2	0.0	0.3	0.3
Darkblotched rockfish		0.1	0.0	0.1		0.6	0.1	0.7	0.8

¹ As in previous years, the rate of mortality for discarded sablefish in the fixed-gear fishery is assumed to be 20%.

² The bycatch ratios are calculated by dividing the total catch of each species by the total poundage of sablefish that was caught.

³ Year specific tonnages combined using the following weights: 2003: 0.45, 2002: 0.35, 2001: 0.2.

⁴ Please note that the observer data on which these rates are based include no observations from south of Ft. Bragg, CA, so these are likely underestimates of true bycatch.

