

GROUND FISH MANAGEMENT TEAM REPORT ON  
PROPOSED 2004 GROUND FISH MANAGEMENT MEASURES

The Groundfish Management Team (GMT) discussed various management measures for the 2004 groundfish fisheries, and recommends that the following preliminary alternatives be approved for public review:

***CREATION OF NEW MANAGEMENT LINES***

The GMT supports the creation of the following latitudinal lines for management purposes:

Nearshore Rockfish Fisheries

1. Line at the Washington/Oregon border (46°16'N latitude)
2. Line at the Oregon/California border (42°00'N latitude)

California Fixed Gear and Recreational Fisheries

- Pedro Point (between San Francisco and Half Moon Bay)

***COMMERCIAL MANAGEMENT MEASURES - COASTWIDE***

Limited Entry Trawl, Fixed Gear, and Open Access

The GMT plans to develop specific management alternatives for 2004 that provide for harvest opportunities while staying within the OYs adopted by the Council earlier this week. These management measures will include, but are not limited to, trip limits, and depth restrictions by time and area. In general, northern depth options for trawl will be analyzed using 25-fathom increments in shallow areas and 50-fathom increments in deep areas. For the area south of 40°10', 10-fathom increments will be used. Options may include restrictions using shallow lines at 50, 60, 75, and/or 100 fathoms, and deep lines at 150, 180, 200 and/or 250 fathoms. Specific results of preliminary runs of the bycatch model for the limited entry trawl fishery are contained in the section of this report addressing trawl bycatch modeling for 2004. For nearshore fixed gear and open access, the GMT recommends inclusion of an option for zero retention of cabezon.

Trawl "B" Platoon

The GMT believes that the costs to our management and regulatory systems resulting from offering the "B Platoon" option to the groundfish trawl fishery currently outweigh the benefits to the industry. Implementation and enforcement of inseason line movements, administration of vessel monitoring systems, bycatch modeling, real time catch accounting and observer scheduling are all complicated by a trawl fleet fishing under two different regulatory time periods. Additionally, the GMT notes that only 28 vessels are currently in the B platoon and smoothing of product flow can be accomplished by the scheduling of landings between the vessel and processor. Also, should an emergency fishing closure be required as a result of attaining an OY for an overfished species, the B platoon could be deprived of fishing time equal to the rest of the fleet or, the Council could be faced with the decision of allowing continued fishing in order to provide equal opportunity to the B platoon. Therefore, the GMT recommends that the B platoon be removed from management measures for 2004 and beyond.

Trawl Gear Modifications

The GMT supports the inclusion of an option identified in the draft minutes of the Allocation Committee meeting (Exhibit B.14.b., Supplemental Ad Hoc Allocation Committee Report) which would allow vessels that cannot safely participate in deep water to use fixed gear under the fixed gear regulations (fixed gear RCA) and available trawl large footrope limits for one or more periods. (Note: Only one gear type per period.) While this concept may require a plan amendment that would require a three-meeting process, the GMT supports this option going forward with the initiation of the necessary process as soon as possible.

Nearshore Trawl Selective Flatfish Fishery

The GMT recommends the Council consider allowing a selective flatfish trawl gear design as an option for 2004 management measures, including allowances for increased trip limits and/or access to areas that would otherwise be

closed, pending results from the current 2003 Oregon and California nearshore flatfish EFPs. Research conducted in 2001 and 2002 demonstrated that a selective flatfish cutback trawl design results in bycatch rates for some rockfish species, including canary and yelloweye, that are significantly lower than existing trawl rates. During 2003, this trawl net design is being examined at different depths under an Oregon Department of Fish and Wildlife-sponsored EFP, and a separate California Department of Fish and Game-sponsored EFP. Although the research is still underway, preliminary results verify lower rockfish bycatch rates which are similar to the earlier research results from 150 fathoms to shore (for Oregon) and from 100 fathoms to shore (for California). The GMT plans to coordinate the states' efforts concerning modified trawl gear, including EFPs, development of gear configuration requirements and regulatory language to enhance the process of applying results coastwide.

#### Directed Trawl Fishery for Arrowtooth Flounder

The GMT supports the Washington Department of Fish and Wildlife proposal to explore the feasibility of applying the results of their Arrowtooth Flounder Exempted Fishery Permit (EFP) fisheries to create a fleetwide trawl opportunity for arrowtooth flounder (i.e., convert the EFP provisions into federal regulations). These provisions include:

- Observer coverage for compliance monitoring (vessel-funded)
- Bycatch caps
- Full retention of rockfish (regardless of size or condition)

#### Options for Sharing of Black Rockfish

The GMT recommends that the following options for the sharing of black rockfish between the states of Oregon and California be approved for analysis and review:

3. Ratio based on catch history using the average catch from 1985-2002
4. Ratio based on catch history using the average catch from 1990-2002
5. Use 2003 pre-season target take as a baseline for each state, and apply any increase or decrease based on a changing OY equally to each state (50:50)
6. Same as Option 3, except use 2002 catches

### ***COMMERCIAL MANAGEMENT MEASURES - CALIFORNIA***

#### Specific Rockfish Conservation Area (RCA) and Cowcod Conservation Area (CCA) Boundary Changes for California Trawl Gear

7. Move seaward RCA line in from 200 fathoms to 150 fathoms south of 40° 10' N. Lat.
8. Reconfigure the Cowcod Conservation Area (CCA): Move seaward lines in 10-fathom increments from 160 to 200 fathoms, depending on estimated impacts. Maintain 20-fathom line.

#### Specific Rockfish Conservation Area (RCA) and Cowcod Conservation Area (CCA) Boundary Changes for California Non-Trawl Gear

1. South of Pt. Conception: Move the shoreward line out from 20 fathoms by 10-fathom increments, to as far as 80 fathoms except for the CCA..
2. Pt. Conception to 36° N. lat.: Move the shoreward line out from 20 fathoms by 10-fathom increments, to as far as 60 fathoms.

3. 36° N. lat. to Pedro Point: Move the shoreward line out from 20 fathoms by 10-fathom increments, to as far as 40 fathoms
4. 36° N. lat. to Pedro Point: Move the seaward line in from 150 fathoms by 10-fathom increments, to as shallow as 70 fathoms.
5. Pedro Point to Cape Mendocino (40° 10' N. lat.): Move the shoreward line out from 20 fathoms by 10-fathom increments, to as far as 40 fathoms for the mainland coast only.
6. North of Cape Mendocino (40° 10' N. lat.): No changes proposed at this time, except to conform to Oregon RCA boundary changes.
7. Reconfigure the Cowcod Conservation Area (CCA): Move seaward lines in 10-fathom increments from 160 to 200 fathoms, depending on estimated impacts. The inside line remains at 20 fathoms.

#### Size Limits and Retention Allowances

1. Establish a slot limit for cabezon of 15 to 21 inches
2. Increase the greenling minimum size limit to between 13 and 16 inches
3. Consider providing for bocaccio retention in shelf fisheries in a range of 50 to 150 pounds per cumulative 2 month period
4. Blue/black rockfish: Increase north of 40 o 10' N. lat. in a range of 3,000 to 8,000 pounds per 2 month period
5. Deeper nearshore rockfish: Increase south of 40 o 10' N. lat. in a range of 200-800 pounds, of which no more than 400 pounds may be species other than black/blue rockfish
6. Minor shelf rockfish: Increase south of 40 o 10' N. lat. in a range of 100 to 1,500 pounds per month
7. Chilipepper rockfish: Increase south of 40 o 10' N. lat. in a range of 550 to 2,000 pounds, if shelf fishing grounds are opened to 70 fathoms or deeper

#### Commercial Ridgeback Prawn Trawl Fishery

1. Ridegeback Prawn Trawl Fishery (Commercial): Require use of bycatch reduction devices (BRDs) for the ridgeback prawn trawl fishery. The types of BRDs appropriate for the ridgeback prawn trawl fishery will be identified by CDFG

#### Options for Sharing of Bocaccio

1. Share bocaccio between commercial and recreational sectors in a range of 50:50 and 56:44

#### Trip Limit Ranges

1. Blue/black rockfish: Increase north of 40° 10' N. lat. in a range of 3,000 to 8,000 pounds per 2 month period

2. Deeper nearshore rockfish: South of 40° 10' N. lat. For periods 1, 2, 3, 5 and 6, increase trip limits in a range up to 400 pounds per 2 month cumulative period, of which no more than 200 pounds may be species other than black/blue rockfish. For period 4, increase trip limits in a range up to 800 pounds per 2 month cumulative period, of which no more than 400 pounds may be species other than black/blue rockfish.
3. Minor shelf rockfish: Increase south of 40° 10' N. lat. in a range of 100 to 1,500 pounds per month
4. Chilipepper rockfish: Increase south of 40° 10' N. lat. in a range of 550 to 2,000 pounds, if shelf fishing grounds are opened to 70 fathoms or deeper.

**COMMERCIAL MANAGEMENT MEASURES - OREGON**

1. Include defined winter petrale fishing areas for Periods 1 and 6
2. Define fixed gear RCA as 30-fms to 75-, 100-, or 125-fms north of 40°10'N lat.
3. Commercial halibut fishery outside of a revised 100-fm line
4. Use video monitoring aboard shoreside whiting vessels

**RECREATIONAL MANAGEMENT MEASURES**

The GMT reviewed the options for state recreational fisheries and recommends they be adopted for public review. These options are:

Washington

1. (Status quo) A recreational groundfish bag limit of 15 groundfish, including rockfish and lingcod, open year-round (except lingcod). The following sublimits apply: 10 aggregate rockfish which includes a sublimit of 1 canary and no retention of yelloweye rockfish; 2 lingcod with 24-inch minimum size limit, lingcod season open Mar 16-Oct 15.
2. Same as Option 1, except the rockfish sublimits would be changed to: 10 aggregate rockfish with no retention of canary rockfish and no retention of yelloweye rockfish.
3. To be combined with either Option 1 or 2: Change the lingcod season to be open from the Saturday closest to March 15 through the Sunday closest to October 15.
4. To be combined with any of the options listed above: Continue the “C”-shaped closed area in WDFW Marine Catch Area 3 (La Push) to protect yelloweye rockfish; this area would be closed to recreational bottomfish and halibut fishing. This area is defined by the following coordinates:
 

48°18'00"	125°18'00"
48°18'00"	124°59'00"
48°11'00"	125°11'00"
48°11'00"	124°59'00"
48°04'00"	125°11'00"
48°04'00"	124°59'00"
48°00'00"	125°18'00"

48°00'00"

124°59'00"

NOTE: Under any of the options listed above, WDFW plans to monitor its recreational catches in season and may take action to restrict recreational fishing, by area, to inside a line that approximates 30 fathoms (defined by lat/long).

### Oregon

1. (Status quo) A recreational marine fish bag limit of 10 (including rockfish, greenling, cabezon, and other species, and excluding salmon, lingcod, perch species, sturgeon, sand dabs, striped bass, tuna and baitfish—herring, smelt, anchovies and sardines) with a sublimit of one yelloweye and one canary rockfish. Additional limits of one halibut (32-inch minimum size) and two lingcod (24-inch minimum size). No canary or yelloweye retention if halibut on board during all-depth season.
2. Same as Option 1, except with lingcod minimum size limit of 26 inches.
3. Combined with Option 1 or 2, except closed to bottomfishing outside of 50 fathoms for the month of July.
4. Combined with Option 1 or 2, except closed to bottomfishing for 2-4 months from either 30, 40 or 50 fathoms.
5. Same as Options 2 and 3, except that exclusions to the general fathom closures would be instituted to give opportunity to ports with no nearshore fishing opportunity.
6. Set minimum length for greenling of 10-12 inches to bring landings of greenling within state harvest guidelines.
7. Set minimum length for cabezon of 16 inches.

### California

1. RCA boundary options for recreational fisheries same as for California fixed gear fisheries described above.
2. CCA boundary options for recreational fisheries same as for California fixed gear fisheries described above.
3. Establish a slot limit for cabezon of 15 to 21 inches.
4. Increase minimum lingcod size from 24 inches to 26 inches.
5. Establish a bocaccio recreational bag sublimit of one to two bocaccio.
6. In state regulation, establish an exemption from rockfish closure periods for shore-based recreational fishing.
7. In state regulation, establish an exemption for any established cabezon slot limit for shore-based recreational fishing.
8. In state regulation, allow retention of ocean whitefish year-round south of Pt. Conception.

9. Adopt a 6- to 10-month season south of 40°10'N. lat.
10. If possible, maintain the same recreational and commercial open periods within each area.
11. Set separate recreational and commercial open periods within each area (status quo).
12. Share bocaccio between the recreational and commercial sectors in a range of 50:50 to 56:44 recreational to sport ratios.

***ADDITIONAL RECREATIONAL OPTIONS***

The GMT recommends consideration of management measures that include zero retention of both canary and yelloweye that would discourage any targeting by recreational fisheries to reduce the potential of additional targeted catch of those species beyond true unavoidable catch to be included for analysis. This action should be considered for review even if it results in creating some limited discard (estimated to be very small by the states) because of 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.

The GMT also recommends inclusion of an option for zero retention of cabezon in recreational fisheries.

## **MODELING ISSUES FOR THE 2004 GROUND FISH TRAWL FISHERY**

The purpose of this section of the GMT report is three-fold: to update the Council on issues that will be addressed and approaches that will be utilized in modeling trawl options for the 2004 fishery; to request input from the Council regarding additional considerations that should be addressed; and, to request specific guidance from the Council regarding the identification of trawl targets to be used for several bycatch species in the modeling exercise.

The last of these items is of fundamental importance for developing a NEPA analysis package that is concise, yet thorough. Three overfished species—bocaccio, canary, and lingcod—have the potential to be caught in significant quantities by all sectors of the fishery. For each of these species, it is critical that guidance be provided regarding the anticipated distribution of the OY between sectors, and in particular the amounts/percentages of the total OYs that should be used in modeling the trawl options. Given the ranges under consideration for these species, it would be beneficial to know if the same distributions should be used over the entire range of OYs.

For another species—darkblotched—the Council elected to manage the 2003 fishery to a target that was well below the adopted OY. For the range of 2004 OYs under consideration, the GMT needs to know if the Council intends to continue this policy in 2004, or to allow access to the entire OY.

The modeling of 2004 management alternatives will utilize the same general approach as was used for the 2003 fishery. The modeling will seek to identify the minimum closed depth range that allows the fullest possible harvest of target species while constraining bycatch of overfished species to acceptable levels. Management lines that will be available in the modeling will include shallow lines at 50 fm, 60 fm, 75 fm, and 100 fm; and deep lines at 150 fm, 180 fm, 200 fm, and 250 fm. It should be noted that comments regarding the removal of a 60 fm line from consideration at the recent Allocation Committee meeting were in error. Alternative model runs with no closure will also be provided for comparison. Bycatch rates that will be used in the modeling are shown in Table 1.

Given the increase in the bocaccio OY, opportunities for targeting chilipepper south of 40°10' during a portion of the year will be explored. Based on the Council inseason discussion at this meeting, a priority will be placed on having a shallow line at depths of at least 75 fm during periods 4 and 5 to protect molting crabs.

The analysis will include a sufficient range of landed catch target amounts to accommodate whatever decisions are made in September regarding revised discard estimates for target species. An effort will also be made to provide some ranging of the potential effects of a successful vessel/permit buyback on 2004 trip limits. Additionally, the potential for inseason incorporation of differential trip limits and/or areas when specified selective gear for avoiding rockfish is used will be explored. For bocaccio, the effect of increased trawl selectivity of the large incoming 1999 year class will be explored through adjusting bycatch rates using changes in catchability that have been estimated by Dr. MacCall.

Two examples of management limits/depths are provided in Tables 2a and 3a, with associated bycatch implications shown in Tables 2b and 3b. Management lines in Version 1 (Table 2a) yield a closed area between 100 fm and 150 fm south of 38° throughout the year. North of 38°, the deep lines are at 200 fm throughout the year, except for petrale areas during periods 1 and 6. Between 38° and 40°10', the shallow line is at 100 fm in all periods. North of 40°10', the shallow line is set at 75 fm throughout most of the year, with one period at 50 fm. Trip limits for major target species are also shown in Table 2a. Projected bycatch under this suite of options is provided in Table 2b. In Version 2, the deep line is set at 150 fm throughout the year for the entire coast. South of 40°10', the shallow line is at 100 fm, throughout the year. North of 40°10', the shallow line is at 75 fm for most of the year, and at 60 fm in 2 periods.

Table 1.--Bycatch ratios for overfished species that will be used in modeling the 2004 fisheries

Subarea	<= 50 fm	<= 60 fm	<= 75 fm	<= 100 fm	> 150 fm	>180 fm	> 200 fm	> 250 fm
Lingcod								
N. of 40°10'	2.424%	3.622%	4.479%	5.555%	0.085%	0.061%	0.000%	0.000%
38°-40°810'	1.285%	0.788%	0.869%	2.901%	0.085%	0.061%	0.000%	0.000%
S. of 38°	1.285%	0.788%	0.869%	2.901%	1.299%	1.391%	0.023%	0.011%
Canary								
N. of 40°10'	0.103%	0.258%	0.724%	1.005%	0.011%	0.000%	0.000%	0.000%
38°-40°810'	0.211%	0.037%	0.053%	0.111%	0.011%	0.000%	0.000%	0.000%
S. of 38°	0.211%	0.037%	0.053%	0.111%	0.000%	0.000%	0.000%	0.000%
Widow								
N. of 40°10'	0.002%	0.052%	0.035%	0.057%	0.010%	0.004%	0.003%	0.000%
38°-40°810'	0.311%	0.033%	0.012%	0.015%	0.010%	0.004%	0.003%	0.000%
S. of 38°	0.311%	0.033%	0.012%	0.015%	0.006%	0.001%	0.000%	0.000%
Bocaccio								
N. of 40°10'	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
38°-40°810'	2.431%	0.810%	0.511%	3.772%	0.001%	0.000%	0.000%	0.000%
S. of 38°	2.431%	0.810%	0.511%	3.772%	0.311%	0.313%	0.000%	0.000%
Cowcod								
N. of 40°10'	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
38°-40°810'	0.000%	0.000%	0.004%	0.010%	0.000%	0.000%	0.000%	0.000%
S. of 38°	0.000%	0.005%	0.006%	0.090%	0.014%	0.000%	0.000%	0.000%
Yelloweye								
N. of 40°10'	0.001%	0.005%	0.027%	0.033%	0.001%	0.000%	0.000%	0.000%
38°-40°810'	0.311%	0.032%	0.011%	0.010%	0.001%	0.000%	0.000%	0.000%
S. of 38°	0.311%	0.032%	0.011%	0.010%	0.000%	0.000%	0.000%	0.000%
Darkblotched								
N. of 40°10'	0.000%	0.076%	0.230%	0.504%	1.197%	0.924%	0.521%	0.000%
38°-40°810'	0.000%	0.000%	0.000%	0.049%	1.197%	0.924%	0.521%	0.000%
S. of 38°	0.000%	0.000%	0.000%	0.049%	0.126%	0.098%	0.042%	0.000%
POP								
N. of 40°10'	0.018%	0.027%	0.292%	0.506%	1.046%	0.692%	0.552%	0.000%
38°-40°810'	0.000%	0.000%	0.000%	0.000%	0.008%	0.000%	0.000%	0.000%
S. of 38°	0.000%	0.000%	0.000%	0.000%	0.008%	0.000%	0.000%	0.000%

Table 2a.--DRAFT 2004 TRAWL MANAGEMENT MEASURES, VERSION 1

Subarea	Footrope	Bi-monthly period					
		1	2	3	4	5	6
N. of 40°10							
	shallow line depth	75	75	75	50	75	75
	deep line depth	150	200	200	200	200	150
Sablefish	large ft-rp	9,100	9,200	9,200	9,200	9,200	9,100
	sm. ft-rp	5,500	5,500	5,500	5,500	5,500	5,500
Longspine	large ft-rp	13,000	14,000	14,000	14,000	14,000	13,000
	sm. ft-rp	5,000	5,000	5,000	5,000	5,000	5,000
Shortspine	large ft-rp	2,500	2,600	2,700	2,700	2,700	2,500
	sm. ft-rp	1,500	1,500	1,500	1,500	1,500	1,500
Dover	large ft-rp	32,000	32,000	32,000	32,000	32,000	32,000
	sm. ft-rp	15,000	15,000	15,000	15,000	15,000	15,000
Arrowtooth	large ft-rp	999,999	150,000	150,000	150,000	150,000	999,999
	sm. ft-rp	5,000	5,000	5,000	5,000	5,000	5,000
Petrals	large ft-rp	999,999	130,000	130,000	130,000	130,000	999,999
	sm. ft-rp	20,000	20,000	20,000	20,000	20,000	20,000
Other flatfish	large ft-rp	100,000	100,000	100,000	100,000	100,000	100,000
	sm. ft-rp	50,000	50,000	50,000	50,000	50,000	50,000
38°-40°10							
	shallow line depth	100	100	100	100	100	100
	deep line depth	150	200	200	200	200	150
Sablefish	All	9,100	9,200	9,200	9,200	9,200	9,100
Longspine	All	13,000	14,000	14,000	14,000	14,000	13,000
Shortspine	All	2,500	2,600	2,700	2,700	2,700	2,500
Dover	All	32,000	32,000	32,000	32,000	32,000	32,000
Arrowtooth	All	999,999	10,000	10,000	10,000	10,000	999,999
Petrals	All	999,999	20,000	20,000	20,000	20,000	999,999
Other flatfish	All	100,000	100,000	100,000	100,000	100,000	100,000
S. of 38°							
	shallow line depth	100	100	100	100	100	100
	deep line depth	150	150	150	150	150	150
Sablefish	All	9,100	9,200	9,200	9,200	9,200	9,100
Longspine	All	13,000	14,000	14,000	14,000	14,000	13,000
Shortspine	All	2,500	2,600	2,700	2,700	2,700	2,500
Dover	All	32,000	32,000	32,000	32,000	32,000	32,000
Arrowtooth	All	999,999	10,000	10,000	10,000	10,000	999,999
Petrals	All	999,999	20,000	20,000	20,000	20,000	999,999
Other flatfish	All	100,000	100,000	100,000	100,000	100,000	100,000

Notes: Large footrope ("large ft-rp") limits may be used only if no small footrope nets (other than midwater) are used during a period; small footrope ("sm. ft-rp") limits apply whenever non-midwater nets with a footrope less than 8 inches are used during a period.

Limits shown as "999,999" indicate no limit during that period.

Table 2b.--DRAFT 2004 TRAWL MANAGEMENT MEASURE BYCATCH, VERSION 1

											Target tonnage	
	Lingcod	Canary	POP	Darkblotched	Widow	Bocaccio	Yelloweye	Cowcod	shallow	deep		
North	1	3.3	0.5	22.7	25.9	0.2	0.0	0.0	0.0	32.2	2,158.1	
	2	6.2	1.0	13.3	12.5	0.1	0.0	0.0	0.0	138.2	2,329.9	
	3	21.0	3.4	13.3	12.4	0.2	0.0	0.1	0.0	468.1	2,169.4	
	4	7.9	0.3	7.5	7.0	0.0	0.0	0.0	0.0	327.5	1,349.6	
	5	13.8	2.2	11.8	11.0	0.2	0.0	0.1	0.0	307.9	1,974.3	
	6	3.6	0.5	14.9	16.9	0.2	0.0	0.0	0.0	54.4	1,405.4	
	Total	55.8	8.0	83.4	85.7	1.0	0.0	0.3	0.0	1,328.3	11,386.7	
South	1	8.7	0.2	0.1	4.9	0.1	7.7	0.0	0.2	183.3	616.3	
	2	10.6	0.3	0.0	2.4	0.1	9.6	0.0	0.2	228.2	676.9	
	3	11.5	0.2	0.0	2.3	0.1	9.6	0.0	0.3	223.1	714.1	
	4	11.9	0.2	0.0	3.1	0.1	8.6	0.0	0.2	188.2	947.9	
	5	9.9	0.2	0.0	3.1	0.1	7.9	0.0	0.2	178.4	862.3	
	6	7.5	0.2	0.1	6.7	0.1	5.2	0.0	0.1	113.9	815.1	
	Total	60.2	1.3	0.2	22.6	0.4	48.5	0.1	1.3	1,115.1	4,632.6	
Coast	1	12.0	0.7	22.7	30.8	0.3	7.7	0.0	0.2	215.4	2,774.4	
	2	16.8	1.3	13.3	14.9	0.2	9.6	0.1	0.2	366.4	3,006.8	
	3	32.4	3.6	13.4	14.7	0.3	9.6	0.1	0.3	691.2	2,883.4	
	4	19.8	0.5	7.5	10.1	0.1	8.6	0.0	0.2	515.7	2,297.5	
	5	23.7	2.4	11.8	14.1	0.2	7.9	0.1	0.2	486.3	2,836.6	
	6	11.1	0.7	14.9	23.7	0.2	5.2	0.0	0.1	168.3	2,220.5	
	Total	115.9	9.3	83.7	108.3	1.4	48.5	0.4	1.3	2,443.4	16,019.3	

Table 3a.--DRAFT 2004 TRAWL MANAGEMENT MEASURES, VERSION 2

Subarea	Footrope	Bi-monthly period					
		1	2	3	4	5	6
N. of 40°10							
	shallow line depth	75	60	60	75	75	75
	deep line depth	150	150	150	150	150	150
Sablefish	large ft-rp	8,900	8,900	8,900	8,900	8,900	8,900
	sm. ft-rp	5,500	5,500	5,500	5,500	5,500	5,500
Longspine	large ft-rp	13,000	13,000	13,000	13,000	13,000	13,000
	sm. ft-rp	5,000	5,000	5,000	5,000	5,000	5,000
Shortspine	large ft-rp	2,500	2,500	2,500	2,500	2,500	2,500
	sm. ft-rp	1,500	1,500	1,500	1,500	1,500	1,500
Dover	large ft-rp	30,000	30,000	30,000	29,000	30,000	30,000
	sm. ft-rp	15,000	15,000	15,000	15,000	15,000	15,000
Arrowtooth	large ft-rp	999,999	150,000	150,000	150,000	150,000	999,999
	sm. ft-rp	5,000	5,000	5,000	5,000	5,000	5,000
Petrale	large ft-rp	999,999	130,000	130,000	130,000	130,000	999,999
	sm. ft-rp	20,000	20,000	20,000	20,000	20,000	20,000
Other flatfish	large ft-rp	100,000	100,000	100,000	100,000	100,000	100,000
	sm. ft-rp	50,000	50,000	50,000	50,000	50,000	50,000
38°-40°10							
	shallow line depth	100	100	100	100	100	100
	deep line depth	150	150	150	150	150	150
Sablefish	All	8,900	8,900	8,900	8,900	8,900	8,900
Longspine	All	13,000	13,000	13,000	13,000	13,000	13,000
Shortspine	All	2,500	2,500	2,500	2,500	2,500	2,500
Dover	All	30,000	30,000	30,000	29,000	30,000	30,000
Arrowtooth	All	999,999	10,000	10,000	10,000	10,000	999,999
Petrale	All	999,999	20,000	20,000	20,000	20,000	999,999
Other flatfish	All	100,000	100,000	100,000	100,000	100,000	100,000
S. of 38°							
	shallow line depth	100	100	100	100	100	100
	deep line depth	150	150	150	150	150	150
Sablefish	All	8,900	8,900	8,900	8,900	8,900	8,900
Longspine	All	13,000	13,000	13,000	13,000	13,000	13,000
Shortspine	All	2,500	2,500	2,500	2,500	2,500	2,500
Dover	All	30,000	30,000	30,000	29,000	30,000	30,000
Arrowtooth	All	999,999	10,000	10,000	10,000	10,000	999,999
Petrale	All	999,999	20,000	20,000	20,000	20,000	999,999
Other flatfish	All	100,000	100,000	100,000	100,000	100,000	100,000

Note: Large footrope ("large ft-rp") limits may be used only if no small footrope nets (other than midwater) are used during a period; small footrope ("sm. ft-rp") limits apply whenever whenever non-midwater nets with a footrope less than 8 inches are used during a period.

Limits shown as "999,999" indicate no limit during that period.

Table 3b.--DRAFT 2004 TRAWL MANAGEMENT MEASURE BYCATCH, VERSION 2

	Lingcod	Canary	POP	Darkblotched	Widow	Bocaccio	Yelloweye	Cowcod	Target tonnage	
									shallow	deep
North	1	3.3	0.5	22.5	25.7	0.2	0.0	0.0	32.0	2,142.9
	2	5.1	0.5	25.3	29.0	0.3	0.0	0.0	83.9	2,416.1
	3	15.1	1.2	20.8	23.9	0.4	0.0	0.0	371.5	1,974.9
	4	26.3	4.2	23.8	26.6	0.4	0.2	0.0	546.4	2,118.6
	5	15.8	2.5	22.0	24.9	0.3	0.1	0.0	314.8	2,018.8
	6	3.5	0.5	14.4	16.4	0.2	0.0	0.0	53.0	1,362.0
	Total	69.1	9.3	128.8	146.5	1.7	0.0	0.4	0.0	1,401.7
South	1	8.7	0.2	0.1	4.9	0.1	0.0	0.2	183.2	614.7
	2	10.7	0.3	0.1	5.0	0.1	0.0	0.2	224.8	672.2
	3	11.3	0.3	0.1	4.6	0.1	0.0	0.2	217.3	700.7
	4	11.6	0.2	0.1	6.0	0.1	0.0	0.2	180.9	903.8
	5	9.8	0.2	0.1	6.7	0.1	0.0	0.2	165.5	861.5
	6	7.4	0.2	0.1	6.5	0.1	0.0	0.1	113.7	793.0
	Total	59.5	1.5	0.4	33.6	0.5	47.2	0.1	1.2	1,085.4
bimo	1	12.0	0.7	22.6	30.6	0.3	0.0	0.2	215.2	2,757.6
	2	15.8	0.8	25.4	33.9	0.4	0.0	0.2	308.7	3,088.3
	3	26.5	1.4	20.8	28.5	0.5	0.1	0.2	588.8	2,675.6
	4	37.9	4.4	23.8	32.6	0.5	0.2	0.2	727.3	3,022.4
	5	25.6	2.7	22.1	31.5	0.4	0.1	0.2	480.3	2,880.3
	6	10.9	0.7	14.5	23.0	0.2	0.0	0.1	166.7	2,155.0
	Total	128.6	10.8	129.2	180.2	2.3	47.2	0.5	1.2	2,487.0

