

GROUND FISH MANAGEMENT TEAM REPORT ON MANAGEMENT MEASURES
FOR 2009-2010 FISHERIES

The Ground Fish Management Team (GMT) reviewed the preliminary preferred optimum yields (OYs) decided by the Council under Agenda Item H.1 and provides new versions of Tables 2-1a and 2-1b reflecting those decisions appended to this report. The GMT notes that the ABC/OY tables used for this decision did not indicate a coastwide OY for lingcod, but rather the OY split at 42° N. lat. which is used to determine state harvest guidelines (HG's). **The GMT would like confirmation that the Council intends to set a coastwide lingcod OY as has been standard practice.**

The GMT recognizes that yelloweye is highly constraining to West Coast groundfish communities and believes the ramp-down strategy is necessary to provide time to collect much-needed additional data, develop new management measures, and mitigate the immediate and drastic adverse impacts to fishing communities. The status quo ramp-down strategy took a significant amount of analysis in the Amendment 16-4 process and the GMT is concerned that the requisite socioeconomic and biological analysis that will be needed for a June decision on revised ramp-down strategies will detract from the quality of analyses of management measures adopted under Agenda Item H.5 and those contemplated under this agenda item. The GMT recognizes the significant adverse socioeconomic impacts associated with any of the ramp-down strategies and, while a less aggressive ramp-down strategy may provide some short term relief, preliminary analysis shows the end result will require lower harvest levels after the ramp down is complete.

To aid the Council's decision on preferred OY alternatives for all the overfished groundfish, the GMT adopted the same methodology as was done in Amendment 16-4 by analyzing a suite of OY alternatives for both rebuilding and target species. As part of the Amendment 16-4 process, the Council considered various suites of rebuilding species OYs in order to show the tradeoffs associated with different rebuilding strategies. These OYs were combined into overall programs, or suites of rebuilding options intended to illustrate the combined, interactive effect of rebuilding species OYs in concert. These options are illustrated below using a combination of 2009 OY alternatives.

INTEGRATED ANALYSIS OF OVERFISHED SPECIES FOR 2009-2010 FISHERIES

TABLE 1. Range of Overfished Species Optimal Yields, by Area and Species.

		Shelf to Slope Impacts				
		Higher-Lower	Lower-Higher	Lower-Lower	Higher-Higher	Mixed
Area	Species	Option 1 (mt)	Option 2 (mt)	Option 3 (mt)	Option 4 (mt)	Option 5 a/b (mt)
Northern Shelf	Canary	155	44	35	155	85 or 105
	Yelloweye	20	14	14	20	17
Southern Shelf	Bocaccio	288	218	218	288	218
	Cowcod	4	2	2	4	2
Slope	POP	130	189	130	189	164
	Darkblotched	159	300	159	300	300
Pelagic	Widow	522	371	371	522	371 or 522

Note: Options 5a and 5b vary widow and canary in concert

Summary of Options Provided in Table 1

- Option 1 is intended to show the effect of providing relatively more opportunity on the shelf and in midwater fisheries and relatively less opportunity on the slope.
- Option 2 is intended to show the effect of providing relatively more opportunity on the slope and relatively less opportunity on the shelf and in midwater fisheries.
- Option 3 is intended to show the effect of being relatively restrictive on the shelf, slope, and in midwater fisheries.
- Option 4 is intended to show the effect of providing relatively more opportunity along the shelf and slope and in midwater fisheries.
- Option 5 is intended to show further trade-offs between rebuilding OYs that may not be captured by Options 1 through 4.

Summary of Integrated Impacts

Effects on Rebuilding Species

Appendix A includes tables of rebuilding OYs and reference points. In summary:

- Darkblotched: The OYs of darkblotched rockfish vary within the options between 159 and 300 mt. Under the 159 mt OY, the T_{target} is equal to 2022 which is 4 years longer than under the no fishing scenario. Under the 300 mt OY, the T_{target} is equal to 2030, which is 12 years longer than under the no fishing scenario
- Canary: The canary rockfish OYs vary in the options between 35 mt and 155 mt, with values that are intermediate. Under the 35 mt OY, the T_{target} is equal to 2020, which is 1 year longer than under the no fishing scenario. Under the highest OY

of 155 mt the T_{target} is equal to 2021. Alternatives less than 155 mt result in a T_{target} of 2020.

- Cowcod: The OYs of cowcod vary between 2 and 4 mt. Under a 2 mt OY, the T_{target} is 2065, or four years later than under no fishing. With a 4 mt OY, the T_{target} is 2072, or 11 years longer than under no fishing.
- Widow rockfish: The OYs of widow vary between 371 and 522 mt under the GMT options. OYs of 371 or 522 mt result in the same T_{target} of 2009, which is no different than under no fishing.
- Pacific Ocean perch: The OYs of POP vary between 130 and 189 mt in the GMT options. The T_{target} is 2010 under the 130 mt option which is the same as under no fishing. The T_{target} is 2011 under the 189 mt option, which is 1 year longer than the year under no fishing.
- Bocaccio: The OYs of bocaccio vary between 218 and 288 mt. The T_{target} under a 218 mt OY is 2022, while the T_{target} under 288 mt is 2023. These OYs are 2 and 3 years longer, respectively, than under no fishing respectively.
- Yelloweye rockfish: The OYs of yelloweye vary between 14 and 20 mt. Furthermore, the ramp down is adjusted to either A) hold the Median Year to Rebuild equivalent to that which is specified in the FMP, or B) ramp down to the same harvest rate originally specified. The implication is that the ramp down either dips lower than originally expected (to maintain the same median year to rebuild), or extends the median year to rebuild to a date later than in the rebuilding plan.

Washington, Oregon, and California Recreational Fisheries

In all options, yelloweye rockfish is the constraining species for recreational fisheries. Recreational fisheries south of approximately San Francisco may be the exception. Management measures taken to reduce yelloweye rockfish catch in the recreational fisheries include reductions in season length, depth closures, bag limits, and yelloweye rockfish conservation areas (YRCAs).

Open Access Nearshore Commercial Groundfish Fishery

As in the recreational fisheries, the nearshore commercial fishery is primarily constrained by yelloweye rockfish. Depth restrictions of 20 fm north of 40°10' N lat., in conjunction with an approximate 30% reduction in catch, would provide yelloweye savings of 0.5 mt. Changes south of 40°10' N lat. will not have any appreciable yelloweye savings because impacts are negligible in that area. West Coast Groundfish Observer Program (WCGOP) data indicates that yelloweye impacts are relatively high in the area between Cape Mendocino (40°10' N. lat.) and Cape Blanco (43° N. lat.). Area specific management measures could possibly be implemented in that area to restrict yelloweye impacts. Management measures could include closing the area for all or part of the year between the Cape Blanco (43° N. lat.) and the Oregon border (42° N. lat.), closing the area between the California/Oregon Border (42° N. lat.) and Cape Mendocino (40°10' N. lat.), or closing both areas (43° N lat. to 40°10' N. lat.). Reductions in overall trip limits can reduce fishery activity in the aggregate, while closures of areas with relatively high encounters of yelloweye may maintain the aggregate catch level while adversely impacting select communities adjacent to those closures.

For 2008 inseason, the GMT is investigating canary and yelloweye rockfish bycatch rates in the open access nearshore commercial fishery on a finer spatial scale. **The GMT recommends, that the Council forward for the analysis any potential management lines for use of routine inseason management that are discovered in the next few weeks for the 2009/2010 for analyses.**

Slope Fixed Gear Commercial Groundfish Fisheries

In all options, yelloweye rockfish is the primary species that constrains opportunities in this fishery. Reductions in fixed gear catch of yelloweye rockfish can be achieved by moving the seaward boundary of the fixed gear RCA north of 40° 10 N. Lat. to depths deeper than 100 fm. For the limited entry fixed gear fleet, yelloweye rockfish catch reductions can also be achieved by allowing longline vessels to use pot gear; an option that was recommended by the Council for 2009-2010 analysis. However, it is unknown how many longline vessels will switch gear, and therefore it is unknown how much bycatch will be reduced. If both gear switching and differential pot and longline trip limits are regulated then effort shifts could be greater, which could provide for decreased yelloweye impacts. The following table illustrates the impacts of overfished species associated with the Council preferred sablefish OY. Varying impacts are shown according to shifts in the RCA boundary and assumed percentages of gear switching.

Table 2. Limited Entry Fixed Gear and Open Access Sablefish Impacts on Overfished Species, Including Distribution of Catch by Gear, Depth, and Area.

	Council Set OY			Percent of Longline to Pots 100 fm North & 150 fm South		
	100 fm North: 150 fm South ¹	125 fm North: 150 fm South ²	150 fm North: 150 fm South ³	20%	35%	50%
Sablefish 2009 LE & OA						
Total catch OY (mt)	7,052	7,052	7,052	7,052	7,052	7,052
Landed Catch (mt)	2,955	2,955	2,955	2,955	2,955	2,955
Projected bycatch impacts (mt)						
Canary rockfish	0.33	0.09	0.09	0.26	0.22	0.17
Widow rockfish	0.41	0.22	0.00	0.32	0.26	0.20
Yelloweye rockfish	1.13	0.69	0.29	0.91	0.74	0.57
Bocaccio rockfish	0.00	0.00	0.00	0.00	0.00	0.00
Cowcod rockfish	0.00	0.00	0.00	0.00	0.00	0.00
Pacific ocean perch	0.30	0.18	0.15	0.24	0.19	0.15
Darkblotched rockfish	0.80	0.86	0.93	0.71	0.65	0.59

Non-Whiting Trawl Fisheries

The overfished species options impact the non-whiting trawl fishery in a number of ways. In all cases, yelloweye, cowcod, and darkblotched rockfish are the principal constraints to trawl fishing activity. Yelloweye constrains harvest activity more so than canary; darkblotched rockfish constrains harvest opportunity more so than POP; and cowcod constrains harvest activity more so than bocaccio. Constraints due to the lowest yelloweye rockfish OY in the overfished species options result in a near total closure of trawling activity in the north in areas shoreward of the RCA. Under the highest yelloweye OY option, trawl fishing activity in the north shoreward of the RCA resembles the fishery at the start of 2007. The moderate yelloweye OY results in more moderate RCA restrictions.

A reduction in the cowcod impacts result in more restrictive shoreward RCA boundaries in the south compared to status quo. Depending upon the option, a 75 fm restriction is in place for periods 3 and 4 compared to status quo where a 100 fm shoreward RCA boundary is in place for the entire year.

The GMT notes that because of the revised stock assessment and rebuilding analysis, the reconsideration of the darkblotched OY presents a new tradeoff between rebuilding time and needs of fishing communities. Trawl fishery opportunities are heavily influenced by the darkblotched OY. Darkblotched has a direct effect on the most valuable target species caught with trawl gear including sablefish, petrale sole, Dover sole, and thornyheads. As modeled, a reduction in the darkblotched OY results in less trawl activity seaward of the RCA in the north. More restrictive RCA boundaries are put in place alongside more restrictive cumulative limits. The more restrictive RCA boundaries (250 fm) are expected to have a distinct geographic effect by limiting opportunities for vessels off central and northern Oregon and Washington more so than vessels off southern Oregon and northern California. This is because target species are less available at deeper depths as one moves north. A reduction in the darkblotched OY can result in a fairly dramatic shift in trawl opportunity for dover-thornyhead-sablefish (DTS) species complex from north to south. This is because darkblotched are found in the north and attaining target species OYs requires a large increase in DTS limits in the south.

Limited Entry Trawl Fishery for Pacific Whiting

The Pacific whiting fishery is limited by widow rockfish in all rebuilding species options. This is based on an extension of the linear trend analysis for predicting widow bycatch that the GMT has been using since the start of 2007. Data used to inform this analysis is through 2007, and therefore, the trend is predicting bycatch two years into the future. This creates some substantial uncertainty, so the estimates are best treated as order of magnitude estimates. The implications of this approach means that a widow rockfish OY of 371 mt may limit the whiting fishery to a U.S. OY of slightly under 200,000 mt, while a widow rockfish OY of 522 mt may limit the whiting fishery to a U.S. OY of slightly under 300,000 mt.

TABLE 3. Overfished Species Impacts within a Range of Pacific Whiting OY

US OY (mt)	Sector	Sector Allocation (mt)	Canary	Drkb	POP	Widow	Yelloweye
280,770	Tribal	35,000	1.1	0.0	0.5	2.7	-
	Mothership	58,505	2.2	6.6	1.2	128.7	0.0
	CP	82,882	0.3	6.5	1.2	157.5	0.0
	Shoreside	102,384	1.7	3.1	0.4	163.8	0.0
	Total	278,770	5.3	16.2	3.3	452.7	0.0
192,014	Tribal	27,500	0.8	0.0	0.4	2.1	-
	Mothership	39,003	1.5	4.4	0.8	85.8	0.0
	CP	55,255	0.2	4.3	0.8	105.0	0.0
	Shoreside	68,256	1.1	2.0	0.2	109.2	0.0
	Total	190,014	3.6	10.8	2.3	302.1	0.0

Tribal Fisheries

The coastal treaty tribes provided a report to the Council (Agenda Item H.5.b, Supplemental Tribal Report) that describes their proposed management measures for 2009-2010. Similar to 2007-2008, these management measures are designed to provide for treaty tribal fisheries while minimizing impacts to overfished species. The GMT will analyze the impacts of these management measures in the 2009-2010 SEIS.

Option 1

Opportunities under Option 1 result in fixed gear fisheries and shoreward trawl fisheries that are similar to status quo. Trawl opportunities for several of the most economically valuable species groups (e.g., sablefish and petrale sole) are restricted under this option. For Washington and California, recreational fisheries are similar to status quo. However, in Oregon reductions to catch in the Pacific halibut fishery are necessary to reduce yelloweye impacts.

Option 1.

Projected Mortality by Sector	Bocaccio	Canary	Cowcod	Drk	POP	Widow	Yelloweye
LE Trawl- Non-Whiting	9.7	23.5	1.1	117.9	36.1	5.2	0.8
LE Trawl- Whiting		4.2		16.2	2.8	450.0	
Total OA: Directed	4.2	3.3	0.1	0.2	0.1	0.7	2.2
Sablefish DTL		0.1		0.2	0.1	0.1	0.3
Nearshore (N of 40 10)		1.7				0.6	1.8
Nearshore (S of 40 10)	0.1	1.5	0.1			0.0	0.0
Other	4.1						0.1
LE Fixed Gear	13.4	1.4	0.1	1.2	0.3	0.9	1.7
Rec: WA projected impacts		1.2					2.5
Rec: WA harvest guideline							
Rec: OR projected impacts		2.8					3.2
Rec: OR harvest guideline							
Rec: CA projected impacts	53.3	8.0	0.1			6.5	2.1
Rec: CA harvest guideline	87.6	31.7	0.3			11.3	2.1
Sub-Total (excludes HGs)	80.6	44.4	1.4	135.5	39.3	463.2	12.5
NON-CHANGEABLES							
LE Trawl- Tribal Whiting		1.1			0.5	2.7	0.0
Tribal		3.4			3.7	40.0	2.3
OA: Incidental	1.3	2.2				0.4	0.6
Research	3.0	7.3	0.2	3.0	3.0	3.0	3.0
EFP		0.4	0.2				0.1
Sub-Total	4.3	14.4	0.4	3.0	7.2	46.1	6.0
Grand Total	84.9	58.8	1.8	138.5	46.5	509.3	18.5
OY	288	155	4	159	130	522	20

Washington Recreational

Washington recreational fishery measures do not require a departure from status quo (2008 management measures) in order to stay within the Council specified catch-sharing arrangements for yelloweye rockfish under Option 1.

Oregon Recreational

Option 1 assumes there is a reduction in the recreational halibut catch limit. This reduction comes either as a result of reduced halibut OY per the stock assessment, or limitations on access to the available OY. Shore based fisheries targeting or incidentally encountering groundfish are allowed year round. Depth closures (seaward of 40-fathoms), compared to status quo, occur only during one month. Marine and flatfish bag limits are status quo, though the lingcod bag limit increases from 2 to 3 fish. The status quo Stonewall Bank RCA remains in place. Restrictions on groundfish retention in the all-depth halibut fishery are status quo.

Season

Month												Yelloweye	Canary RF
J	F	M	A	M	J	J	A	S	O	N	D	RF (mt)	(mt)
Open all depth						<40 fm	Open all depth					3.2	2.8

California Recreational Fisheries

The California Department of Fish and Game (CDFG) is proposing a range of management measures for its recreational fisheries in 2009 and 2010 and is exploring which measures may be necessary to meet the constraints of the high and low yelloweye and cowcod OYs. The North and North Central North of Pt. Arena Management Areas are reduced by 4 months and 3 months respectively, relative to their status quo pre 2007

season length. This, in addition to 5 yelloweye rockfish conservation areas, shallower depth restrictions and bag limits, were necessary in all options analyzed in order to reduce the catch of yelloweye rockfish given the low share of the OY apportioned under the current initial catch sharing of the recreational harvest guideline.

RCG SEASON BY REGION

Region	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec
North Region	---	---	---	---	---	Open <20fm			---	---	---	---
North Central N. of Pt. Arena	---	---	---	---	---	Open <20fm			---	---	---	---
North Central S. of Pt. Arena	---	---	---	---	---	Open <30fm						---
South Central - Monterey	---	---	---	---	Open <40fm							---
South Central - Morro Bay	---	---	---	---	Open <40fm							---
South Region	---	---	Open < 60fm									

NOTES AND KEY:

RCG = Rockfish, cabezon, greenlings

--- = Closed to boat-based fishing for RCG

In the South Region, CA scorpionfish is open 12 months: 0-40 fm January-February, 0-60 fm in March-December.

(All other regulations are as described in Appendix B)

Limited Entry Non-Whiting Trawl Fishery

Limited entry trawl measures under Option 1 use a 75 fm and 100 fm shoreward RCA in the north. Seaward boundaries are set to 250 fm north of 40°10' N. lat. and to 200 fm between 40°10' N. lat and 38° N. lat. RCA boundaries south of 38° N. lat. are unaffected. Trip limits are set at levels shown in the following table.

OPTION: 1

SUBAREA	BIMO	INLINE	OUTLINE	SABLE	LONGSP	SHORTSP	DOVER	OTR	FLAT	PETRALE	ARRWTTTH	SLP	RK
NORTH LARGE FOOTROP	1	75	200*	15,000	8,000	8,000	50,000	90,000	50,000	90,000	90,000	1,500	
	2	75	250	15,000	8,000	8,000	50,000	90,000	30,000	90,000	90,000	1,500	
	3	75	250	15,000	8,000	8,000	50,000	90,000	30,000	90,000	90,000	1,500	
	4	100	250	15,000	8,000	8,000	50,000	90,000	30,000	90,000	90,000	1,500	
	5	75	250	15,000	8,000	8,000	50,000	90,000	30,000	90,000	90,000	1,500	
	6	75	200*	15,000	8,000	8,000	50,000	90,000	50,000	90,000	90,000	1,500	
NORTH SFFT	1	75	200*	5,000	3,000	3,000	40,000	90,000	16,000	90,000	90,000	1,500	
	2	75	250	8,000	3,000	3,000	40,000	90,000	25,000	90,000	90,000	1,500	
	3	75	250	8,000	3,000	3,000	40,000	90,000	25,000	90,000	90,000	1,500	
	4	100	250	8,000	3,000	3,000	40,000	90,000	25,000	90,000	90,000	1,500	
	5	75	250	8,000	3,000	3,000	40,000	90,000	25,000	90,000	90,000	1,500	
	6	75	200*	5,000	3,000	3,000	40,000	90,000	16,000	90,000	90,000	1,500	
38 - 40 10	1	100	200*	15,000	8,000	8,000	50,000	90,000	50,000	10,000	15,000		
	2	100	200	15,000	8,000	8,000	50,000	90,000	30,000	10,000	15,000		
	3	100	200	15,000	8,000	8,000	50,000	90,000	30,000	10,000	15,000		
	4	100	200	15,000	8,000	8,000	50,000	90,000	30,000	10,000	15,000		
	5	100	200	15,000	8,000	8,000	50,000	90,000	30,000	10,000	15,000		
	6	100	200*	15,000	8,000	8,000	50,000	90,000	50,000	10,000	15,000		
SOUTH 38	1	100	150	15,000	8,000	8,000	50,000	90,000	50,000	10,000	40,000		
	2	100	150	15,000	8,000	8,000	50,000	90,000	30,000	10,000	40,000		
	3	100	150	15,000	8,000	8,000	50,000	90,000	30,000	10,000	40,000		
	4	100	150	15,000	8,000	8,000	50,000	90,000	30,000	10,000	40,000		
	5	100	150	15,000	8,000	8,000	50,000	90,000	30,000	10,000	40,000		
	6	100	150	15,000	8,000	8,000	50,000	90,000	50,000	10,000	40,000		

splitnose limits equal to slope rock

set chilipepper limits with small footrope to 5,000 lbs in the south

Open Access Nearshore Fishery

The open access nearshore model will be constrained by the amount of yelloweye under this option. Under a 20 mt OY, yelloweye impacts are 1.8 mt. No additional opportunities could be provided without further impacting yelloweye.

Limited Entry Trawl Fishery for Pacific Whiting

The amount of Pacific whiting accessed under this option assumes that bycatch limits for widow rockfish are set at levels that do not affect other fisheries. The widow OY under this option is expected to result in an overall catch of Pacific whiting that is slightly less than 300,000 mt, but greater than status quo (2008 OY).

Option 2

Opportunities under Option 2 tend to restrict hook and line and midwater fisheries. Recreational fisheries, the fixed gear sablefish fishery, and the nearshore commercial groundfish fishery are restricted because of yelloweye. Measures to reduce impacts include additional YRCAs, more restrictive recreational RCAs, and reductions in bag limits. Trawl fisheries are heavily restricted on the shelf, with regionally based closures. Slope opportunities in the trawl fishery are similar to status quo with near full attainment of sablefish and petrale sole OYs. The Pacific whiting fishery is limited to a whiting catch that is less than 200,000 mt.

Option 2.

Projected Mortality by Sector	Bocaccio	Canary	Cowcod	Drk	POP	Widow	Yelloweye
LE Trawl- Non-Whiting	11.1	4.7	1.1	243.9	94.2	7.3	0.1
LE Trawl- Whiting		2.8		10.7	1.8	300.0	
Total OA: Directed	4.2	2.0	0.1	0.2	0.0	0.5	1.4
Sablefish DTL		0.0		0.2	0.0	0.1	0.2
Nearshore (N of 40 10)		1.0				0.4	1.1
Nearshore (S of 40 10)	0.1	1.0	0.1			0.0	0.0
Other	4.1						0.1
LE Fixed Gear	13.4	1.1	0.1	1.3	0.2	0.3	1.0
Rec: WA projected impacts		0.7					1.9
Rec: WA harvest guideline							
Rec: OR projected impacts		2.0					1.9
Rec: OR harvest guideline							
Rec: CA projected impacts	27.5	7.4	0.0			3.8	1.2
Rec: CA harvest guideline	66.3	9.0	0.2			8.1	1.2
Sub-Total (excludes HGs)	56.1	20.7	1.3	256.1	96.2	311.9	7.6
NON-CHANGEABLES							
LE Trawl- Tribal Whiting		0.8			0.4	2.1	0.0
Tribal		3.4			3.7	40.0	2.3
OA: Incidental	1.3	2.2				0.4	0.6
Research	3.0	7.3	0.2	3.0	3.0	3.0	3.0
EFP		0.4	0.2				0.1
Sub-Total	4.3	14.1	0.4	3.0	7.1	45.5	6.0
Grand Total	60.4	34.8	1.7	259.1	103.3	357.4	13.6
OY	218	44	2	300	189	371	14

Washington Recreational

The Washington recreational fishery portion of the shared harvest guideline for yelloweye rockfish under this option is 2.0 mt. Depth restriction periods would be extended and additional restrictions to lingcod retention from status quo would be implemented to meet the yelloweye harvest guidelines under Option 2. Status quo RCAs, bag limits, and length limits would remain in place. (Specific management measures under this option are described in Option 1 in the WDFW Report, Agenda Item H.5.b, April 2008).

Oregon Recreational

Option 2 includes shorebased fisheries targeting or incidentally encountering groundfish year round, and the ocean boat fishery is limited to depths shoreward of 30 fm. The marine fish daily bag limit is 9 fish, but other bag and length limits remain status quo. The status quo Stonewall Bank YRCA remains in place. Restrictions on groundfish retention in the all-depth halibut fishery are status quo. (Specific management measures under this option are described in Option 1 in the ODFW Report, Agenda Item H.5.b, April 2008).

Season

Month												Yelloweye	Canary RF
J	F	M	A	M	J	J	A	S	O	N	D	RF (mt)	(mt)
Open <30 fm												1.9	2.0

California Recreational

Under these OY options, the season length for the Northern and North-Central North of Pt. Arena Management areas are reduced by 1 month, and North-Central South of Pt. Arena Management Areas season is reduced by two months to prevent the catch of yelloweye rockfish from exceeding the harvest guideline. In this option, cowcod OY would be 2 mt and the California recreational HG for cowcod would be reduced to 0.15 mt. The RecFISH model has projected the Cowcod catch to be 0.1 mt in 2007 under the status quo 60 fm depth restriction, but the average catch in 2005, 2006 and 2007 is 0.2 mt, which would exceed the harvest guideline under this option. Thus, with the 0.15 mt HG under the 2 mt OY, actions may need to be taken to reduce the depth restriction to 50 or 40 fms to bring the cowcod catch below the harvest guideline. The fishery has remained below the current 0.3 mt HG under the 4 mt OY in 2005, 2006 and 2007.

RCG SEASON BY REGION

Region	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec
North Region	---	---	---	---	---	Open <20fm		---	---	---	---	---
North Central N. of Pt. Arena	---	---	---	---	---	Open <20fm		---	---	---	---	---
North Central S. of Pt. Arena	---	---	---	---	---	Open <30fm				---	---	---
South Central - Monterey	---	---	---	---	---	Open <40fm						---
South Central - Morro Bay	---	---	---	---	---	Open <40fm						---
South Region	---	---	Open <40fm									

NOTES AND KEY:

RCG = Rockfish, cabezon, greenlings

--- = Closed to boat-based fishing for RCG

In the South Region, CA scorpionfish is open 12 months: 0-40 fm January-February, 0-60 fm in March-December.

(All other regulations are as described in Appendix B)

Limited Entry Non-Whiting Trawl Fishery

Opportunities for non-whiting trawl activity is heavily restricted in the northern shoreward areas compared to status quo. Under this option, areas shoreward of the trawl RCA in the north are closed for all months except for period 4. The shoreward RCA boundary in the south is set to 75 fm in periods 1, 2, and 6. Seaward opportunities north and south are similar to status quo. Trip limits are shown in the following table.

OPTION: 2

SUBAREA	BIMO	INLINE	OUTLINE	SABLE	LONGSP	SHORTSP	DOVER	OTR	FLAT	PETRALE	ARRWTTH	SLP	RK
NORTH LARGE FOOTROP	1	0	200*	20,000	22,000	14,000	90,000	110,000	115,000	150,000	150,000	4,000	
	2	0	200	20,000	22,000	14,000	90,000	110,000	50,000	150,000	150,000	4,000	
	3	0	150 WA/	20,000	22,000	14,000	90,000	110,000	30,000	150,000	150,000	4,000	
	4	75	200 OR	20,000	22,000	14,000	90,000	110,000	30,000	150,000	150,000	4,000	
	5	0	200	20,000	22,000	14,000	90,000	110,000	50,000	150,000	150,000	4,000	
	6	0	200*	20,000	22,000	14,000	90,000	110,000	115,000	150,000	150,000	4,000	
NORTH SFFT	1	0	200*										
	2	0	200										
	3	0	150 WA/										
	4	75	200 OR	8,000	3,000	3,000	40,000	90,000	25,000	90,000	90,000	4,000	
	5	0	200										
	6	0	200*										
38 - 40 10	1	75	150	20,000	22,000	14,000	90,000	110,000	115,000	10,000	15,000		
	2	75	150	20,000	22,000	14,000	90,000	110,000	50,000	10,000	15,000		
	3	100	150	20,000	22,000	14,000	90,000	110,000	30,000	10,000	15,000		
	4	100	150	20,000	22,000	14,000	90,000	110,000	30,000	10,000	10,000		
	5	100	150	20,000	22,000	14,000	90,000	110,000	50,000	10,000	10,000		
	6	75	150	20,000	22,000	14,000	90,000	110,000	115,000	10,000	15,000		
SOUTH 38	1	75	150	20,000	22,000	14,000	90,000	110,000	115,000	10,000	40,000		
	2	75	150	20,000	22,000	14,000	90,000	110,000	50,000	10,000	40,000		
	3	100	150	20,000	22,000	14,000	90,000	110,000	30,000	10,000	40,000		
	4	100	150	20,000	22,000	14,000	90,000	110,000	30,000	10,000	40,000		
	5	75	150	20,000	22,000	14,000	90,000	110,000	50,000	10,000	40,000		
	6	75	150	20,000	22,000	14,000	90,000	110,000	115,000	10,000	40,000		

splitnose limits equal to slope rock

vessels using selective flatfish gear in the north in periods 1, 2, 3, 5, and 6 are not held to a lower limit

Open Access Nearshore Fishery

This option is driven by the low amount of yelloweye available to the open access nearshore fishery. Depth restrictions of 20 fm north of 40°10' N lat. would be required as well as an approximate 30% reduction in catch to stay within the amount of yelloweye available to this fishery.

Limited Entry Trawl Fishery for Pacific Whiting

Assuming bycatch limits for widow rockfish are set in a manner that do not affect other fisheries, the amount of widow rockfish OY in this option restricts whiting harvests to less than 200,000 mt, which is less than status quo (2008).

Option 3

Option 3 results in restrictions to all fisheries except perhaps pot fisheries, but only if differential regulations are adopted that redistribute effort between longline and pot fisheries. Recreational, commercial hook and line, bottom trawl, and Pacific whiting fisheries all are more heavily restricted than under status quo. Several fisheries experience relatively large reductions in opportunity (recreational, nearshore commercial, and bottom trawl) with adverse impacts that are more concentrated in areas north of San Francisco.

Option 3.

Projected Mortality by Sector	Bocaccio	Canary	Cowcod	Drk	POP	Widow	Yelloweye
LE Trawl- Non-Whiting	10.1	4.6	1.0	131.0	32.0	7.9	0.1
LE Trawl- Whiting		2.8		10.7	1.8	300.0	
Total OA: Directed	4.2	2.0	0.1	0.2	0.0	0.5	1.4
Sablefish DTL		0.0		0.2	0.0	0.1	0.2
Nearshore (N of 40 10)		1.0				0.4	1.1
Nearshore (S of 40 10)	0.1	1.0	0.1			0.0	
Other	4.1						0.1
LE Fixed Gear	13.4	1.1	0.1	1.3	0.2	0.3	1.0
Rec: WA projected impacts		0.7					1.9
Rec: WA harvest guideline							
Rec: OR projected impacts		2.0					1.9
Rec: OR harvest guideline							
Rec: CA projected impacts	27.5	7.4	0.0			3.8	1.2
Rec: CA harvest guideline	66.3	9.0	0.2			8.1	1.2
Sub-Total (excludes HGs)	55.1	20.6	1.2	143.2	34.0	312.4	7.5
NON-CHANGEABLES							
LE Trawl- Tribal Whiting		0.8			0.4	2.1	0.0
Tribal		3.4			3.7	40.0	2.3
OA: Incidental	1.3	2.2				0.4	0.6
Research	3.0	7.3	0.2	3.0	3.0	3.0	3.0
EFP		0.4	0.2				0.1
Sub-Total	4.3	14.1	0.4	3.0	7.1	45.5	6.0
Grand Total	59.4	34.7	1.6	146.2	41.1	357.9	13.5
OY	218	44	2	300	189	371	14

Washington Recreational

The Washington recreational fishery portion of the shared harvest guideline for yelloweye rockfish under this option is 2.0 mt. Depth restriction periods would be extended and additional restrictions to lingcod retention from status quo would be implemented to meet the yelloweye harvest guidelines under Option 3. Status quo RCA's, bag limits and length limits would remain in place. (Specific management measures for this option correspond to Option 1 in the WDFW Report Agenda Item H.5.b)

Oregon Recreational

Option 3 includes shorebased fisheries targeting or incidentally encountering groundfish year round, and the ocean boat fishery is limited to depths shoreward of 30 fm. The marine fish daily bag limit is 9 fish, but other bag and length limits remain status quo. The status quo Stonewall Bank YRCA remains in place. Restrictions on groundfish retention in the all-depth halibut fishery are status quo.

Season

Month												Yelloweye RF (mt)	Canary RF (mt)
J	F	M	A	M	J	J	A	S	O	N	D		
Open <30 fm												1.9	2.0

California Recreational

Same as in Option 2.

Limited Entry Non-Whiting Trawl Fishery

The non-whiting trawl fishery under Option 3 is closed in areas shoreward of the trawl RCA in the north for all months except for period 4. The shoreward RCA boundary in the south is set to 75 fm in periods 1, 2, and 6. Seaward boundaries are set to 250 fm north of 40°10' N. lat. and to 200 fm between 40°10' N. lat. and 38° N. lat. Trip limits are set at levels shown in the following table.

OPTION: 3

SUBAREA	BIMO	INLINE	OUTLINE	SABLE	LONGSP	SHORTSP	DOVER	OTR	FLAT	PETRALE	ARRWTTH	SLP	RK
NORTH LARGE FOOTROP	1	0	200*	11,000	6,000	5,000	30,000	110,000	50,000	50,000	1,500		
	2	0	250	11,000	6,000	5,000	30,000	110,000	30,000	50,000	1,500		
	3	0	250	11,000	6,000	5,000	30,000	110,000	30,000	50,000	1,500		
	4	75	250	11,000	6,000	5,000	30,000	110,000	30,000	50,000	1,500		
	5	0	250	11,000	6,000	5,000	30,000	110,000	30,000	50,000	1,500		
	6	0	200*	11,000	6,000	5,000	30,000	110,000	50,000	50,000	1,500		
NORTH SFFT	1	0	200*										
	2	0	250										
	3	0	250										
	4	75	250	5,000	3,000	3,000	25,000	50,000	16,000	50,000	1,500		
	5	0	250										
	6	0	200*										
38 - 40 10	1	75	200*	30,000	30,000	30,000	100,000	110,000	70,000	10,000	15,000		
	2	100	200	30,000	30,000	30,000	100,000	110,000	30,000	10,000	15,000		
	3	100	200	30,000	30,000	30,000	100,000	110,000	30,000	10,000	15,000		
	4	100	200	30,000	30,000	30,000	100,000	110,000	30,000	10,000	10,000		
	5	75	200	30,000	30,000	30,000	100,000	110,000	30,000	10,000	10,000		
	6	75	200*	30,000	30,000	30,000	100,000	110,000	70,000	10,000	15,000		
SOUTH 38	1	75	150	30,000	30,000	30,000	100,000	110,000	70,000	10,000	40,000		
	2	100	150	30,000	30,000	30,000	100,000	110,000	30,000	10,000	40,000		
	3	100	150	30,000	30,000	30,000	100,000	110,000	30,000	10,000	40,000		
	4	100	150	30,000	30,000	30,000	100,000	110,000	30,000	10,000	40,000		
	5	75	150	30,000	30,000	30,000	100,000	110,000	30,000	10,000	40,000		
	6	75	150	30,000	30,000	30,000	100,000	110,000	70,000	10,000	40,000		

splitnose limits equal to slope rock

vessels using selective flatfish gear in the north in periods 1, 2, 3, 5, and 6 are not held to a lower limit

Open Access Nearshore Fishery

This option is similar to Option 2, and the low amount of yelloweye available to this fishery would require the same depth restrictions and decreases in catch.

Limited Entry Trawl Fishery for Pacific Whiting

The amount of whiting expected to be harvested under Option 3 is equivalent to that under Option 2. Less than 200,000 mt of whiting are expected to be harvested under this option, which is less than status quo (2008).

Option 4

Option 4 results in a combined suite of measures that are less restrictive than other options. Combined opportunities are greatest under this option, fixed gear fisheries that are similar to status quo, trawl fisheries that are similar to status quo on the slope and similar to the start of 2007 on the shelf, and Pacific whiting fisheries that have the ability to harvest slightly more whiting than under status quo. For Washington and California, recreational fisheries are similar to status quo. However, in Oregon reductions to the Pacific halibut fishery are necessary to reduce yelloweye impacts.

Option 4.

Projected Mortality by Sector	Bocaccio	Canary	Cowcod	Drk	POP	Widow	Yelloweye
LE Trawl- Non-Whiting	12.3	24.5	1.3	235.2	88.0	8.2	0.9
LE Trawl- Whiting		4.2		16.2	2.8	450.0	
Total OA: Directed	4.2	3.3	0.1	0.2	0.1	0.7	2.2
Sablefish DTL		0.1		0.2	0.1	0.1	0.3
Nearshore (N of 40 10)		1.7				0.6	1.8
Nearshore (S of 40 10)	0.1	1.5	0.1			0.0	
Other	4.1						0.1
LE Fixed Gear	13.4	1.4	0.1	1.2	0.3	0.9	1.7
Rec: WA projected impacts		1.2					2.5
Rec: WA harvest guideline							
Rec: OR projected impacts		2.8					3.2
Rec: OR harvest guideline							
Rec: CA projected impacts	53.3	8.0	0.1			6.5	2.1
Rec: CA harvest guideline	87.6	31.7	0.3			11.3	2.1
Sub-Total (excludes HGs)	83.1	45.4	1.6	252.8	91.2	466.2	12.5
NON-CHANGEABLES							
LE Trawl- Tribal Whiting		1.1			0.5	2.7	0.0
Tribal		3.4			3.7	40.0	2.3
OA: Incidental	1.3	2.2				0.4	0.6
Research	3.0	7.3	0.2	3.0	3.0	3.0	3.0
EFP		0.4	0.2				0.1
Sub-Total	4.3	14.4	0.4	3.0	7.2	46.1	6.0
Grand Total	87.4	59.8	2.0	255.8	98.4	512.3	18.5
OY	288	155	4	300	189	522	20

Washington Recreational

Washington recreational fishery measures do not require a departure from status quo (2008 management measures) in order to stay within the Council specified catch-sharing arrangements for yelloweye rockfish under Option 4.

Oregon Recreational

Option 4 assumes there is a reduction in the recreational halibut catch limit. This reduction comes either as a result of reduced halibut OY as per the stock assessment or limitations on access to the available OY. Shorebased fisheries targeting or incidentally encountering groundfish are allowed year round. Depth closures (seaward of 40-fathoms), compared to status quo, occur only during one month. Marine and flatfish bag limits are status quo, though the lingcod bag limit increases from 2 to 3 fish. The status quo Stonewall Bank RCA remains in place. Restrictions on groundfish retention in the all-depth halibut fishery are status quo.

Season

Month											Yelloweye	Canary RF	
J	F	M	A	M	J	J	A	S	O	N	D	RF (mt)	(mt)
Open all depth						<40 fm	Open all depth					3.2	2.8

California Recreational

Same as in Option 1.

Limited Entry Non-Whiting Trawl Fishery

Opportunities for non-whiting trawl fisheries include the use of 75 fm and 100 fm shoreward RCA in the north. Seaward boundaries set are at 150 fm and 200 fm north of 40°10' N. lat. and at 150 fm south of 40°10' N. lat. Trip limits are set at levels in the following table.

OPTION: 4

SUBAREA	BIMO	INLINE	OUTLINE	SABLE	LONGSP	SHORTSP	DOVER	OTR FLAT	PETRALE	ARRWTTH	SLP RK
NORTH LARGE FOOTROP	1	75	200*	18,000	22,000	14,000	110,000	110,000	40,000	150,000	4,000
	2	75	200	20,000	22,000	14,000	110,000	110,000	30,000	150,000	4,000
	3	75	150 WA/	20,000	22,000	14,000	110,000	110,000	30,000	150,000	4,000
	4	100	200 OR	20,000	22,000	14,000	110,000	110,000	30,000	150,000	4,000
	5	75	200	20,000	22,000	14,000	110,000	110,000	30,000	150,000	4,000
	6	75	200*	18,000	22,000	14,000	110,000	110,000	40,000	150,000	4,000
NORTH SFFT	1	75	200*	5,000	3,000	3,000	40,000	90,000	16,000	90,000	4,000
	2	75	200	8,000	3,000	3,000	40,000	90,000	25,000	90,000	4,000
	3	75	150 WA/	8,000	3,000	3,000	40,000	90,000	25,000	90,000	4,000
	4	100	200 OR	8,000	3,000	3,000	40,000	90,000	25,000	90,000	4,000
	5	75	200	8,000	3,000	3,000	40,000	90,000	25,000	90,000	4,000
	6	75	200*	5,000	3,000	3,000	40,000	90,000	16,000	90,000	4,000
38 - 40 10	1	100	150	18,000	22,000	14,000	110,000	110,000	40,000	10,000	15,000
	2	100	150	20,000	22,000	14,000	110,000	110,000	30,000	10,000	15,000
	3	100	150	20,000	22,000	14,000	110,000	110,000	30,000	10,000	15,000
	4	100	150	20,000	22,000	14,000	110,000	110,000	30,000	10,000	10,000
	5	100	150	20,000	22,000	14,000	110,000	110,000	30,000	10,000	10,000
	6	100	150	18,000	22,000	14,000	110,000	110,000	40,000	10,000	15,000
SOUTH 38	1	100	150	18,000	22,000	14,000	110,000	110,000	40,000	10,000	40,000
	2	100	150	20,000	22,000	14,000	110,000	110,000	30,000	10,000	40,000
	3	100	150	20,000	22,000	14,000	110,000	110,000	30,000	10,000	40,000
	4	100	150	20,000	22,000	14,000	110,000	110,000	30,000	10,000	40,000
	5	100	150	20,000	22,000	14,000	110,000	110,000	30,000	10,000	40,000
	6	100	150	18,000	22,000	14,000	110,000	110,000	40,000	10,000	40,000

splitnose limits equal to slope rock

set chilipepper limits with small footrope to 5,000 lbs in the south

Open Access Nearshore Fishery

This option is similar to Option 1. Management would remain status quo but no additional opportunities could be provided without further impacting yelloweye.

Limited Entry Trawl Fishery for Pacific Whiting

Opportunities for participants in the Pacific whiting fishery are the same under Option 4 as Option 1. Harvest of whiting under this option may approach 300,000 mt.

Options 5 and 5b

Option 5 a and b results in a series of impacts that are somewhat moderate compared to Options 1 through 4. Opportunities for recreational and fixed gear fisheries are constrained somewhat in some cases while opportunities for bottom trawl fisheries are similar to status quo on the slope and somewhat less restrictive than status quo on the northern shelf, but slightly more so on the shelf in the south. Opportunities in the Pacific whiting fishery are dependent on widow; the lower widow OY constrains opportunities to a harvest that is less than status quo (2008).

Option 5a.

Projected Mortality by Sector	Bocaccio	Canary	Cowcod	Drk	POP	Widow	Yelloweye
LE Trawl- Non-Whiting	10.3	15.3	1.0	224.0	83.3	7.6	0.6
LE Trawl- Whiting		4.2		16.2	2.8	450.0	
Total OA: Directed	4.2	2.7	0.1	0.2	0.1	0.6	2.0
Sablefish DTL		0.1		0.2	0.1	0.1	0.3
Nearshore (N of 40 10)		1.6				0.5	1.6
Nearshore (S of 40 10)	0.1	1.0	0.1			0.0	
Other	4.1						0.1
LE Fixed Gear	13.4	1.1	0.1	1.3	0.2	0.3	1.0
Rec: WA projected impacts		1.1					2.5
Rec: WA harvest guideline							
Rec: OR projected impacts		2.5					2.6
Rec: OR harvest guideline							
Rec: CA projected impacts	28.9	8.3	0.0			4.2	1.7
Rec: CA harvest guideline	66.3	17.4	0.2			8.0	1.7
Sub-Total (excludes HGs)	56.8	35.1	1.2	241.7	86.4	462.8	10.4
NON-CHANGEABLES							
LE Trawl- Tribal Whiting		1.1			0.5	2.7	0.0
Tribal		3.4			3.7	40.0	2.3
OA: Incidental	1.3	2.2				0.4	0.6
Research	3.0	7.3	0.2	3.0	3.0	3.0	3.0
EFP		0.4	0.2				0.1
Sub-Total	4.3	14.4	0.4	3.0	7.2	46.1	6.0
Grand Total	61.1	49.5	1.6	244.7	93.6	508.9	16.4
OY	218	105	2	300	164	522	17

Option 5b.

Projected Mortality by Sector	Bocaccio	Canary	Cowcod	Drk	POP	Widow	Yelloweye
LE Trawl- Non-Whiting	10.3	15.3	1.0	224.0	83.3	7.6	0.6
LE Trawl- Whiting		2.8		10.7	1.8	300.0	
Total OA: Directed	4.2	2.7	0.1	0.2	0.1	0.6	2.0
Sablefish DTL		0.1		0.2	0.1	0.1	0.3
Nearshore (N of 40 10)		1.6				0.5	1.6
Nearshore (S of 40 10)	0.1	1.0	0.1			0.0	
Other	4.1						0.1
LE Fixed Gear	13.4	1.1	0.1	1.3	0.2	0.3	1.0
Rec: WA projected impacts		1.1					2.5
Rec: WA harvest guideline							
Rec: OR projected impacts		2.5					2.6
Rec: OR harvest guideline							
Rec: CA projected impacts	28.9	8.3	0.0			4.2	1.7
Rec: CA harvest guideline	66.3	17.4	0.2			8.0	1.7
Sub-Total (excludes HGs)	56.8	33.7	1.2	236.2	85.4	312.8	10.4
NON-CHANGEABLES							
LE Trawl- Tribal Whiting		0.8			0.4	2.1	0.0
Tribal		3.4			3.7	40.0	2.3
OA: Incidental	1.3	2.2				0.4	0.6
Research	3.0	7.3	0.2	3.0	3.0	3.0	3.0
EFP		0.4	0.2				0.1
Sub-Total	4.3	14.1	0.4	3.0	7.1	45.5	6.0
Grand Total	61.1	47.8	1.6	239.2	92.5	358.3	16.4
OY	218	85	2	300	164	371	17

Washington Recreational

Washington recreational fishery measures do not require a departure from status quo (2008 management measures) in order to stay within the Council specified catch-sharing arrangements for yelloweye rockfish under Option 5.

Oregon Recreational

Option 5 includes shorebased fisheries targeting or incidentally encountering groundfish year round. Relative to status quo, four instead of six months require seaward of 40-fathom depth closures. Daily bag and length limits remain status quo. The status quo Stonewall Bank YRCA remains in place. Restrictions on groundfish retention in the all-depth halibut fishery are status quo.

Season

Month												Yelloweye RF (mt)	Canary RF (mt)
J	F	M	A	M	J	J	A	S	O	N	D		
Open all depth					Open <40 fm			Open all depth				2.6	2.5

California Recreational

Under this OY option, the season length for the North and North-Central North of Pt. Arena Management Areas are further reduced by half of the economically valuable summer month of August to prevent the catch of yelloweye rockfish from exceeding the harvest guideline. In this option, cowcod OY would be 2 mt and the California recreational HG for cowcod would be reduced to .15 mt. The RecFISH model has projected the cowcod catch to be .1 mt in 2007 under the status quo 60 fm depth restriction, but the average catch in 2005, 2006 and 2007 is .2 mt, which would exceed the harvest guideline under this option. Thus, with the .15 metric ton HG under the 2 mt OY, actions may need to be taken to reduce the depth restriction to 50 or 40 fms to bring the cowcod catch below the harvest guideline. The fishery has remained below the current .3 mt HG under the 4 mt OY in 2005, 2006 and 2007.

RCG SEASON BY REGION

Region	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec
North Region	---	---	---	---	---	Open <20fm---Aug 15		---	---	---	---	---
North Central N. of Pt. Arena	---	---	---	---	---	Open <20fm---Aug 15		---	---	---	---	---
North Central S. of Pt. Arena	---	---	---	---	---	Open <30fm						---
South Central - Monterey	---	---	---	---	---	Open <40fm						---
South Central - Morro Bay	---	---	---	---	---	Open <40fm						---
South Region	---	---	Open < 40fm									

NOTES AND KEY:

RCG = Rockfish, cabezon, greenlings

--- = Closed to boat-based fishing for RCG

In the South Region, CA scorpionfish is open 12 months: 0-40 fm January-February, 0-60 fm in March-December.

(All other regulations are as described under Appendix B)

Limited Entry Non-Whiting Trawl Fishery

Opportunities for non-whiting trawl harvesters under this option include closing the area shoreward of the RCA north of Cape Alava for the entire year. Shoreward RCA boundaries in the north are set at 75 fm for the year. Shoreward RCA boundary in the south are set at 75 fm in periods 1, 2, and 6. Seaward boundaries are set at 150 fm and 200 fm north of 40°10' N. lat. and at 150 fm south of 40°10' N. lat. Trip limits are set at levels shown in the following table.

OPTION: 5

SUBAREA	BIMO	INLINE	OUTLINE	SABLE	LONGSP	SHORTSP	DOVER	OTR	FLAT	PETRALE	ARRWTTH	SLP	RK
NORTH LARGE FOOTROP	1		200*	20,000	22,000	14,000	100,000	110,000	50,000	150,000	4,000		
	2		200	20,000	22,000	14,000	100,000	110,000	30,000	150,000	4,000		
	3	75 fm	150 WA/	20,000	22,000	14,000	100,000	110,000	30,000	150,000	4,000		
	4	(close	200 OR	20,000	22,000	14,000	100,000	110,000	30,000	150,000	4,000		
	5	north of	200	20,000	22,000	14,000	100,000	110,000	30,000	150,000	4,000		
	6	Alava)	200*	20,000	22,000	14,000	100,000	110,000	50,000	150,000	4,000		
NORTH SFFT	1		200*	5,000	3,000	3,000	40,000	90,000	16,000	90,000	4,000		
	2		200	8,000	3,000	3,000	40,000	90,000	25,000	90,000	4,000		
	3	75 fm	150 WA/	8,000	3,000	3,000	40,000	90,000	25,000	90,000	4,000		
	4	(close	200 OR	8,000	3,000	3,000	40,000	90,000	25,000	90,000	4,000		
	5	north of	200	8,000	3,000	3,000	40,000	90,000	25,000	90,000	4,000		
	6	Alava)	200*	5,000	3,000	3,000	40,000	90,000	16,000	90,000	4,000		
38 - 40 10	1	75	150	20,000	22,000	14,000	100,000	110,000	50,000	10,000	15,000		
	2	100	150	20,000	22,000	14,000	100,000	110,000	30,000	10,000	15,000		
	3	100	150	20,000	22,000	14,000	100,000	110,000	30,000	10,000	15,000		
	4	100	150	20,000	22,000	14,000	100,000	110,000	30,000	10,000	10,000		
	5	75	150	20,000	22,000	14,000	100,000	110,000	30,000	10,000	10,000		
	6	75	150	20,000	22,000	14,000	100,000	110,000	50,000	10,000	15,000		
SOUTH 38	1	75	150	20,000	22,000	14,000	100,000	110,000	50,000	10,000	40,000		
	2	100	150	20,000	22,000	14,000	100,000	110,000	30,000	10,000	40,000		
	3	100	150	20,000	22,000	14,000	100,000	110,000	30,000	10,000	40,000		
	4	100	150	20,000	22,000	14,000	100,000	110,000	30,000	10,000	40,000		
	5	75	150	20,000	22,000	14,000	100,000	110,000	30,000	10,000	40,000		
	6	75	150	20,000	22,000	14,000	100,000	110,000	50,000	10,000	40,000		

splitnose limits equal to slope rock

set chilipepper limits with small footrope to 5,000 lbs in the south

Open Access Nearshore Fishery

This option is similar to Option 1. Management would remain status quo but no additional opportunities could be provided without further impacting yelloweye.

Alternative Recreational Harvest Guideline Evaluation

In November 2007, the Council gave the GMT direction for initial analyses of recreational impacts between states based on the 2007 harvest guidelines. At this meeting, the Council requested that the GMT analyze a sharing agreement between states based on the 2006 harvest guidelines. As evidenced by the 8 mt California recreation catch estimate, the California recreational model projection of 1.7 mt used to apportion the OY for season analysis under-projected the catch for the California recreational fishery.

Table 4. Yelloweye Apportionment for Different OY Alternatives

YE OY	14 mt		17 mt		20 mt	
	2007 HG (mt)	2006 HG (mt)	2007 HG (mt)	2006 HG (mt)	2007 HG (mt)	2006 HG (mt)
Washington	2.0	1.7	2.8	2.4	3.6	3.0
Oregon	1.9	1.6	2.6	2.2	3.4	2.8
California	1.2	1.8	1.7	2.6	2.1	3.2

Washington Recreational

The alternative recreational harvest guideline analysis would require the most restrictive recreational management measures for the Washington recreational fisheries, in order to

meet the 1.6 mt yelloweye guideline under this option. Depth restriction periods would be extended and recreational bottomfishing would be prohibited from mid August through mid-April of the following year with the exception of a small open area on the north coast. Lingcod retention would be restricted with a prohibition to retain lingcod south of 46°58 N. Lat. (Specific management measures for this option correspond to Option 2 in the WDFW Report Agenda Item H.5.b)

The 2.4 and 3.0 mt harvest guidelines, associated with the 17 and 20 mt yelloweye OY, respectively, under this option do not require a departure from status quo (2008 management measures).

Oregon Recreational

Models to the lowest yelloweye rockfish OY option of 14 mt, with an Oregon harvest guideline of 1.7 mt, demonstrate the impacts on opportunity resulting from this scenario. Shorebased fisheries targeting or incidentally encountering groundfish are allowed for only 5 months (May-Sept), shoreward of 25 fm. This is a significant departure from status quo. Bag and length limits are status quo. The status quo Stonewall Bank RCA remains in place. Restrictions on groundfish retention in the all-depth halibut fishery are status quo.

Season

Month												Yelloweye	Canary RF
J	F	M	A	M	J	J	A	S	O	N	D	RF (mt)	(mt)
CLOSED					Open <25 fm					CLOSED		1.6	1.7

Options 2 and 3, outlined above would be necessary to achieve harvest guideline levels in the 17 and 20 mt yelloweye rockfish OY alternatives.

California Recreational

The season and depth restrictions resulting from the status quo recreational HG apportionment using 2007 projected impacts is followed by the season and depth restrictions resulting from the apportionment of the OY using 2006 harvest guidelines at 14, 17 and 20 mt OYs for comparison of these catch sharing methods. The ramp down of the OY will necessitate implementation of the following management measures in the California Recreational fishery in 2009 and 2010. All options were evaluated using the following regulations unless otherwise noted:

- A 6 fish Rockfish Cabezon and Greenling RCG bag limit in the North and North-Central north of Pt. Arena Management Areas and 10 fish bag limit in the remainder of the state with a 1 fish sublimit for cabezon, 2 fish sublimit for greenlings statewide.
- Five YRCAs proposed for 2008 off the ports of Fort Bragg, Shelter Cove and Crescent City, from which ~70% of the California recreational yelloweye rockfish catch in 2007 originated.

- Use of the management line at Pt. Arena in the division of the North-Central Management Area into the North-Central North and North Central South Management Areas.

14 mt OY

California Recreational Season and Depth Restrictions under the 14 mt OY, 2007 Status Quo HG Catch Sharing (1.2 mt HG)

RCG SEASON BY REGION

Region	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec	
North Region	---	---	---	---	---	Open <20fm		---	---	---	---	---	
North Central N. of Pt. Arena	---	---	---	---	---	Open <20fm		---	---	---	---	---	
North Central S. of Pt. Arena	---	---	---	---	---	Open <30fm				---	---	---	
South Central - Monterey	---	---	---	---	---	Open <40fm						---	---
South Central - Morro Bay	---	---	---	---	---	Open <40fm						---	---
South Region	---	---	Open < 40fm										

NOTES AND KEY:

RCG = Rockfish, cabezon, greenlings

--- = Closed to boat-based fishing for RCG

In the South Region, CA scorpionfish is open 12 months: 0-40 fm January-February, 0-60 fm in March-December.

California Recreational Season and Depth Restrictions under the 14 mt OY, 2006 HG Alternative Catch Sharing (1.8 mt HG)

RCG SEASON BY REGION

Region	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec	
North Region	---	---	---	---	Open <20fm				---	---	---	---	
North Central N. of Pt. Arena	---	---	---	---	---	Open <20fm Close Aug 15			---	---	---	---	
North Central S. of Pt. Arena	---	---	---	---	---	Open <30fm				---	---	---	
South Central - Monterey	---	---	---	---	---	Open <40fm						---	---
South Central - Morro Bay	---	---	---	---	---	Open <40fm						---	---
South Region	---	---	Open < 40fm										

NOTES AND KEY:

RCG = Rockfish, cabezon, greenlings

--- = Closed to boat-based fishing for RCG

In the South Region, CA scorpionfish is open 12 months: 0-40 fm January-February, 0-60 fm in March-December.

17 mt OY

California Recreational Season and Depth Restrictions under the 17 mt OY, 2007 Status Quo HG Catch Sharing (1.7 mt HG)

RCG SEASON BY REGION

Region	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec	
North Region	---	---	---	---	---	Open <20fm---Aug 15		---	---	---	---	---	
North Central N. of Pt. Arena	---	---	---	---	---	Open <20fm---Aug 15		---	---	---	---	---	
North Central S. of Pt. Arena	---	---	---	---	---	Open <30fm				---	---	---	
South Central - Monterey	---	---	---	---	---	Open <40fm						---	---
South Central - Morro Bay	---	---	---	---	---	Open <40fm						---	---
South Region	---	---	Open < 40fm										

NOTES AND KEY:

RCG = Rockfish, cabezon, greenlings

--- = Closed to boat-based fishing for RCG

In the South Region, CA scorpionfish is open 12 months: 0-40 fm January-February, 0-60 fm in March-December.

California Recreational Season and Depth Restrictions under the 17 mt OY, 2006 HG Alternative Catch Sharing (2.6 mt HG)

RCG SEASON BY REGION

Region	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec
North Region	---	---	---	---	Open <20fm			---	---	---	---	---
North Central N. of Pt. Arena	---	---	---	---	---	Open <20fm			---	---	---	---
North Central S. of Pt. Arena	---	---	---	---	---	Open <30fm			---	---	---	---
South Central - Monterey	---	---	---	---	Open <40fm			---	---	---	---	---
South Central - Morro Bay	---	---	---	---	Open <40fm			---	---	---	---	---
South Region	---	---	Open < 40fm									

NOTES AND KEY:

RCG = Rockfish, cabezon, greenlings

--- = Closed to boat-based fishing for RCG

In the South Region, CA scorpionfish is open 12 months: 0-40 fm January-February, 0-60 fm in March-December.

20mt OY

California Recreational Season and Depth Restrictions under the 20 mt OY, 2007 Status Quo HG Catch Sharing (2.1 mt HG)

RCG SEASON BY REGION

Region	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec
North Region	---	---	---	---	---	Open <20fm			---	---	---	---
North Central N. of Pt. Arena	---	---	---	---	---	Open <20fm			---	---	---	---
North Central S. of Pt. Arena	---	---	---	---	---	Open <30fm			---	---	---	---
South Central - Monterey	---	---	---	---	Open <40fm			---	---	---	---	---
South Central - Morro Bay	---	---	---	---	Open <40fm			---	---	---	---	---
South Region	---	---	Open < 60fm									

NOTES AND KEY:

RCG = Rockfish, cabezon, greenlings

--- = Closed to boat-based fishing for RCG

In the South Region, CA scorpionfish is open 12 months: 0-40 fm January-February, 0-60 fm in March-December.

California Recreational Season and Depth Restrictions under the 20 mt OY, 2006 HG Alternative Catch Sharing (3.2 mt HG)

RCG SEASON BY REGION

Region	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec
North Region	---	---	---	---	Open <20fm			---	---	---	---	---
North Central N. of Pt. Arena	---	---	---	---	---	Open <20fm			---	---	---	---
North Central S. of Pt. Arena	---	---	---	---	---	Open <30fm			---	---	---	---
South Central - Monterey	---	---	---	---	Open <40fm			---	---	---	---	---
South Central - Morro Bay	---	---	---	---	Open <40fm			---	---	---	---	---
South Region	---	---	Open < 60fm									

NOTES AND KEY:

RCG = Rockfish, cabezon, greenlings

--- = Closed to boat-based fishing for RCG

In the South Region, CA scorpionfish is open 12 months: 0-40 fm January-February, 0-60 fm in March-December.

Note: This option would allow the North-Central Management Area North of Pt. Arena return to its status quo 10 fish bag limit.

Supplemental State Reports

For the preliminary proposed range of commercial and recreational management measures in the Supplemental State Reports (Agenda Items H.5.b), the GMT has identified several issues of potential concern for consideration.

Spatial Management and RCAs

The GMT encourages the use of YRCAs and cold spots as a method to reduce yelloweye impacts. However, complex area management options could present an enforcement concern (e.g. cold spots and weekend prohibitions on lingcod in the Supplemental WDFW Report). The GMT encourages the states to continue to develop their proposals in cooperation with enforcement agents.

Oregon and California have both proposed use of new latitudinal management lines for inseason closures. These are not available for NMFS conforming action until analyzed as routine inseason management measures.

Relaxing the California commercial RCA (i.e., allowing access to deeper water) from the border to Pt. Conception may result in increased yelloweye and canary impacts, so the GMT recommends analyzing available information to quantify these impacts.

Retention

All states have proposed options allowing retention of lingcod in commercial fisheries during winter periods presently closed to protect nesting males. Likewise, Oregon and California have proposed increases in their recreational bag limits for lingcod. The GMT is concerned that this could result in increased targeting of lingcod, which may increase yelloweye and canary bycatch. Additionally, south of Cape Blanco the lingcod stock is estimated to be in the precautionary zone and increasing lingcod mortality may be a concern. The GMT also notes that only the option for commercial retention seaward of the RCA in Washington can be quantified with available observer data.

The GMT has concerns with any options that allow for retention of overfished species (e.g., bocaccio, canary, yelloweye). Such options could increase targeting, rather than just allowing for decreased wastage or reducing pressure on other stocks. Also, such retention may not meet the legal requirement of accounting for the needs of the fishing community while rebuilding overfished stocks in as short a time as possible.

The Team also discussed WDFW North Coast bottomfish Options 1-3, all of which allow for retention of bottomfish during days that halibut fishing is open. Removing the potential for mixed targeting strategies (e.g., prohibiting bottomfish retention during halibut trips) may provide for savings in overfished species impacts and should be analyzed. In the current WDFW proposal, the tradeoff between yelloweye rockfish impacts from mixed targeting are accounted for by earlier depth closures. This strategy was developed through WDFW public meetings and industry input.

Re-submersion Devices

Re-submersion devices are mentioned as potential discard mortality reduction measures for both Oregon and California recreational fisheries. A coordinated review of existing data and/or field investigations should be undertaken to accurately quantify any savings. GMT encourages the use of such devices for their potential savings of overfished species mortalities, but notes that mandatory requirements are likely neither enforceable nor quantifiable.

GMT Recommendations

1. The GMT would like confirmation that the Council intends to set a coastwide lingcod OY as has been standard practice.
2. The GMT recommends that the Council forward for analysis any potential management lines for use of routine inseason management in the nearshore commercial fisheries for the 2009/2010 analyses.

Appendix A

Table 1. Summary of Rebuilding OYs and Reference Points

	Alt 1 OY	Alt 2 OY	Alt 3 OY	Alt 4 OY
POP				
2009 OY (mt)	0	130	164	189
Ttarget	2010	2010	2011	2011
SPR	F=0	90.3%	88.0%	86.4%
Tmax	N/A	2037	2037	2037
Pmax	N/A	95.6%	95.0%	94.4%

	Alt 1	Alt 2	Alt 3
Widow			
2009 OY (mt)	0	371	522
Ttarget	2009	2009	2009
SPR	F=0	96.4%	95.0%
Tmax	N/A	2031	2031
Pmax	N/A	100.0%	100.0%

	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6
Canary						
2009 OY (mt)	0	35	44	85	105	155
Ttarget	2019	2020	2020	2020	2020	2021
SPR	F=0	97.3%	96.2%	93.6%	92.2%	88.7%
Tmax	N/A	2041	2041	2041	2041	2041
Pmax	N/A	75%	75%	75%	75%	75%

	Alt 1	Alt 2	Alt 3
Boccacio			
2009 OY (mt)	0	218	288
Ttarget	2020	2022	2023
SPR	F=0	82.6%	77.7%
Tmax	N/A	2033	2033
Pmax	N/A	???	???

	Alt 1	Alt 2	Alt 3
Cowcod			
2009 OY (mt)	0	2	4
Ttarget	2061	2065	2072
SPR	F=0	90.0%	82.1%
Tmax	2098	2098	2098
Pmax	0.784	72.4%	66.2%

Darkblotched

2009 OY (mt)

Ttarget

SPR

Tmax

Pmax

Alt 1	Alt 2	Alt 3	Alt 4
0	159	229	300
2018	2022	2025	2030
F=0	75.6%	67.7%	60.7%
N/A	2040	2040	2040
N/A	97.7%	91.0%	76.7%

Yelloweye

2009 OY (mt)

Ttarget

SPR

Tmax

Pmax

Alt 1	Alt 2	Alt 3	Alt 4
0	13	17	15
2049	2082	2082	2090
F=0	71.9%	66.3%	69.3%
N/A	2090	2090	2090
N/A	69.5%	68.9%	50.0%

Appendix B - California Recreational Groundfish Fishery Regulations and Projected Impacts on OFS in 2009 and 2010

Of the overfished species, yelloweye rockfish constrains the season length in the North and North-Central Management Areas, while cowcod becomes depth restriction limiting in the South Management Area under a 2 mt cowcod OY. The following depth restrictions would need to be put in place in order to reduce the catch of yelloweye below the harvest guideline in addition to the season and depth restrictions shown under each option provided above.

Daily Bag Limit:

Rockfish Cabezon and Greenling (RCG) North and North-Central north of Pt. Arena Management Areas: 6 fish, 10 fish in the balance of the state.

Cabezon: 1 fish sublimit within RCG

Greenlings: 2 fish sublimit within RCG

Bocaccio N. of 40deg 10': 2 fish sublimit within RCG

Bocaccio S. of 40deg 10': 1 fish sublimit within RCG

Lingcod: 2 fish

Minimum Length Limits:

Cabezon: 15 inches

Greenlings: 12 inches

Bocaccio: 10 inches

Lingcod: 24 inches

Additional Management Measures:

The ramp down of the OY will necessitate implementation of the following management measures in addition to the status quo management measures in the California Recreational fishery in 2008, 2009 and 2010:

- Five YRCAs proposed for 2008 off the ports of Fort Bragg, Shelter Cove and Crescent City from which ~70% of the catch in 2007 originated.
- Use of the management line at Pt. Arena in the division of the North-Central Management Area into the North-Central North and North Central South Management Areas.
- A six fish bag limit in the reduced season lengths.

Appendix C - Summary of Overfished Species Combinations for Analysis

TABLE 1. Range of Overfished Species Optimal Yields, by Area and Species.

		Shelf to Slope Impacts				
		Higher-Lower	Lower-Higher	Lower-Lower	Higher-Higher	Mixed
Area	Species	Option 1 (mt)	Option 2 (mt)	Option 3 (mt)	Option 4 (mt)	Option 5 a/b (mt)
Northern Shelf	Canary	155	44	35	155	85 or 105
	Yelloweye	20	14	14	20	17
Southern Shelf	Bocaccio	288	218	218	288	218
	Cowcod	4	2	2	4	2
Slope	POP	130	189	130	189	164
	Darkblotched	159	300	159	300	300
Pelagic	Widow	522	371	371	522	371 or 522
Note: option 5a and 5b vary widow and canary in concert						

Summary of Options Provided in Table 1

- Option 1 is intended to show the effect of providing relatively more opportunity on the shelf and in midwater fisheries and relatively less opportunity on the slope.
- Option 2 is intended to show the effect of providing relatively more opportunity on the slope and relatively less opportunity on the shelf and in midwater fisheries.
- Option 3 is intended to show the effect of being relatively restrictive on the shelf, slope, and in midwater fisheries.
- Option 4 is intended to show the effect of providing relatively more opportunity along the shelf and slope and in midwater fisheries.
- Option 5 is intended to show further trade-offs between rebuilding OYs that may not be captured by Options 1 through 4.

TABLE 2-1a. Preliminary PFMC-recommended alternatives for acceptable biological catches (ABCs) and total catch optimum yields (OYs) (mt) for 2009, including preliminary preferred alternatives. (Overfished stocks in CAPS; Stocks with new assessments in bold).

Stock	No Action Alternative			2009 Action Alternatives								Preliminary preferred alternative
	2007 ABC a/	2008 ABC a/	2008 OY a/	2009 ABC	2010 ABC	Alt 1 OY	Alt 2 OY	Alt 3 OY	Alt 4 OY	Alt 5 OY	Alt 6 OY	
Lingcod - coastwide b/	6,706	5,853		5,278	4,829	5,205	5,278					5,278
N of 42° (OR & WA)			5,558			4,593	4,593					4,593
S of 42° (CA)			612			612	685					685
Pacific Cod	3,200	3,200	1,600	3,200	3,200	1,600						1,600
Pacific Whiting (U.S.)	612,068 (2007 U.S. & Can.)	400,000 (2008 U.S. & Can.)	269,545 (2008)	To be determined in March 2009	To be determined in March 2010	134,773	269,545	404,318				
Sablefish (Coastwide)	6,210	6,058	5,934	9,914	9,217	9,795	8,423	6,250				8,423
N of 36° (Monterey north)			5,723			9,452	7,052	5,233				7,052
S of 36° (Conception area)			210			343	1,371	1,018				1,371
PACIFIC OCEAN PERCH	900	911	150	1,160	1,173	0	130	164	189			189
Shortbelly Rockfish	13,900	13,900	13,900	6,950	6,950	3,475	6,950	43,900				6,950
WIDOW ROCKFISH	5,334	5,144	368	7,728	6,937	0	371	522				371
CANARY ROCKFISH	172	179	44	937	940	0	35	44	85	105	155	Ttarget=2021
Chilipepper Rockfish	2,700	2,700	2,000	3,037	2,576	2,000	2,099	3,037				2,885
BOCACCIO	602	618	218	793	793	0	218	288				
Splitnose Rockfish	615	615	461	615	615	461						461
Yellowtail Rockfish	4,585	4,510	4,548	4,562	4,562	4,562						4,562
Shortspine Thornyhead - coastwide	2,488	2,463		2,437	2,411							
Shortspine Thornyhead - N of 34°27'			1,634			1,608						1,608
Shortspine Thornyhead - S of 34°27'			421			414						414
Longspine Thornyhead - coastwide	3,953	3,860		3,766	3,671							
Longspine Thornyhead - N of 34°27'			2,220			2,231						2,231
Longspine Thornyhead - S of 34°27'			476			395						395
COWCOD	36	36	4	13	14	0	2	4				
DARKBLOTCHED	456	487	290 (2007) 330 (2008)	437	440	0	159	229	300			Ttarget=2030
YELLOWEYE	47	47	Ramp-down c/	31	32	0	13	17	15	20	20	17
Black Rockfish (WA)	540	540	540	490	464	490						490
Black Rockfish (OR-CA)	725	719	722	1,469	1,317	920	1,000	1,469				1,000

TABLE 2-1a (continued). Preliminary PFMC-recommended alternatives for acceptable biological catches (ABCs) and total catch optimum yields (OYs) (mt) for 2009, including preliminary preferred alternatives. (Overfished stocks in CAPS; Stocks with new assessments in bold).

Stock	No Action Alternative			2009 Action Alternatives								Preliminary preferred alternative
	2007 ABC a/	2008 ABC a/	2007-08 OY a/	2009 ABC	2010 ABC	Alt 1 OY	Alt 2 OY	Alt 3 OY	Alt 4 OY	Alt 5 OY	Alt 6 OY	
Blue Rockfish (CA)	Managed under the Minor Nearshore Rockfish complexes			241	239	Managed under minor nearshore rockfish complexes		207	230			Managed under minor nearshore rockfish complexes
Minor Rockfish North	3,680	3,680	2,270	3,678	3,678	2,280	2,283					2,283
Nearshore Species			142			152	155					155
Blue rockfish contribution				28	28	25	28					28
Shelf Species			968			968						968
Slope Species			1,160			1,160						1,160
Minor Rockfish South	3,403		1,904	3,384	3,382	1,970	1,990					1,990
Nearshore Species			564			630	650					650
Blue rockfish contribution				213	211	182	202					202
Shelf Species			714			714						714
Slope Species			626			626						626
California scorpionfish	236	202	175	175	155	111	175					175
Cabezon (off CA only)	94	94	69	106	111	69	74	69				69
Dover Sole	28,522	28,442	16,500	29,453	28,582	16,500						16,500
English Sole	6,773	5,701	6,237	14,326	9,745	14,326						14,326
Petrale Sole (coastwide) b/	2,917	2,919	2,499	2,811	2,751	2,433						2,433
Arrowtooth Flounder	5,800	5,800	5,800	11,267	10,112	5,245	11,267					11,267
Starry Flounder	1,221	1,221	890	1,509	1,578	1,004						1,004
Other Flatfish	6,731	6,731	4,884	6,731	6,731	4,884						4,884
Other Fish	14,600	14,600	7,300	TBD d/	TBD d/	TBD d/	TBD d/	TBD d/				
Longnose Skate	Managed under the Other Fish complex			3,428	3,269	901	1,349	3,428				
Kelp Greenling HG (OR)			OR HG			OR HG						OR HG

a/ The Council elected to average OY projections for 2007 and 2008. ABCs are year-specific.

b/ Area OYs/HGs are stratified according to the assessment areas and alternatively adjusted by management areas for lingcod and petrale sole.

c/ The yelloweye ramp-down strategy ramps the harvest rate down from the status quo harvest rate and resumes a constant harvest rate strategy in 2011. The 2007-2010 OYs are 23 mt, 20 mt, 17 mt, and 14 mt, respectively under the ramp-down strategy.

TABLE 2-1b. Preliminary PFMC-recommended alternatives for acceptable biological catches (ABCs) and total catch optimum yields (OYs) (mt) for 2010, including preliminary preferred alternatives. (Overfished stocks in CAPS; Stocks with new assessments in bold).

Stock	No Action Alternative			2010 Action Alternatives								Preliminary preferred alternative
	2007 ABC a/	2008 ABC a/	2007-08 OY a/	2009 ABC	2010 ABC	Alt 1 OY	Alt 2 OY	Alt 3 OY	Alt 4 OY	Alt 5 OY	Alt 6 OY	
Lingcod - coastwide b/	6,706	5,853		5,278	4,829	4,785	4,829					4,829
N of 42° (OR & WA)			5,558			4,173	4,173					4,173
S of 42° (CA)			612			612	656					656
Pacific Cod	3,200	3,200	1,600	3,200	3,200	1,600						1,600
Pacific Whiting (U.S.)	612,068 (2007 U.S. & Can.)	400,000 (2008 U.S. & Can.)	269,545 (2008)	To be determined in March 2009	To be determined in March 2010	134,773	269,545	404,318				
Sablefish (Coastwide)	6,210	6,058	5,934	9,914	9,217	8,988	7,729	5,777				7,729
N of 36° (Monterey north)			5,723			8,673	6,471	4,837				6,471
S of 36° (Conception area)			210			315	1,258	941				1,258
PACIFIC OCEAN PERCH	900	911	150	1,160	1,173	0	137	173	200			200
Shortbelly Rockfish	13,900	13,900	13,900	6,950	6,950	3,475	6,950	43,900				6,950
WIDOW ROCKFISH	5,334	5,144	368	7,728	6,937	0	362	509				
CANARY ROCKFISH	172	179	44	937	940	0	35	44	85	105	155	Ttarget=2021
Chilipepper Rockfish	2,700	2,700	2,000	3,037	2,576	2,000	2,099	2,576				2,447
BOCACCIO	602	618	218	793	793	0	227	302				
Splitnose Rockfish	615	615	461	615	615	461						461
Yellowtail Rockfish	4,585	4,510	4,548	4,562	4,562	4,562						4,562
Shortspine Thornyhead - coastwide	2,488	2,463		2,437	2,411							
Shortspine Thornyhead - N of 34°27'			1,634			1,591						1,591
Shortspine Thornyhead - S of 34°27'			421			410						410
Longspine Thornyhead - coastwide	3,953	3,860		3,766	3,671							
Longspine Thornyhead - N of 34°27'			2,220			2,175						2,175
Longspine Thornyhead - S of 34°27'			476			385						385
COWCOD	36	36	4	13	14	0	2	4				
S of 36° (Conception area)	17	17										
N of 36° (Monterey area)	19	19										
DARKBLOTCHED	456	487	290 (2007) 330 (2008)	437	440	0	165	235	306			Ttarget=2030
YELLOWEYE	47	47	Ramp-down c/	31	32	0	14	14	15	16	17	14
Black Rockfish (WA)	540	540	540	490	464	464						464
Black Rockfish (OR-CA)	725	719	722	1,469	1,317	831	1,000	1,317				1,000

TABLE 2-1b (continued). Preliminary PFMC-recommended alternatives for acceptable biological catches (ABCs) and total catch optimum yields (OYs) (mt) for 2010, including preliminary preferred alternatives. (Overfished stocks in CAPS; Stocks with new assessments in bold).

Stock	No Action Alternative			2010 Action Alternatives								Preliminary preferred alternative
	2007 ABC a/	2008 ABC a/	2007-08 OY a/	2009 ABC	2010 ABC	Alt 1 OY	Alt 2 OY	Alt 3 OY	Alt 4 OY	Alt 5 OY	Alt 6 OY	
Blue Rockfish (CA)	Managed under the Minor Nearshore Rockfish complexes			241	239	Managed under minor nearshore rockfish complexes		207	230			Managed under minor nearshore rockfish complexes
Minor Rockfish North	3,680	3,680	2,270	3,678	3,678	2,280	2,283					2,283
Nearshore Species			142			152	155					155
Blue rockfish contribution				28	28	25	28					28
Shelf Species			968			968						968
Slope Species			1,160			1,160						1,160
Minor Rockfish South	3,403		1,904	3,384	3,382	1,970	1,990					1,990
Nearshore Species			564			630	650					650
Blue rockfish contribution				213	211	182	202					202
Shelf Species			714			714						714
Slope Species			626			626						626
California scorpionfish	236	202	175	175	155	99	155					155
Cabazon (off CA only)	94	94	69	106	111	69	74	79				79
Dover Sole	28,522	28,442	16,500	29,453	28,582	16,500						16,500
English Sole	6,773	5,701	6,237	14,326	9,745	9,745						9,745
Petrale Sole (coastwide) b/	2,917	2,919	2,499	2,811	2,751	2,393						2,393
Arrowtooth Flounder	5,800	5,800	5,800	11,267	10,112	5,245	10,112					10,112
Starry Flounder	1,221	1,221	890	1,509	1,578	1,077						1,077
Other Flatfish	6,731	6,731	4,884	6,731	6,731	4,884						4,884
Other Fish	14,600	14,600	7,300	TBD d/	TBD d/	TBD d/	TBD d/	TBD d/				
Longnose Skate	Managed under the Other Fish complex			3,428	3,269	902	1,349	3,269				
Kelp Greenling HG (OR)			OR HG			OR HG						OR HG

a/ The Council elected to average OY projections for 2007 and 2008. ABCs are year-specific.

b/ Area OYs/HGs are stratified according to the assessment areas and alternatively adjusted by management areas for lingcod and petrale sole.

c/ The yelloweye ramp-down strategy ramps the harvest rate down from the status quo harvest rate and resumes a constant harvest rate strategy in 2011. The 2007-2010 OYs are 23 mt, 20 mt, 17 mt, and 14 mt, respectively under the ramp-down strategy.