

**GROUND FISH MANAGEMENT TEAM (GMT) REPORT ON FINAL
CONSIDERATION OF INSEASON ADJUSTMENTS**

The Groundfish Management Team (GMT) considered the Council guidance under Agenda Item E.7, and offers the following considerations and recommendations.

LE Trawl Non-Whiting Fishery

The following table (Table 1) lists the impacts from the petrale sole reductions, sablefish and Dover sole increases, and modified Rockfish Conservation Area (RCA) line preliminarily adopted under the initial inseason action (E.7.).

Table 1. Impacts from Preliminarily Adopted Trawl Measures for 2009

		North	South	Total	OY/HG/ allocation
Rebuilding Species	Canary	18.3	4.3	22.6	
	POP	105.4	0.8	106.2	
	Darkbltch	202.7	34.8	237.5	
	Widow	11.5	9.2	20.8	
	Bocaccio	-	13.1	13.1	
	Yelloweye	0.6	-	0.6	
	Cowcod	-	1.4	1.4	
Target Species	Sablefish	2,764.6	488.4	3,253.0	3,280
	Longspine	721.7	284.8	1,006.4	2,231
	Shortspine	1,053.3	255.2	1,308.5	1,608
	Dover	11,895.1	1,857.3	13,752.4	16,500
	Arrowtooth	3,825.2	175.5	4,000.7	11,267
	Petrale	2,022.3	393.9	2,416.2	2,433
	Other Flat	1,727.5	643.2	2,370.7	4,884
	Slope Rock	97.2	181.4	278.6	1160N/626S

Petrale Adjustments for the Point of Concern

In light of the draft petrale sole assessment which indicates that the stock status is worse off than previously believed, the Council requested that the GMT look at making reductions in petrale sole catch in both the end of 2009 and for 2010 to reduce the likelihood that the stock would be overfished at the start of 2011.

In addition to the three scenarios presented in our previous inseason statement, the GMT requested another run from the stock assessment authors to explore the impact of period 5 and period 6 catch reductions. Scenario IV, which is unchanged from our first inseason statement, involves a 433 mt cut to the 2009 catch. Achieving this catch savings would require reductions

to catch in both period 5 and period 6. A new run, Scenario III, is based on a 233 mt cut (i.e. only reducing limits in period 6), and is provided for comparison (Table 2).

Table 2. Base case model projections of 2011 petrale stock abundance under four 2009-10 catch scenarios.

	<i>2009/2010 Catch Scenarios (mt)</i>			
	<i>I.</i>	<i>II.</i>	<i>III.</i>	<i>IV.</i>
2011 abundance	(2,433/2,393)	(2,433/1,200)	(2,200/1,200)	(2,000/1,200)
% of B _{unfished}	9%	12%	12%	13%
% of B _{MSY}	48%	63%	66%	68%

2009

The GMT looked at potential savings by period (Table 2) in light of the inseason adjustment contemplated to stay within the OY and the request to examine what changes are needed to reduce catch in 2009 to approximately 400 mt below the OY. The trip limits associated with these reductions are listed in Table 4 and the associated impacts in Table 6.

Table 3. 2009 cumulative catch by month by petrale action (takes into account Council's preliminary inseason actions, except petrale adjustments, under E.7).

	Cumulative Catch by Period				
	PD 1 and 2	PD 3	PD 4	PD 5	PD 6
No Change in 5 or 6	1,100	1,393	1,780	2,023	2,500
Reduce period 5	1,100	1,393	1,780	1,926	2,402
Reduce period 5 and 6	1,100	1,393	1,780	1,926	1,986

Table 4. 2009 cumulative limit adjustments to reduce petrale ~400 mt below OY (commensurate with Scenario IV).

Subarea	Period	RCA Boundaries									
		INLINE	OUTLINE	Sable	Longsp	Shortsp	Dover	Otr Flat	Petrals	Arrowth	Slope Rk
North 40 10 Large& sm Footrope	1			18,000	22,000	17,000	110,000	110,000	25,000	150,000	1,500
	2			18,000	22,000	17,000	110,000	110,000	25,000	150,000	1,500
	3	see attached table		22,000	22,000	17,000	110,000	110,000	30,000	150,000	1,500
	4	see attached table		24,000	22,000	17,000	110,000	110,000	30,000	150,000	1,500
	5	see attached table		24,000	22,000	17,000	110,000	110,000	5,000	150,000	1,500
	6	see attached table		20,000	22,000	17,000	110,000	110,000	2,000	150,000	1,500
North 40 10 SFFT	1			5,000	3,000	3,000	40,000	90,000	16,000	90,000	1,500
	2			7,500	5,000	3,000	45,000	90,000	18,000	90,000	1,500
	3	see attached table		7,500	5,000	3,000	45,000	90,000	18,000	90,000	1,500
	4	see attached table		11,000	5,000	3,000	60,000	90,000	18,000	90,000	1,500
	5	see attached table		11,000	5,000	3,000	60,000	90,000	5,000	90,000	1,500
	6	see attached table		11,000	3,000	3,000	60,000	90,000	2,000	90,000	1,500
38 - 40 10	1	100	150	20,000	22,000	17,000	110,000	110,000	50,000	10,000	15,000
	2	100	150	20,000	22,000	17,000	110,000	110,000	30,000	10,000	15,000
	3	100	150	20,000	22,000	17,000	110,000	110,000	30,000	10,000	15,000
	4	100	150	20,000	22,000	17,000	110,000	110,000	30,000	10,000	10,000
	5	100	150	20,000	22,000	17,000	110,000	110,000	5,000	10,000	10,000
	6	100	200	20,000	22,000	17,000	110,000	110,000	2,000	10,000	15,000
S 38	1	100	150	20,000	22,000	17,000	110,000	110,000	50,000	10,000	55,000
	2	100	150	20,000	22,000	17,000	110,000	110,000	30,000	10,000	55,000
	3	100	150	20,000	22,000	17,000	110,000	110,000	30,000	10,000	55,000
	4	100	150	20,000	22,000	17,000	110,000	110,000	30,000	10,000	55,000
	5	100	150	20,000	22,000	17,000	110,000	110,000	5,000	10,000	55,000
	6	100	200	20,000	22,000	17,000	110,000	110,000	2,000	10,000	55,000

Table 5. RCA schedule resulting from preliminary June inseason action.

2009 RCAs						
	Jan - Feb	Mar - Apr	May - Jun	Jul - Aug	Sep - Oct	Nov - Dec
North of 48 10	0 - 200*		0 - 200	0 - 150	0 - 150	0 - 200
48 10 to 45 46	75 - 200*		75 - 200	75 - 150	100 - 150	75 - 200
45 46 to 40 10				75 - 200	100 - 200	75 - 200

Table 6. Rebuilding and target species impacts associated with a 400 mt reduction in petrale catch in 2009.

		North	South	Total	OY/HG/ allocation
Rebuilding Species	Canary	18.1	4.0	22.1	
	POP	94.2	0.8	95.0	
	Darkbltch	170.7	32.0	202.8	
	Widow	10.2	9.2	19.4	
	Bocaccio		12.6	12.6	
	Yelloweye	0.6	0.0	0.6	
	Cowcod	0.0	1.3	1.3	
Target Species	Sablefish	2,759.3	486.8	3,246.1	3,280
	Longspine	721.7	284.8	1,006.5	2,231
	Shortspine	1,046.2	255.0	1,301.2	1,608
	Dover	11,862.6	1,854.1	13,716.7	16,500
	Arrowtooth	3,800.6	175.4	3,976.0	11,267
	Petrале	1,676.7	309.6	1,986.2	2,433
	Other Flat	1,711.2	642.4	2,353.6	4,884
	Slope Rock	96.1	177.6	273.7	1160N/626S

2010

The GMT further modeled cumulative limits (given currently scheduled RCA boundaries) designed to result in approximately 1,200 mt of catch in 2010 and the associated impacts (Tables 7 and 8). The impacts associated with those changes are also provided (Table 9).

Table 7. Cumulative limits designed to reduce petrale to ~1,200 mt of total catch in 2010.

Subarea	Period	RCA Boundaries		Sable	Longsp	Shortsp	Dover	Otr Flat	Petrале	Arrowth	Slope Rk
		INLINE	OUTLINE								
North 40 10 Large &sm Footrope	1			18,000	22,000	17,000	110,000	110,000	1,000	150,000	1,500
	2			18,000	22,000	17,000	110,000	110,000	18,000	150,000	1,500
	3	see attached table		22,000	22,000	17,000	110,000	110,000	18,000	150,000	1,500
	4	see attached table		24,000	22,000	17,000	110,000	110,000	18,000	150,000	1,500
	5	see attached table		24,000	22,000	17,000	110,000	110,000	18,000	150,000	1,500
	6	see attached table		20,000	22,000	17,000	110,000	110,000	1,000	150,000	1,500
North 40 10 SFFT	1			5,000	3,000	3,000	40,000	90,000	1,000	90,000	1,500
	2			7,500	5,000	3,000	45,000	90,000	18,000	90,000	1,500
	3	see attached table		7,500	5,000	3,000	45,000	90,000	18,000	90,000	1,500
	4	see attached table		11,000	5,000	3,000	60,000	90,000	18,000	90,000	1,500
	5	see attached table		11,000	5,000	3,000	60,000	90,000	18,000	90,000	1,500
	6	see attached table		11,000	3,000	3,000	60,000	90,000	1,000	90,000	1,500
38 - 40 10	1	100	200	20,000	22,000	17,000	110,000	110,000	1,000	10,000	15,000
	2	100	150	20,000	22,000	17,000	110,000	110,000	18,000	10,000	15,000
	3	100	150	20,000	22,000	17,000	110,000	110,000	18,000	10,000	15,000
	4	100	150	20,000	22,000	17,000	110,000	110,000	18,000	10,000	10,000
	5	100	150	20,000	22,000	17,000	110,000	110,000	18,000	10,000	10,000
	6	100	200	20,000	22,000	17,000	110,000	110,000	1,000	10,000	15,000
S 38	1	100	200	20,000	22,000	17,000	110,000	110,000	1,000	10,000	55,000
	2	100	150	20,000	22,000	17,000	110,000	110,000	18,000	10,000	55,000
	3	100	150	20,000	22,000	17,000	110,000	110,000	18,000	10,000	55,000
	4	100	150	20,000	22,000	17,000	110,000	110,000	18,000	10,000	55,000
	5	100	150	20,000	22,000	17,000	110,000	110,000	18,000	10,000	55,000
	6	100	200	20,000	22,000	17,000	110,000	110,000	1,000	10,000	55,000

Table 8. Current RCA schedule for 2010

2010 RCAs	Jan - Feb	Mar - Apr	May - Jun	Jul - Aug	Sep - Oct	Nov - Dec
North of 48 10	0 - 200	0 - 200	0 - 150	0 - 150	0 - 200	0 - 200
48 10 to 45 46	75 - 200	75 - 200	75 - 150	100 - 150	75 - 200	75 - 200
45 46 to 40 10			75 - 200	100 - 200	75 - 200	

Table 9. Rebuilding and target species impacts associated with an estimated 1200 mt total catch of petrale in 2010.

		North	South	Total	OY/HG/ allocation
Rebuilding Species	Canary	18.1	4.0	22.1	
	POP	76.5	0.8	77.3	
	Darkbltch	118.4	28.1	146.5	
	Widow	8.1	9.2	17.3	
	Bocaccio	-	12.7	12.7	
	Yelloweye	0.6	-	0.6	
	Cowcod	-	1.4	1.4	
Target Species	Sablefish	2,752.1	485.1	3,237.2	3,280
	Longspine	721.0	284.7	1,005.6	2,231
	Shortspine	1,033.5	254.4	1,287.9	1,608
	Dover	11,839.3	1,848.7	13,688.0	16,500
	Arrowtooth	3,671.9	146.6	3,818.5	11,267
	Petrale	1,004.9	173.5	1,178.3	2,433
	Other Flat	1,674.4	638.5	2,312.9	4,884
	Slope Rock	94.2	169.3	263.5	1160N/626S

Canary Rockfish

Finally, based on the preliminary actions under E.7 the total impacts to canary rockfish are 3.7 mt over the OY in the scorecard (Attachment 1). The GMT notes that even with petrale catch reductions in periods 5 and 6 as contemplated, the overage is 3.3 mt (Attachment 2). The Council may want to consider reducing the scorecard estimates from the recreational sector by an amount slightly greater than this to balance impacts while still providing for prosecution of ongoing fishery seasons. Alternatively, the Council could reconsider some of the actions taken under the preliminary inseason item to reduce canary impacts.

GMT Recommendations:

1. Reduce petrale sole trip limits in both period 5 and 6 to achieve a harvest approximately 400 mt below the OY (see Table 4).
2. Consider adjusting canary estimates in the scorecard to balance impacts from inseason adjustments and fisheries and modeling updates.

PFMC
06/16/09

Attachment 1

Projected mortality impacts (mt) of overfished groundfish species updated with most recent research estimates and fishery projections through June and preliminary inseason action.

Fishery	Bocaccio b/	Canary	Cowcod	Dkbl	POP	Widow	Yelloweye
Limited Entry Trawl- Non-whiting	13.1	22.6	1.4	237.5	106.2	20.8	0.6
Limited Entry Trawl- Whiting							
At-sea whiting motherships a/		4.3		6.0	0.5	60.0	0.0
At-sea whiting cat-proc a/		6.1		8.5	0.5	85.0	0.0
Shoreside whiting a/		7.6		10.5	0.1	105.0	0.0
Tribal whiting		1.4		0.0	0.7	3.7	0.0
Tribal							
Midwater Trawl		3.6		0.0	0.0	40.0	0.0
Bottom Trawl		0.8		0.0	3.7	0.0	0.0
Troll		0.5		0.0	0.0		0.0
Fixed gear		0.3		0.0	0.0	0.0	2.3
Fixed Gear Sablefish	0.2	2.8	0.0	4.2	0.5	0.1	0.9
Fixed Gear Nearshore	0.3	3.3	0.0	0.0	0.0	0.3	1.2
Fixed Gear Other	5.0	0.0	0.0	9.0	0.0	0.7	0.0
Open Access: Incidental Groundfish	2.0	0.9	0.0	0.0	0.0	4.0	0.3
Recreational Groundfish c/							
WA							
OR		20.9				1.0	5.2
CA	67.3	22.9	0.1			6.2	2.8
EFPs	13.7	2.7	0.3	1.3	0.0	5.5	0.3
Research: Includes NMFS trawl shelf-slope surveys, the IPHC halibut survey, and expected impacts from SRPs and LOAs.							
	2.0	8.0	0.2	2.0	2.0	5.7	1.9
TOTAL	103.6	108.7	2.0	279.0	114.2	338.0	15.5
2009 OY d/	288	105	4.0	285	189	522	17
Difference	184.4	-3.7	2.0	6.0	74.8	184.0	1.5
Percent of OY	36.0%	103.5%	50.0%	97.9%	60.4%	64.8%	91.2%
Key		= either not applicable; trace amount (<0.01 mt); or not reported in available data sources.					
a/ Non-tribal whiting values for canary, darkblotched, and widow reflect bycatch limits for the non-tribal whiting sectors.							
b/ South of 40°10' N. lat.							
c/ Values in scorecard represent projected impacts for all species except canary and yelloweye rockfish, which are the prescribed harvest guidelines.							
d/ 2009 and 2010 OYs are the same except for darkblotched (291 mt in 2010), POP (200 mt in 2010), and widow (509 mt in 2010).							

Attachment 2

Projected mortality impacts (mt) of overfished groundfish species updated with most recent research estimates and fishery projections through June and reductions to petrale sole of about 400 mt in 2009.

Fishery	Bocaccio b/	Canary	Cowcod	Dkbl	POP	Widow	Yelloweye
Limited Entry Trawl- Non-whiting	12.6	22.1	1.3	202.8	95.0	19.4	0.6
Limited Entry Trawl- Whiting							
At-sea whiting motherships a/		4.3		6.0	0.5	60.0	0.0
At-sea whiting cat-proc a/		6.1		8.5	0.5	85.0	0.0
Shoreside whiting a/		7.6		10.5	0.1	105.0	0.0
Tribal whiting		1.4		0.0	0.7	3.7	0.0
Tribal							
Midwater Trawl		3.6		0.0	0.0	40.0	0.0
Bottom Trawl		0.8		0.0	3.7	0.0	0.0
Troll		0.5		0.0	0.0		0.0
Fixed gear		0.3		0.0	0.0	0.0	2.3
Fixed Gear Sablefish	0.2	2.8	0.0	4.2	0.5	0.1	0.9
Fixed Gear Nearshore	0.3	3.3	0.0	0.0	0.0	0.3	1.2
Fixed Gear Other	5.0	0.0	0.0	9.0	0.0	0.7	0.0
Open Access: Incidental Groundfish	2.0	0.9	0.0	0.0	0.0	4.0	0.3
Recreational Groundfish c/							
WA		20.9					5.2
OR						1.0	
CA	67.3	22.9	0.1			6.2	2.8
EFPs	13.7	2.7	0.3	1.3	0.0	5.5	0.3
Research: Includes NMFS trawl shelf-slope surveys, the IPHC halibut survey, and expected impacts from SRPs and LOAs.							
	2.0	8.0	0.2	2.0	2.0	5.7	1.9
TOTAL	103.1	108.2	1.9	244.3	103.0	336.6	15.5
2009 OY d/	288	105	4.0	285	189	522	17
Difference	184.9	-3.2	2.1	40.7	86.0	185.4	1.5
Percent of OY	35.8%	103.0%	47.5%	85.7%	54.5%	64.5%	91.2%
Key		= either not applicable; trace amount (<0.01 mt); or not reported in available data sources.					
a/ Non-tribal whiting values for canary, darkblotched, and widow reflect bycatch limits for the non-tribal whiting sectors.							
b/ South of 40°10' N. lat.							
c/ Values in scorecard represent projected impacts for all species except canary and yelloweye rockfish, which are the prescribed harvest guidelines.							
d/ 2009 and 2010 OYs are the same except for darkblotched (291 mt in 2010), POP (200 mt in 2010), and widow (509 mt in 2010).							