Agenda Item D.4.a Attachment 2 November 2007

Table 2.2. Basis for the DRAFT 2009-2010 Optimum Yield Alternatives Recommended by the GMT for Analysis.

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Stock	Alt 1 OY	Alt 2 OY	Alt 3 OY	Alt 4 OY	Alt 5 OY
Lingcod - coastwide					
N of 42º (OR & WA)	Adjusted the projected OY from the 2005 assessment for N of 43 deg (Col. and U.SVan areas) as follows: derived the percentage of the 2005-06 OY estimated for the area between 42 and 43 deg. (107 mt/719 mt) and applied this proportion to the estimated OY S of 43 deg. to determine an estimated OY for the area between 42 and 43 deg. This was added to the projected OY for N of 43 deg. to determine an appropriate OY for N of 42 deg	Adjusted the projected OY from the 2005 assessment for N of 43 deg (Col. and U.SVan areas) as follows: derived the percentage of the 2005-06 OY estimated for the area between 42 and 43 deg. (107 mt/719 mt) and applied this proportion to the estimated OY S of 43 deg. to determine an estimated OY for the area between 42 and 43 deg. This was added to the projected OY for N of 43 deg. to determine an appropriate OY for N of 42 deg			
S of 42º (CA)	Status quo	Adjusted the projected OY for S of 43 deg (Col. and U.SVan areas) as follows: derived the percentage of the 2005-06 OY estimated for the area between 42 and 43 deg. (107 mt/719 mt) and applied this proportion to the estimated OY S of 43 deg. to determine an estimated OY for the area between 42 and 43 deg. This was subtracted from the projected ave. 2009-10 OY for S of 43 deg. to determine an appropriate OY for S of 42 deg			
Pacific Cod	Status quo				
Pacific Whiting (U.S.)	50% of 2007 U.S. OY	2007 U.S. OY	150% of 2007 U.S. OY		
Sablefish (Coastwide)	From Schirripa 2007; Note: 2009-10 ave. OY > 2010 ABC				
N of 36 (Monterey north)	96.5% of coastwide OY, which is the status quo apportionment. Note: this may be too high in the north given NWFSC trawl survey results. GMT will be discussing this and other sablefish OY alts. in Nov.				
S of 36 (Conception area)	3.5% of coastwide OY, which is status quo apportionment				
PACIFIC OCEAN PERCH	T (@ F=0) = 2010	SPR = F90.3%; Ttarg = 2010; Pmax = 97.0%	SPR = F88% (HR that produces the 0708 ave. OYs); Ttarg = 2011; Pmax = 96.5%	Status quo SPR = F86.4%; Ttarg = 2011; Pmax = 96.1%	SPR = F54.8%; Ttarg = 2017 (Ttarg in the rebuilding plan); Pmax =50%
Shortbelly Rockfish	25% of status quo ABC/OY; stock projected to rebuild	50% of status quo ABC/OY; stock projected to remain in equlibrium	Status quo ABC/OY; stock projected to decrease dramatically		
	T (@ F=0) = 2009	SPR = F96.4% (HR that produces the 0708 ave. OYs); Ttarg = 2009; Pmax = 100%	Status quo SPR = F95%; Ttarg = 2009; Pmax = 100%	SPR = F65%; Ttarg = 2009; Pmax = 100%	
CANARY ROCKFISH	T (@ F=0) = 2019	SPR = F95.8%; Ttarg = 2020; Pmax = 75.0%	SPR = F92.9%; Ttarg = 2020; Pmax = 75.0%	Status quo SPR = F88.7%; Ttarg = 2021; Pmax = 74.9%	SPR = F62%; Ttarg = 2035 (longest allowable rebuilding time under NS1 guidelines); Pmax = 50%

Chilipepper Rockfish	Status quo	Long-term equilibrium MSY at F50%	OY= ABC, stock depletion at B67% in 2009 and B65% in 2010 under base model		
BOCACCIO	T (@ F=0) = 2020	SPR = F82.6% (HR that produces the 0708 ave. OYs); Ttarg = 2022; Pmax = x%	Status quo SPR = F77.7%; Ttarg = 2023; Pmax = x%	SPR = 66.4% (HR that predicts current Ttarget as the median rebuilding time); Ttarget = 2026; Pmax = x%	
Splitnose Rockfish	Status quo				
Yellowtail Rockfish	OY = ABC projected from 2005 assessment				
Shortspine Thornyhead - coastwide	No coastwide OY (status quo)				
Shortspine Thornyhead - N of 34º27'	OY = 66% of the projected coastwide ABC/OY since the 2005 assessment indicated 66% of the biomass occurs N. of Pt. Conception (status quo methodology)				
Shortspine Thornyhead - S of 34º27'	OY = 34% of the projected coastwide ABC/OY since the 2005 assessment indicated 34% of the biomass occurs S of Pt. Conception with an additional 50% precautionary reduction to account for the paucity of survey data S of Pt. Conception (status quo methodology)	t			
Longspine Thornyhead - coastwide	No coastwide OY (status quo)				
Longspine Thornyhead - N of 34º27'	Coastwide ABC/OY projected from the 2005 assessment was apportioned N & S of Pt. Conception as follows: Assumed constant density throughout the Conception area and estimated 79% of the assessed coastwide biomass occurs N of Pt. Conception, with a 25% precautionary reduction to account for relatively higher assessment uncertainty (status quo methodology).				
Longspine Thornyhead - S of 34º27'	Coastwide ABC/OY projected from the 2005 assessment was apportioned N & S of Pt. Conception as follows: Assumed constant density throughout the Conception area and estimated 21% of the assessed coastwide biomass occurs S of Pt. Conception, with a 50% precautionary reduction to account for relatively higher assessment uncertainty and a paucity of survey data for the Conception area (status quo methodology).				
сомсор	T (@ F=0) = 2061; Pmax = 78.4%	Status quo SPR = F90%; Ttarg = 2065; Pmax = 72.4%	SPR = F82.1% (produces the 2007-08 OY); Ttarg = 2072; Pmax = 66.2%	SPR = F63.8%; Ttarg = 2089 (closest to max. allowable rebuilding time which corresponds to a Pmax = 50%); Pmax = 53.3%	

DARKBLOTCHED	T (@ F=0) = 2018	SPR = F75.6%; Ttarg = 2022; Pmax = 97.7%	Status quo SPR = F60.7%; Ttarg = 2030; Pmax = 76.7%	SPR = F59.2% (HR that produces the 0708 ave. OYs); Ttarg = 2031; Pmax = 76.2%	SPR = F53.7%; Ttarg = 2040 (= Tmax); Pmax = 50%
YELLOWEYE	T (@F=0) = 2049	Constant HR strategy; SPR = F71.9%; Ttarg = 2082; Pmax = 69.5%	HR ramp-down strategy (2009 OY = 17 mt, SPR HR = F66.3%; 2010 OY = 14 mt, SPR HR = F71.3%); Ttarg = 2082; Pmax = 68.9%	Constant HR strategy; SPR = F69.3%; Ttarg = 2090 (= Tmax); Pmax = 50%	
Black Rockfish (WA)	OY under the low natural mortality model (M=0.12 males; M=0.18 females); Note: Assessment is bounded at Cape Falcon, OR -GMT will decide appropriate correction factor to specify OYs N & S of the Col. R.	OY under the base model (M=0.16 males, M=0.24 females); Note: Assessment is bounded at Cape Falcon, OR -GMT will decide appropriate correction factor to specify OYs N & S of the Col. R.			
Black Rockfish (OR-CA)	OY under the low productivity model scenario; Note: Assessment is bounded at Cape Falcon, OR -GMT will decide appropriate correction factor to specify OYs N & S of the Col. R.	OY under the medium productivity scenario (base case); Note: Assessment is bounded at Cape Falcon, OR -GMT will decide appropriate correction factor to specify OYs N & S of the Col. R.			
Blue Rockfish (CA)	TBD				
Minor Rockfish North	Status quo				
Nearshore Species	Status quo				
Shelf Species	Status quo				
Slope Species	Status quo				
Minor Rockfish South	TBD				
Nearshore Species	TBD				
Shelf Species	Status quo				
Slope Species	Status quo				
California scorpionfish					
Cabezon (off CA only)					
Dover Sole	Equilibrium MSY from 2005 assessment				
English Sole	OY from base model				
Petrale Sole (coastwide)	Projected from 2005 assessment: sum of ave. 40-10 adjusted northern OYs and 75% of 40-10 adjusted southern OYs (75% precautionary adjustment for assessment uncertainty)				
Longnose Skate	Projected OY under the current estimated exploitation rate	OY based on a 50% increase in average landings and discard mortality relative to the base model	OY = ABC under the proxy SPR HR (F45%); Note: OY > 2010 ABC		
Arrowtooth Flounder	MSY under the proxy HR (SPR = F40%)	OY = ABC from base model; Note OY > 2010 ABC			
Starry Flounder	Projected OY from 2005 assessment with a 25% precautionary reduction (data-poor assessment)				
Other Flatfish	Status quo				
Other Fish	TBD				
Kelp Greenling HG (OR)	Status quo				