

12 Gulf of Alaska Pelagic Shelf Rockfish (Executive Summary)

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12.1 Introduction

Rockfish have been moved to a biennial stock assessment schedule to coincide with new survey data. For Gulf of Alaska rockfish in alternate (even) years we will present an executive summary using the current year's key assessment parameters and projections for the next (odd) year. A discussion at the September 2006 Groundfish Plan Team meetings concluded the following two important points for updating information in off-year assessments:

- 1) Anytime the assessment model is re-run and presented in the SAFE Report, a full assessment document must be produced.
- 2) The single-species projection model may be re-run using new catch data without re-running the assessment model.

Therefore, as opposed to 2004, we will not be running the assessment model with updated catch data, but will run the projection model with updated catch data. This satisfies the above recommendations and accounts for changes in catch from last year's estimates. We present results from last year's projection with this year's projection for comparison. Both projections are based on the 2005 assessment model results. For further information about the assessment model, last year's full stock assessment is on the web (Lunsford et al. 2005, <http://www.afsc.noaa.gov/refm/docs/2005/GOApelagicrock.pdf>).

Assessments for rockfish species without an age-structured assessment or projection model will use information from last year's stock assessment to determine this year's estimates.

12.2 Updated catch and projection

In the 2005 full stock assessment, the average of exploitable biomass from the three most recent trawl surveys was used to determine the recommended ABC for dark, widow, and yellowtail rockfish, while an age-structured model was used for dusky rockfish. Therefore, for dark, widow, and yellowtail rockfish, last year's stock assessment estimates will be rolled over for this year. This results in a recommended ABC of 551 mt for dark, widow, and yellowtail rockfish.

For dusky rockfish, new information for this year's projection model is updated 2005 catch at 2,213 mt and the best estimate of the 2006 catch at 2,462 mt. Last year's dusky catch estimates were 2,179 mt and 2,649 mt for 2005 and 2006, respectively. This year's dusky rockfish projection results in a recommended ABC of 4,991 mt which is up slightly from the 2006 dusky ABC of 4,885 mt.

For the pelagic shelf rockfish assemblage, ABC and OFL for dusky rockfish are combined with the ABC and OFL for dark, widow, and yellowtail rockfish. For the 2007 fishery, we recommend the maximum allowable ABC for the pelagic shelf rockfish complex of 5,542 mt. This ABC is similar to last year's ABC of 5,436 mt. The corresponding reference values for pelagic shelf rockfish are summarized in the following table, with the recommended values in bold. The stock is not overfished, nor is it approaching overfishing status.

Dark, Widow, and Yellowtail	Last year's estimates:		This year's roll-over:	
	<u>2006</u>	<u>2007</u>	<u>2007</u>	<u>2008</u>
Tier 5				
Exploitable Biomass (mt)	10,493	--	--	--
F_{ABC} (maximum allowable = $0.75 * M$)	0.0525	0.0525	0.0525	0.0525
F_{OFL} (M)	0.07	0.07	0.07	0.07
ABC (mt, maximum allowable)	551	551	551	551
OFL (mt)	735	735	735	735
Dusky rockfish	Last year's projection:		This year's projection:	
	Not Updated		Updated*	
	<u>2006</u>	<u>2007</u>	<u>2007</u>	<u>2008</u>
Tier 3a				
Exploitable Biomass	49,829	--	--	--
$B_{40\%}$ (mt)	18,291	--	--	--
Female Spawning Biomass (mt)	24,733	26,502	26,401	27,023
F_{ABC} (maximum allowable = $F_{40\%}$)	0.088	0.088	0.088	0.088
F_{OFL} ($F_{35\%}$)	0.108	0.108	0.108	0.108
ABC $_{F40\%}$ (mt yield at $F_{40\%}=F_{max}$)	4,885	4,979	4,991	6,071
OFL (mt, yield at $F_{35\%}$)	5,927	6,044	5,723	7,451
Pelagic Shelf Rockfish Complex	Last year's projection:		This year's projection:	
	Not Updated		Updated	
	<u>2006</u>	<u>2007</u>	<u>2007</u>	<u>2008</u>
Exploitable Biomass	60,322	--	--	--
ABC $_{F40\%}$ (mt, maximum allowable)	5,436	5,530	5,542	6,622
OFL (mt, $F_{35\%}$)	6,662	6,779	6,458	8,186

*Estimated dusky rockfish catch for 2006 is from the AK Regional Office website on 10/20/06. Estimated catch for 2007 is the same as 2006 catch, as recent catches have been much lower than maximum permissible ABC.

12.3 Area Apportionment

The apportionment percentages are identical to last year, because there is no new survey information. The following table shows the recommended apportionment for 2007.

	Western	Central	West Yakutat	SE/Outside	Total
Area Apportionment	26%	60%	10%	4%	100%
Area ABC (mt)	1,466	3,325	307	444	5,542
OFL (mt)					6,458

Amendment 41 prohibited trawling in the Eastern area east of 140° W longitude. The ratio of biomass still obtainable in the W. Yakutat area (between 147° W and 140° W) is the same as last year at 0.4084.

12.4 Responses to Council, SSC, and Plan Team Comments

In February 2005, the Council initiated an analysis to remove dark rockfish from the GOA pelagic shelf assemblage and transfer management to the State of Alaska. The Plan Team and SSC had endorsed the recommendation of removing dark rockfish in 2004, however action was delayed until the 2005 GOA trawl survey data was available for analysis (see Plan Team and SSC 2004 and 2005 December minutes). In April 2006, Council staff presented the updated information on dark rockfish distribution in a draft environmental assessment (http://www.fakr.noaa.gov/npfmc/analyses/GOA67_406.pdf) to the SSC and Council. The SSC determined there was insufficient information to determine the depth and distribution

of GOA dark rockfish. The Council and SSC recommended another iteration of the analyses which included information on the BSAI dark rockfish distribution and therefore, 2006 survey information. An update on available information was provided to the Council in October 2006 and initial review of the updated draft EA is scheduled for the 2007 February Council meeting. Final action on this amendment should occur at the 2007 April Council meeting.

12.5 Research Priorities

This year a rockfish modeling workshop was held at the Auke Bay Laboratory (ABL) that included participants from the Alaska Fisheries Science Center (AFSC), Alaska Regional Office, and the Alaska Department of Fish and Game. Additionally, a Center for Independent Experts (CIE) review of rockfish assessment occurred at the AFSC in June. A workshop summary and formal CIE review report are available online on the AFSC website (<http://www.afsc.noaa.gov/Quarterly/amj2006/divrptsABL1.htm>, and http://www.afsc.noaa.gov/refm/docs/2006/rf_CIE.pdf, respectively). Our priorities for next year's full assessment are to consider incorporating many of the useful recommendations produced by both the workshop and the review.

It is critically important to the assessment of rockfish species that the GOA trawl surveys extend into deeper waters (>200m) in order to cover the range of primary habitat for rockfish.

12.6 Summaries for Plan Team

Species	Year	Biomass ¹	OFL	ABC	TAC	Catch
Pelagic Shelf Rockfish	2005	65,559	5,680	4,553	4,553	2,235
	2006	97,386	6,662	5,436	5,436	2,498 ²
	2007		6,458	5,542		
	2008		8,186	6,622		

¹Total biomass from trawl survey estimates for dark, widow and yellowtail rockfish and age-structured model for dusky rockfish

Stock/ Assemblage	Area	2006			2007		2008		
		OFL	ABC	TAC	Catch ²	OFL	ABC	OFL	ABC
Pelagic Shelf Rockfish	W		1,438	1,438	554		1,466		1,752
	C		3,262	3,262	1,770		3,325		3,973
	WYAK		301	301	173		307		366
	EYAK/SEO		435	435	1		444		531
	Total		6,662	5,436	5,436	2,498	6,458	5,542	8,186

²Current as of November 4, 2006 (http://www.fakr.noaa.gov/2006/car110_goa.pdf)

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