

## CHAPTER 12

### NORTHERN ROCKFISH

by

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#### **Introduction**

In 2005, BSAI rockfish were moved to a biennial assessment schedule to coincide with the frequency of trawl surveys in the Aleutian Islands and the eastern Bering Sea slope. These surveys occur in even years, and for these years a full assessment of northern rockfish the BSAI area will be conducted. The 2006 full assessment can be found at <http://www.afsc.noaa.gov/refm/docs/2006/BSAInorthernrock.pdf>. In the September 2006 Plan Team meeting, guidelines were established for updating assessments in the off-years. In particular, a full assessment must be produced if the assessment model is re-run, and the single-species projection model may be re-run using new catch data without re-running the assessment model. Therefore, this update was produced by updating the catch data and re-running the projection model using the results from the 2006 assessment model as a starting point.

#### **Updated catch and projection**

New information for this update is the final estimate of 2006 catch. The 2006 catch was 3,824 t, smaller than the 2006 TAC of 4,500 t that was used as an estimate of 2006 catch in the 2006 projection. The 2007 catch through October 6<sup>th</sup>, 2007 was 3,117 t, with catches still occurring in the fall of 2007. Thus, as in the 2006 projection, the estimated 2007 catch is set to 4,500 t, which is close to the total annual catch in recent years. For 2008, we recommend a maximum permissible ABC of 8,180 t based upon the updated projection. This value is nearly equivalent to the 2006 projection for 2008 (8,151 t). The stock is not overfished nor approaching an overfishing status. Stock size, harvest, and fishing rate reference values are shown in the following table:

	2006 Projection		2007 Projection	
	2007	2008	2008	2009
<i>M</i>	0.045	--	0.045	--
Tier	3a	--	3a	--
<i>B</i> <sub>100%</sub> (mt)	129,879	--	129,879	--
<i>B</i> <sub>40%</sub> (mt)	51,952	--	51,952	--
<i>B</i> <sub>35%</sub> (mt)	45,458	--	45,458	--
SSB (mt)	72,830	73,187	73,455	73,649
Total Biomass (mt)	211,893	211,336	212,009	211,493
Max <i>F</i> <sub>abc</sub> (= <i>F</i> <sub>40%</sub> )	0.044693	0.044693	0.044693	0.044693
<i>F</i> <sub>opt</sub> ( <i>F</i> <sub>35%</sub> )	0.05342	0.05342	0.05342	0.05342
Max ABC (mt, yield at <i>F</i> <sub>40%</sub> )	8,194	8,151	8,180	8,129
Recommended ABC	8,194	8,151	8,180	8,129
OFL (mt, yield at <i>F</i> <sub>35%</sub> )	9,753	9,702	9,736	9,676

### Responses to the comments of the Statistical and Scientific Committee

In the December, 2006 meeting of the Statistical and Scientific Committee (SSC) of the North Pacific Fisheries Management Council, the following request was made for the BSAI northern rockfish assessment.

*Consider splitting the survey data to account for differences between the 1980-1986 cooperative surveys and the 1991-2006 U.S. domestic surveys.*

The assessment authors will address this issue in the next full assessment of BSAI northern rockfish in 2008.

### Summary table for the Plan Team

Year	Biomass <sup>1</sup>	OFL	ABC	TAC	Catch
2006	211,890	10,100	8,530	4,500	3,824
2007	212,578	9,750	8,190	8,190	3,117 <sup>2</sup>
2008		9,736	8,180		
2009		9,676	8,129		

<sup>1</sup> Total biomass from age-structured projection model.

<sup>2</sup> Catch as of October 6, 2007.