MarinTrust Standard V2

By-product Fishery Assessment Report Template

MarinTrust Programme
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Table 1 Application details and summary of the assessment outcome

Fishery Under Assessment	Species:	Pacific cod, *Gadus macrocephalus*
	Geographical area:	FAO 67 Pacific Northeast
	Country of origin of the product:	Vietnam
	Stock:	Eastern Bering Sea Pacific cod
Date	30/09/2021	
Report Code	BP162	
Assessor	Virginia Polonio	
Country of origin of the product - PASS	PASS	
Country of origin of the product - FAIL	NA	

Application details and summary of the assessment outcome			
Name:			
Address:			
Country: Vietnam		Zip:	
Tel. No.:		Fax. No.:	
Email address:		Applicant Code:	
Key Contact:		Title:	
Certification Body Details			
Name of Certification Body:		Global Trust Certification	
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval
Virginia Polonio	Geraldine Criquet	0.5	Re-approval
Assessment Period	To September 2021		

Scope Details	
Main Species	Pacific cod, *Gadus macrocephalus*
Stock	Eastern Bering Sea Pacific cod
Fishery Location	FAO 67 Pacific Northeast
Management Authority (Country/ State)	Alaska Department of Fish and Game (ADF&G) , North Pacific Fishery Management Council (NPFMC)
Gear Type(s)	Demersal trawls, longline, pot
Outcome of Assessment	
Peer Review Evaluation	Agree with the assessor's recommendation of approval
Recommendation	**APPROVED**

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Table 2. Assessment Determination

Assessment Determination
If any species is categorised as Endangered or Critically Endangered on IUCN's Red List, or if it appears in the CITES appendices, it cannot be approved for use as MarinTrust raw material. Sprat does not appear as Endangered or Critically Endangered on IUCN's Red List, nor does it appear in CITES appendices; therefore, Pacific Cod, Gadus macrocepahlus in Eastern Bering Sea is eligible for approval for use as MarinTrust by-product raw material. The stock is managed under the Bering Sea/Aleutian Islands Groundfish Fishery Management Plan where 10.7 percent of the allowable catch is allocated to the community development quota program, which benefits fishery-dependent communities in western Alaska. The rest is allocated among the various fishing sectors based on gear type, vessel size, and ability to process their catch. Therefore, the stock is subject to a species-specific management regime and is managed and consequently, it is assessed under Category C. Fishery removals of the stock are considered in the stock assessment process so the stock PASSES Clause C1.1. Further, the estimated biomass is above BMSY therefore, the stock PASSES Clause C1.2 In order to be approved, the stock assessed must pass both Clauses C1.1 and C1.2; therefore, as this is the case here, Pacific Cod in Eastern Bering Sea is **APPROVED** for the production of fishmeal and fish oil under the current MarinTrust v 2.0 by-product standard.
Fishery Assessment Peer Review Comments
The assessor correctly classified the Eastern Bering Sea Pacific cod stock as category C, reference points are defined to assess status of the stock relative to. Fishery removals are included in the stock assessment process so it PASSES Clause C1.1. The Eastern Bering Sea Pacific cod stock is considered, in its most recent stock assessment, to have a biomass above the limit reference point, it PASSES Clause C1.2. Therefore, the Eastern Bering Sea Pacific cod stock should be approved.
Notes for On-site Auditor

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Species Categorisation

NB: If any species is categorised as Endangered or Critically Endangered on the IUCN Red List, or if it appears in CITES Appendix 1, it **cannot** be approved for use as an MARINTRUST raw material.

IUCN Red list Category

By-product material from a species listed by IUCN (the International Union for Conservation of Nature) under the Red List for the following categories shall immediately fail the assessment;

- EXTINCT (E) AND EXTINCT IN THE WILD (EW)
- CRITICALLY ENDANGERED (CR) facing an extremely high risk of extinction in the wild.
- ENDANGERED (EN) facing a very high risk of extinction in the wild.

By-product material may be used from the following categories provided that all clauses in the MarinTrust standard are passed.

- VULNERABLE (VU) facing a high risk of extinction in the wild.
- NEAR THREATENED (NT) does not qualify for above now, but is close or is likely to qualify for, a threatened category in the near future.
- LEAST CONCERN (LC) Widespread and abundant.
- DATA DEFICIENT (DD) and NOT EVALUATED (NE)

Table 3 Species Categorisation Table

Common name	Latin name	Stock	Management	Category	IUCN Red List Category[1]	CITES Appendix 1[2]
Pacific Cod	*Gadus macrocepahlus*	Eastern Bering Sea	NOAA Fisheries and the North Pacific Fishery Management Council	C	LC	No

[1] https://www.iucnredlist.org/
[2] https://cites.org/eng/app/appendices.php

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CATEGORY C SPECIES

In a whole fish assessment, Category C species are those which make up less than 5% of landings, but which are subject to a species-specific management regime. In most cases this will be because they are a commercial target in a fishery other than the one under assessment.

Clause C1 should be completed for **each** Category C species. If there are no Category C species in the fishery under assessment, this section can be deleted. Where a species fails this Clause, it should be assessed as a Category D species instead.

Species Name		**Pacific Cod, *Gadus macrocepahlus***
C1	**Category C Stock Status - Minimum Requirements**	
	C1.1 Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.	Yes
	C1.2 The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.	Yes
	Clause outcome:	PASS

C1.1 Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.

There have been changes in the input data from the previous stock assessment in 2019. Therefore, the main changes in 2020 stock assessment are detailed below:

- Catches for 1991-2019 were updated, and a preliminary catch estimate for 2020 was incorporated.
- Commercial fishery size compositions for 1991-2019 were updated, and a preliminary size composition from the 2020 commercial fishery was incorporated.
- Age compositions from the EBS, Northern Bering Sea (NBS) and combined EBS+NBS survey time series were updated through 2019, based on the VAST approach.
- Long-term average weight-length parameters, and the time series of annual deviations therefrom, were re-estimated.
- For a pair of new models, a catch-weighted, all-gear, relative CPUE time series for the commercial fishery was incorporated.

Therefore, removals of the species are considered in the stock assessment and the fishery **PASSES** clause C1.1.

C1.2 The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.

The principal results of the present assessment, are listed in the table below (biomass and catch figures are in units of t) and compared with the corresponding quantities as specified last year by the SSC (note that the values specified last year by the SSC are, for the most part, different than those listed in last year's assessment, due to a difference in recommended model):

Table 1. Main results from the fourteen models (including the current base model) used in the 2020 stock assessment. Source: Thompson et al. 2020

Quantity	As estimated or *specified last* year for: 2020	2021	As estimated or *recommended this* year for: 2021*	2022*
M (natural mortality rate)	0.35	0.35	0.32	0.32
Tier	3a	3b	3b	3b
Projected total (age 0+) biomass (t)	756,811	702,235	842,254	878,837
Projected female spawning biomass (t)	267,333	216,255	273,584	253,506
$B_{100\%}$	672,795	672,795	771,600	771,600
$B_{40\%}$	269,118	269,118	308,640	308,640
$B_{35\%}$	235,478	235,478	270,060	270,060
F_{OFL}	0.41	0.33	0.31	0.30
$maxF_{ABC}$	0.34	0.27	0.26	0.25
F_{ABC}	0.33	0.26	0.26	0.25
OFL (t)	191,386	125,734	139,984	130,076
maxABC (t)	160,789	105,046	118,013	109,266
ABC (t)	155,873	102,975	118,013	109,266
Status	As determined *last* year for: 2018	2019	As determined *this* year for: 2019	2020
Overfishing	No	n/a	No	n/a
Overfished	n/a	No	n/a	No
Approaching overfished	n/a	No	n/a	No

*Projections are based on assumed catches of 155,873 t, and 118,013 t in 2020 and 2021, respectively.

Following the information reported in the last stock assessment, the biomass estimate is 270,954 mt and BMSY is set up at 230,841 mt. therefore the biomass is above limits (Figure 1)

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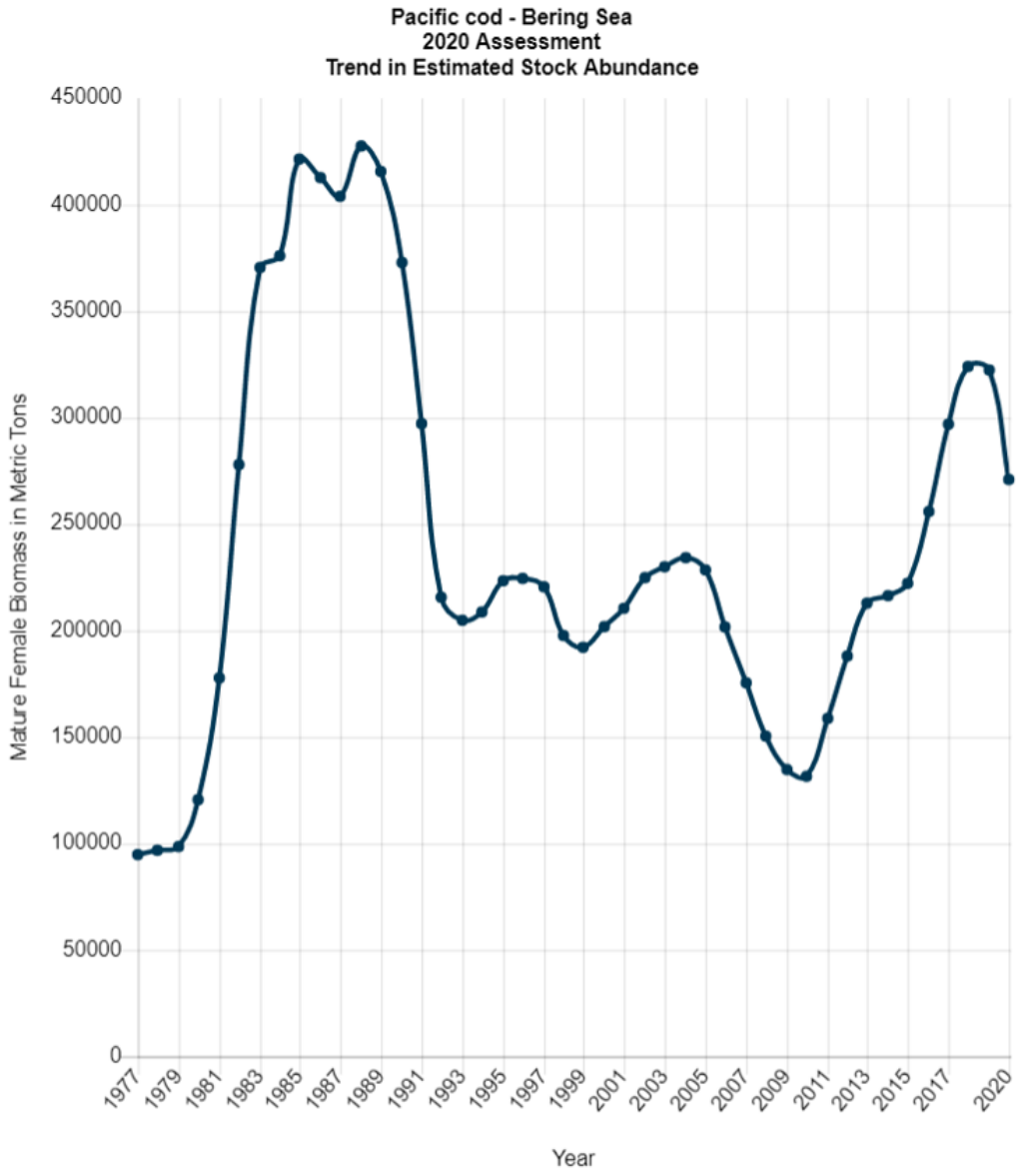

Figure 1. Trend in estimated Stock abundance for Pacific cod in Easter Bering Sea. Source: Thompson et al. 2020

Therefore, The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy and it **PASSES** clause C1.2

References

Thompson, G. G., J. Conner, S. K. Shotwell, B. Fissel, T. Hurst, B. Laurel, and E. Siddon. 2020. Assessment of the Pacific Cod Stock in the Eastern Bering Sea. 344 pp.

NOAA Fisheries. 2021. Stock SMART data records. Retrieved from www.st.nmfs.noaa.gov/stocksmart.

Links	
MARINTRUST Standard clause	1.3.2.2
FAO CCRF	7.5.3
GSSI	D.3.04, D5.01

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