



# BYPRODUCT FISHERY ASSESSMENT TEMPLATE REPORT

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	Species:	Yellowfin Sole (Limanda aspera)	
		FAO Areas 61 & 67, Pacific	
	Geographical area:	Northwest and Northeast, US	
Fishers Under		Federal EEZ and State waters of the	
Fishery Under Assessment		Bering Sea and Aleutian Islands	
Assessment	Country of origin of the		
	product:	USA	
	Stock:	Bering Sea and Aleutian Islands	
		yellowfin sole	
Date	February 2021		
Report Code	245-2020		
Assessor	Virginia Polonio		
Country of origin of	USA		
the product - PASS			
Country of origin of	NA		
the product - FAIL			

Application details and summary of the assessment outcome					
Name: Piyo Bhokabhan					
Address:					
Country: Thailand		Zip:			
Tel. No.:		Fax. No.:	Fax. No.:		
Email address:		Applicant Code:			
Key Contact:		Title:			
Certification Body Details					
Name of Certificat	ion Body:	Global Trust Certification			
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval		
Virginia Polonio	Geraldine Criquet	0.5	Initial		
<b>Assessment Period</b>	February 2021				

Scope Details		
Main Species	Yellowfin Sole (Limanda aspera)	
Stock	Bering Sea and Aleutian Islands yellowfin sole	
Fishery Location	FAO Areas 61&67 Pacific Northwest and Northeast	
Management Authority	North Pacific Fishery Management Council (NPFMC) and Magnuson-	
(Country/ State)	Stevens Act	
Gear Type(s)	Otter trawls	
Outcome of Assessment		
Peer Review Evaluation	Agree with the assessor's recommendation	
Recommendation	APPROVED	

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. Yellowfin sole (*Limanda aspera*) does not appear as Endangered or Critically Endangered on IUCN's Red List, nor does it appear in CITES appendices; therefore, Yellowfin sole (*Limanda aspera*) in the FAO areas 61 & 67 is eligible for approval for use as MARINTRUST by-product raw material.

The species in the study area is managed under the Magnuson-Stevens Act, the governs allocations of groundfish account to the CDQ Program. The species is managed following the Optimal Yield (OP) approach. The OP of the BSAI groundfish complex is 85% of the historical estimate of MSY, or 1.4 to 2.0 million mt. Based on the annual Stock Assessment and Fishery Evaluation (SAFE) report, the Council recommends to the Secretary of Commerce TACs and apportionments thereof for each target species such as yellowfin sole. The Secretary implements annual TACs which may address up to 2 fishing years, following public comment and Council recommendations at the December Council meeting. Therefore, there is a species-specific management system and the species has been assessed under Category C.

Fishery removals of the stock are considered in the 2019 stock assessment processes so the stock **PASSES** Clause C1.

In the last stock assessment, the species has not been considered overfished and overfishing is not occurring, therefore, the stock **PASSES** Clause C1.2.

In order to be approved, the stock assessed must pass both Clause C1.1 and C1.2; therefore, as this is the case here, Yellowfin sole (*Limanda aspera*) in the FAO areas 61 & 67, by-product covered by this report is **APPROVED** for the production of fishmeal and fish oil under the current MARINTRUST v 2.0 by-product standard.

#### **Peer Review Comments**

The assessor correctly classified Bering Sea and Aleutian Islands yellowfin sole stock as category C, the stock is managed and reference points are defined to assess the stock status against.

Fishery removals from the stock are considered in the stock assessment process. The most recent stock assessment shows that the stock is considered to have a biomass above the limit reference point.

Bering Sea and Aleutian Islands yellowfin sole stock passes both C1.1 and C1.2 and is therefore approved.

#### **Notes for On-site Auditor**



# SPECIES CATEGORISATION

<u>NB</u>: 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 Redlist Category**

Byproduct 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.

Byproduct 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 <sup>1</sup>	CITES Appendix 1 <sup>2</sup>
Yellowfin Sole	<i>Limanda aspera</i>	Bering Sea and Aleutian Islands FAO Areas 61&67 Pacific Northwest and Northeast	North Pacific Fishery Management Council (NPFMC) and Magnuson- Stevens Act	С	LC	No

<sup>&</sup>lt;sup>1</sup> <u>https://www.iucnredlist.org/</u>

<sup>&</sup>lt;sup>2</sup> <u>https://cites.org/eng/app/appendices.php</u>



# **CATEGORY C SPECIES**

In a by-product assessment, Category C species are those which are subject to a species-specific management regime and are usually targeted species in fisheries for human consumption.

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 may be assessed as a Category D species instead, EXCEPT if there is evidence that it is currently below the limit reference point.

Spe	Species Name Yellowfin Sole, Limanda aspera			
<b>C1</b>	C1 Category C Stock Status - Minimum Requirements			
CI	C1.1	Fishery removals of the species in the fishery under assessment are included in the stock PA	PASS	
		assessment process, OR are considered by scientific authorities to be negligible.		
	C1.2	The species is considered, in its most recent stock assessment, to have a biomass above the limit PA	PASS	
		reference point (or proxy), OR removals by the fishery under assessment are considered by		
		scientific authorities to be negligible.		
		Clause outcome: PA	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.

The data used in this assessment include estimates of total catch, bottom trawl survey biomass estimates and their attendant 95% confidence intervals, catch-at-age from the fishery, and population age composition estimates from the bottom trawl survey. Weight-at-age and proportion mature-at-age are also available from studies conducted during the bottom trawl surveys (table1).

**Table 1.** Data used in the 2018 assessment and updated with 2019 data referred to Model 18.1a. Source: 2019 Assessment ofthe Yellowfin Sole Stock in the Bering Sea and Aleutian Islands

Data source	Year
Fishery catch	1954 - 2019
Fishery age composition	1964 - 2018
Fishery weight-at-age	Avg. weight at age from 2008-2018 used for 2008-2019
Survey biomass and standard error	1982 - 2019
bottom temperature	1982 - 2019
Survey age composition	1979 - 2018
Annual length-at-age and weight-at-age from surveys	1979 - 2018
Age at maturity	Combined 1992 and 2012 samples

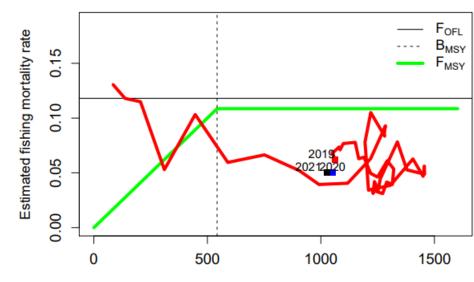
Therefore, the fishery removals of the species in the fishery under assessment are included in the stock assessment process and it **PASSES** clause C1.1

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.

Yellowfin Sole continue to be above BMSY and the annual harvest remains below the ABC level. The projected estimate of total biomass for 2020 was higher by 17 percent from the 2018 assessment of 2,331,500 tonnes to 2,726,370 t.

The model projection of spawning biomass for 2020, assuming catch for 2019 as described above, was 1,051,050 t, 132 percent of the projected 2020 spawning biomass from the 2018 assessment of 796,600 t. The 2020 and 2021 ABCs using FABC from this assessment model were higher than the 2018 ABC of 249,100 t; 296,060 t and 296,793 t. The 2020 and 2021 OFLs estimated in this assessment were 321,794 t and 322,591 t (Figure 1).





Estimated female spawning biomass (x 1.000 t)

**Figure 1.** Fishing mortality rate and female spawning biomass from 1975 to 2019 compared to the F35% and F40% control rules, based on Model 18.2. Vertical line is B35%. Squares indicate estimates for 2019, 2020, and 2021. Source: Ingrid Spies, et al 2019. Assessment of the Yellowfin Sole Stock in the Bering Sea and Aleutian Islands

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

#### References

Spies, I., et al 2019. Assessment of the Yellowfin Sole Stock in the Bering Sea and Aleutian Islands. NPFMC Bering Sea and Aleutian Islands SAFE.

FMP for Groundfish of the BSAI Management Area. November 2020.

https://www.fishsource.org/stock\_page/1955

 Links

 MARINTRUST Standard clause
 1.3.2.2

 FAO CCRF
 7.5.3

 GSSI
 D.3.04, D5.01

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### SOCIAL CRITERION

In addition to the scored criteria listed above, applicants must commit to ensuring that vessels operating in the fishery adhere to internationally recognised guidance on human rights. They must also commit to ensuring there is no use of enforced or unpaid labour in the fleet(s) operating upon the resource.



## **Appendix B: From MARINTRUST Standard V2.0 Annex 2: Fish By-product Assessment Methodology**

#### Definition of a Fish By-product

A by-product is a useful and marketable product that is not the primary product being produced. A marketable by-product is from a process that can technically not be avoided. This includes materials that may be traditionally defined as waste such as industrial scrap that is subsequently used as a raw material in a different manufacturing process.

"Fish By-products" refers to commodities that are manufactured from fish, including shellfish, and crustaceans in a form that is different than conventional foods and which are intended for human consumption (either directly or as a food ingredient). Fish By-products include, but are not limited to:

- By-products derived from fish, including fish cartilage, fish oils, and fish proteins; and
- By-products derived from the carapaces of crustaceans; but do not include marine plants or marine plant products.

#### (Canadian Food Inspection Agency Definition)

In addition, a whole fish which is rejected on an intrinsic quality ground e.g. does not meet the specification for human consumption due to physical damage or the quality is substandard. These whole fish shall in these cases be classified as a by-product from the human consumption fishery, and can be used for marine ingredients production.

A whole catch of fish that is rejected by a fish processing factory on economic grounds is not considered to be a fish by-product. This fish can only be used for marine ingredients production if the fishery has been assessed and approved under the requirements of the IFFO Responsible Sourcing Standard.

#### Why utilise Fish By-products?

#### FAO Code of Conduct for Responsible Fisheries

#### **General Principles Article 6**

**6.7** The harvesting, handling, processing and distribution of fish and fishery products should be carried out in a manner which will maintain the nutritional value, quality and safety of the products, reduce waste and minimize negative impacts on the environment.

#### **Responsible fish utilisation Article 11.1**

**11.1.8** States should encourage those involved in fish processing, distribution and marketing to reduce post-harvest losses and waste.

#### Benefits of Including Fish By-Products in the MARINTRUST Standard:

1. Improved fish resource utilisation

- 2. Reduction in waste for nutritional value
- 3. 35% of fish by-products are currently used to make quality fishmeal and oil
- 4. Excellent Economic return
- 5. Better compliance with FAO Code of Conduct for Responsible Fisheries

#### What Fish By-products cannot be used?



#### 1. IUCN

Fishery By-products shall Not be taken from a species listed by IUCN (the International Union for Conservation of Nature) under the Red List for certain categories;

- 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.

Fish By-product material may be used from the vulnerable category, but it shall incur a fishery surveillance conducted by the certification body prior to it being included in the scope of this standard.

• VULNERABLE (VU) facing a high risk of extinction in the wild.

The Fish By-product material from these species will be acceptable for use in the scope of this standard;

- 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.

Fish By-product material may be used from the following category, but it shall incur a fishery surveillance prior to it being included in the scope of this standard;

• DATA DEFICIENT (DD) and NOT EVALUATED (NE)

The fishery surveillance conducted by the certification body will review the following areas:

#### Stock Assessment

- From a recognised Institution
- Fisheries are recognised as legal
- Fisheries do not contradict scientific opinion

#### 2. FAO Code of Conduct for Responsible Fisheries

In addition the Fish By-products shall not come from fisheries that do not comply with the following criteria;

**1.** Fisheries should prohibit dynamiting, poisoning and other comparable destructive fishing practices.

**2.** Fishery material shall not be from IUU fishing activity nor sourced from vessels officially listed as engaging in illegal, unreported and unregulated (IUU) fishing activity.

#### **Sources of Information**

- **1.** Food Standards Agency
- 2. Canadian Food Inspection Agency
- 3. DEFRA
- 4. GAA Feed mill BAP standard
- 5. EU Commission
- 6. IUCN