MarinTrust Standard V2

By-product Fishery Assessment
THA62 – Sockeye salmon
(Oncorhynchus nerka)
in FAO 61

Table 1 Application details and summary of the assessment outcome

Fishery Under Assessment	Species:	Sockeye salmon (*Oncorhynchus nerka*)
	Geographical area:	FAO Area 61
	Country of origin of the product:	Thailand
	Stock:	Various

Date	March 2024
Report Code	THA62
Assessor	Sam Peacock
Country of origin of the product - PASS	Thailand
Country of origin of the product - FAIL	N/A

Application details and summary of the assessment outcome			
Company Name(s): Piyo Bhokabhan Co. Ltd			
Country: Thailand			
Email address:		Applicant Code:	
Certification Body Details			
Name of Certification Body:		Global Trust Certification Ltd. / NSF	
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/Re-approval
Sam Peacock	Matthew Jew	0.2	Initial
Assessment Period	March 2024 – March 2025		

Scope Details	
Main Species	Sockeye salmon (*Oncorhynchus nerka*)
Stock	Various
Fishery Location	FAO Area 61
Management Authority (Country/ State)	Russian Federation
Gear Type(s)	Beach seines, gillnets, traps
Outcome of Assessment	
Peer Review Evaluation	Agree with 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 Marin trust raw material. Sockeye salmon (*Oncorhynchus nerka*) does not appear as Endangered or Critically Endangered on IUCN's Red List, and does not appear in CITES appendices; therefore, *Oncorhynchus nerka* is eligible for approval for use as Marin trust by-product raw material.
There are a number of different Russian-flagged fisheries targeting sockeye salmon in the Northwest Pacific, including Chukhota, East Kamchatka, Ozernaya River, West Kamchatka, and the Russian offshore fishery[1]. Without more detailed information on the origin of the byproduct, the most appropriate approach is to apply a Category D assessment, the outcomes of which will cover every sockeye stock.
In the Category D PSA, sockeye salmon was assigned a Productivity score of 1.57 and a Susceptibility score of 3, leading to a Pass rating on Table D3.
Therefore, Sockeye salmon (*Oncorhynchus nerka*) in FAO Area 61 is **APPROVED** for the production of fishmeal and fish oil under the current MarinTrust v2.3 by-products.

Fishery Assessment Peer Review Comments
The assessor correctly classified sockeye salmon (Oncorhynchus nerka) in FAO area 61 as Category D, the stock is lacking specific information regarding of the by product material.
The assessor correctly scored each PSA attribute and correctly calculated the average score for productivity and susceptibility.
Sockeye salmon (Oncorhynchus nerka) in FAO area 61 passes Category D and therefore should be approved under the MarinTrust Standard v.2.3 by-products standards.

Notes for On-site Auditor
N/A

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[1] https://www.fishsource.org/fishery_page/3220

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[2]	CITES Appendix 1[3]
Sockeye salmon	*Oncorhynchus nerka*	Various	See Assessment Determination	D	Least Concern[4]	No

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[2] https://www.iucnredlist.org/
[3] https://cites.org/eng/app/appendices.php
[4] https://www.iucnredlist.org/species/135301/4071001

CATEGORY D SPECIES

Category D species are those which are not subject to a species-specific management regime. In the case of mixed trawl fisheries, Category D species may make up the majority of landings. The comparative lack of scientific information on the status of the population of the species means that a risk-assessment style approach must be taken.
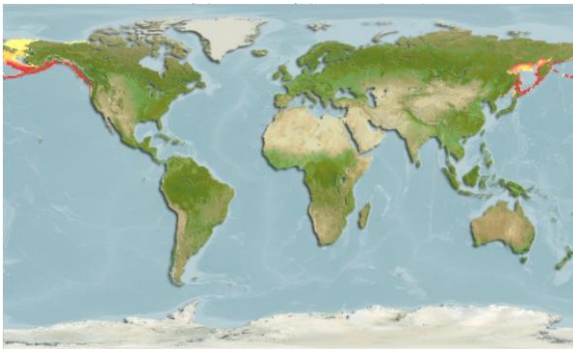
D1	Species Name	Sockeye salmon (*Oncorhynchus nerka*)	
	Productivity Attribute	**Value**	**Score**
	Average age at maturity (years)	1.1 years	1
	Average maximum age (years)	5 years	1
	Fecundity (eggs/spawning)	1,136	2
	Average maximum size (cm)	84cm	1
	Average size at maturity (cm)	37.4cm	1
	Reproductive strategy	Guarders / brood hiders	2
	Mean trophic level	3.5	3
		Average Productivity Score	**1.57**
	Susceptibility Attribute	**Value**	**Score**
	Availability (area overlap)	>30% overlap	3
	Encounterability (the position of the stock/species within the water column relative to the fishing gear)	Targeted	3
	Selectivity of gear type	Targeted	3
	Post-capture mortality	Retained	3
		Average Susceptibility Score	**3**
		PSA Risk Rating (From Table D3)	**PASS**
		Compliance rating	**PASS**
	Further justification for susceptibility scoring (where relevant) *For susceptibility attributes, please provide a brief rationale for scoring of parameters where there may be uncertainty affecting your decision* **Sockeye salmon, computer-generated distribution map. From FishBase, https://fishbase.mnhn.fr/summary/243**		
	References Fishbase, sockeye salmon: https://fishbase.mnhn.fr/summary/243		
	Standard clauses 1.3.2.2		

Table D2 - Productivity / Susceptibility attributes and scores.

Productivity attributes	High productivity (Low risk, score = 1)	Medium productivity (medium risk, score = 2)	Low productivity (high risk, score = 3)
Average age at maturity	<5 years	5-15 years	>15 years
Average maximum age	<10 years	10-25 years	>25 years
Fecundity	>20,000 eggs per year	100-20,000 eggs per year	<100 eggs per year
Average maximum size	<100 cm	100-300 cm	>300 cm
Average size at maturity	<40 cm	40-200 cm	>200 cm
Reproductive strategy	Broadcast spawner	Demersal egg layer	Live bearer
Mean Trophic Level	<2.75	2.75-3.25	>3.25

Susceptibility attributes	Low susceptibility (Low risk, score = 1)		Medium susceptibility (medium risk, score = 2)		High susceptibility (high risk, score = 3)	
Areal overlap (availability) Overlap of the fishing effort with the species range	<10% overlap		10-30% overlap		>30% overlap	
Encounterability The position of the stock/species within the water column relative to the fishing gear, and the position of the stock/species within the habitat relative to the position of the gear	Low overlap with fishing gear (low encounterability).		Medium overlap with fishing gear.		High overlap with fishing gear (high encounterability). Default score for target species	
Selectivity of gear type Potential of the gear to retain species	a	Individuals < size at maturity are rarely caught	a	Individuals < size at maturity are regularly caught.	a	Individuals < size at maturity are frequently caught
	b	Individuals < size at maturity can escape or avoid gear.	b	Individuals < half the size at maturity can escape or avoid gear.	b	Individuals < half the size at maturity are retained by gear.
Post-capture mortality (PCM) The chance that, if captured, a species would be released and that it would be in a condition permitting subsequent survival	Evidence of majority released post-capture and survival.		Evidence of some released post-capture and survival.		Retained species or majority dead when released.	

D3		Average Susceptibility Score		
		1 - 1.75	1.76 - 2.24	2.25 - 3
Average Productivity Score	1 - 1.75	PASS	PASS	PASS
	1.76 - 2.24	PASS	PASS	TABLE D4
	2.25 - 3	PASS	TABLE D4	TABLE D4