

MarinTrust Standard V2

By-product Fishery Assessment CHL10 Coho salmon *(Oncorhynchus kisutch)*

in FAO 67 - northeast Pacific

MarinTrust Programme Unit C, Printworks 22 Amelia Street London SE17 3BZ E: <u>standards@marin-trust.com</u> T: +44 2039 780 819

Marine Ingredients Certifications Ltd (09357209) | Doc FISH1- Issued October 2022 – Version 2.3 | Approved by Libby Woodhatch Controlled Copy- No unauthorised copying or alteration permitted © Marine Ingredients Certifications Ltd., for authorised use only



Table 1 Application details and summary of the assessment outcome

	Species:	Coho salmon (Oncorhynchus kisutch)			
	Geographical area:	FAO 67 (Northeast Pacific)			
Fishery Under	Country of origin of	Chile			
Assessment	the product:	Flag Country: USA			
	Stock:	Alaska Coho salmon			
Date		December 2024			
Report Code		CHL10			
Assessor		Ana Elisa Almeida Ayres			
Country of origin of the		Chile			
product - PASS		Flag Country: USA			
Country of origin of the		N/A			
product - FAIL	N/A				

Application details and summary of the assessment outcome									
Company Name(s): Sociedad Pesquera Landes SA									
Country: Chile									
Email address:		Applicant Code:							
Certification Body Details									
Name of Certification Bod	y:	NSF / Glo	bal Trust Certification Ltd						
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/Re-approval						
Ana Elisa Almeida Ayres	Matthew Jew	0.5	Surveillance 1						
Assessment Period		December 2024 – D	ecember 2025						

Scope Details	
Main Species	Coho salmon (<i>Oncorhynchus kisutch</i>)
Stock	Alaska Coho salmon
Fishery Location	FAO 67 (Northeast Pacific)
Management Authority (Country/ State)	Alaska Department of Fish and Game (ADF&G), North Pacific Fishery Management Council (NPFMC), National Oceanic and Atmospheric Administration (NOAA) Fisheries
Gear Type(s)	Gillnets, entangling nets, seine nets, hook and lines, trolling lines, surrounding nets with purse lines, 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 Union for Conservation of Nature's Red List of Threatened Species - IUCN's Red List, or if it appears in the Convention on International Trade in Endangered Species of Wild Fauna and Flora - CITES appendices, it cannot be approved for use as MarinTrust raw material. Coho salmon (*Oncorhynchus kisutch*) is not categorised as Endangered or Critically Endangered on IUCN's Red List and does not appear in CITES appendices; therefore, coho salmon (*Oncorhynchus nerka*) eligible for approval for use as Marin Trust by-product raw material.

The flag country of assessment is USA and almost all the sockeye salmon harvested there comes from Alaska fisheries. <u>Coho salmon is certified by Marine Stewardship Council - MSC</u> since 2000, together with other Alaska salmon species, such as chum salmon (*Oncorhynchus keta*), sockeye salmon (*Oncorhynchus nerka*) Chinook salmon (*Oncorhynchus tshawytscha*) and pink salmon (*Oncorhynchus gorbusha*) in FAO 18 - Arctic sea and FAO 67 - northeast Pacific. Alaska salmon fisheries are generally managed to achieve spawning escapement goals determined to ensure conservation and long-term sustainability. Coho salmon stock was assessed under Category C.

Fishery removals are included in the stock assessment and it PASSES Clause C1.1. Overall, in 2021, most coho salmon stocks meet escapement goals or did not reach it, nevertheless this stock was never classified as a stock of concern over the history. Therefore, the assessment team concluded the stock is considered to be above the limit reference point and it PASSES Clause C1.2.

Coho salmon (*Oncorhynchus kisutch*) in FAO area 67 - northeast Pacific is **APPROVED** for the production of fishmeal and fish oil under the current MarinTrust v2.3 by-products standard.

Fishery Assessment Peer Review Comments

The assessor correctly classified the coho salmon (*Oncorhynchus kisutch*) in FAO area 67 are under category C, as the stock is managed, and reference points (or proxy) are defined to assess the stock status against.

Fishery removals are considered in the stock assessment process. The most recent stock assessment is considered to be above Blim as the majority of stocks are meeting or exceeding escapement goals. Therefore, the stock is considered to have biomass above the limit reference point.

Therefore, the coho salmon in FAO area 67 passes both clauses (C1.1 and C1.2) and therefore should be **APPROVED** under the current MarinTrust V2.3 by-products standards

Notes for On-site Auditor

N/A



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
Coho salmon	Oncorhynchus kisutch	Alaska Coho salmon	Yes	С	LC ³	No

Marine Ingredients Certifications Ltd (09357209) | Doc FISH1- Issued October 2022 – Version 2.3 | Approved by Libby Woodhatch Controlled Copy- No unauthorised copying or alteration permitted

© Marine Ingredients Certifications Ltd., for authorised use only

¹ <u>https://www.iucnredlist.org/</u>

² <u>https://cites.org/eng/app/appendices.php</u>

³ https://www.iucnredlist.org/species/202638/18228780



Spe	cies	Name	Coho salmon (<i>Oncorhynchus kisutch</i>)				
C1	Catego	ory C Stock Sta	atus - Minimum Requirements				
CI	C1.1		ovals of the species in the fishery under assessment are included in the stock assessment are considered by scientific authorities to be negligible.	Pass			
	 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. 						
			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.

The flag country of assessment is USA and almost all the coho salmon harvested there comes from Alaska fisheries. Alaska salmon fisheries are not managed through a Total Allowable Catch – TAC, but they are generally managed to achieve spawning escapement goals determined to ensure conservation and long-term sustainability.

According to MSC (2024):

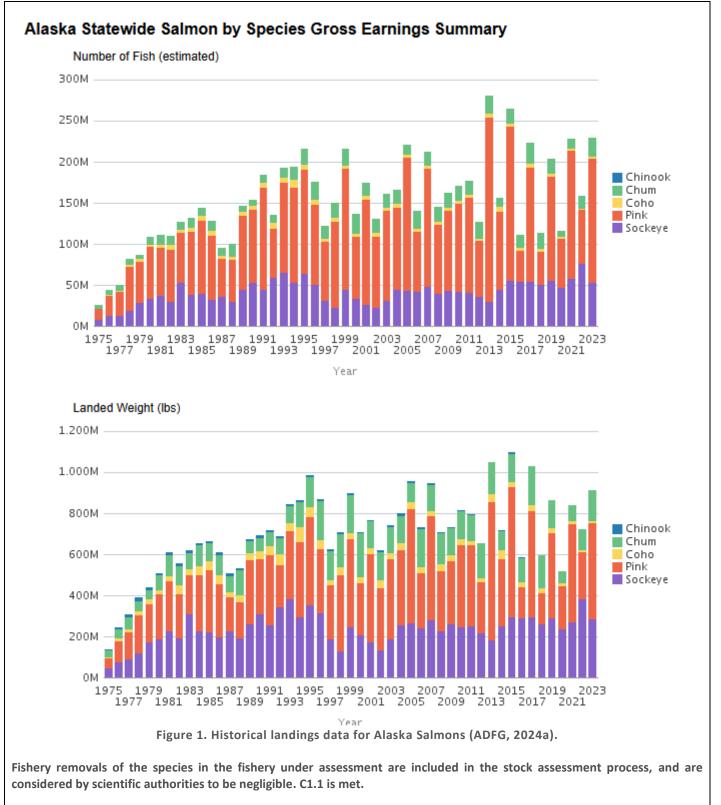
"Escapement goals are defined in ranges which function as target reference points for fishery management. Goals are established for key reference species and stocks in each fishing area. ADF&G uses a variety of methods to establish escapement goals, depending on the type and quality of data that are acquired. Escapement goal methods and evaluation of whether the goals were met in response to harvest management actions are reviewed in technical reports every three years in accordance with BOF Reviews. Thus, each management area has a recent escapement goal report, which also includes references to or included historical data on which the goals were developed. The technical reports are available online (<u>www.adfg.alaska.gov</u>) [...]

Fisheries are managed inseason based on abundance to achieve target escapement goal ranges. To achieve minimum escapement goals, directed fishing stops and incidental harvests are reduced at low run sizes. Fisheries are liberalized when abundance is high. Fishing effort and harvest is generally regulated over the course of the return based on time and area openings and closures. In high value fisheries, management can be intensive with decisions made on a day to day or even hour to hour schedule.

Commercial harvests of salmon in Alaska are monitored through the fish ticket system, which are sales receipts issued to commercial fishermen upon selling their catch to processors. As a result, harvest data is available by fishing district and opening date, generally on a real time basis for use in inseason management decisions. ADF&G has also been implementing electronic fish tickets which can result in almost instantaneous reporting of harvest in some fisheries (Bristol Bay). Inseason data on escapement, catch, catch rates and biological characteristics can effectively be used to regulate harvest rates based on abundance because most Alaska salmon harvest occurs in terminal fishing areas."

Landings data for coho salmon are showed in Figure 1.





Marine Ingredients Certifications Ltd (09357209) | Doc FISH1- Issued October 2022 - Version 2.3 | Approved by Libby Woodhatch Controlled Copy- No unauthorised copying or alteration permitted © Marine Ingredients Certifications Ltd., for authorised use only



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.

Alaska fishery managers have the primary goal of maintaining spawning population sizes, not of reaching preseason harvest projections. Alaska salmon fisheries are generally managed to achieve spawning escapement goals determined to ensure conservation and long-term sustainability. Escapement goals are defined in ranges which function as target reference points for fishery management. Goals are established for key reference species and stocks in each fishing area.

Currently, there are approximately 300 established escapement goals in Alaska. Each year, escapements for fishery stocks are reported in Area Management Reports. Since 2010, the department has produced a <u>publicly accessible report</u> that is a statewide compilation of salmon escapements and escapement goals. The most current report was published in October 2023 and covers escapements from 2014 to 2024 (Munro, 2023). Escapements were compared against escapement goals in place at the time of enumeration to assess outcomes in achieving goals. Escapements for a particular stock were classed as "Under" if escapement for a given year was less than the lower bound of the escapement goal. If escapement fell within the escapement goal range or was greater than a lower bound goal, they considered the goal "Met". Where escapement exceeded the upper bound of an escapement goal range, it was classed as "Over". Overall, most coho salmon stocks were below or met the escapement goals. The summary of the escapements review for coho salmon in 4 regions of Alaska is presented in Tables 3, 4, 5 and 6 below.



Table 3. Assessment of whether escapements met (Met), exceeded (Over), or did not meet (Under) the escapement goal in place at the time of enumeration for salmon stocks in Southeast Region for the years 2014 to 2022 (Munro, 2023).

	2014	2015	2016	2017	2018	2019	2020	2021	2022
CHINOOK SALMON		-			-	-	-		-
Number Below	4	2	10	10	7	4	5	4	6
Number Met	7	8	1	1	3	6	5	5	5
Number Above	1	2	1	1	1	1	1	2	0
% Below	33%	17%	83%	83%	64%	36%	45%	36%	55%
% Met	58%	67%	8%	8%	27%	55%	45%	45%	45%
% Above	8%	17%	8%	8%	9%	9%	9%	18%	0%
CHUM SALMON									
Number Below	2	0	2	1	2	2	5	4	4
Number Met	6	5	6	5	4	6	3	3	3
Number Above	0	3	0	2	1	0	0	1	1
% Below	25%	0%	25%	13%	29%	25%	63%	50%	50%
% Met	75%	63%	75%	63%	57%	75%	38%	38%	38%
% Above	0%	38%	0%	25%	14%	0%	0%	13%	13%
COHO SALMON									
Number Below	0	0	3	1	2	1	4	2	1
Number Met	6	7	6	9	7	7	5	6	6
Number Above	8	7	4	3	4	3	2	2	2
% Below	0%	0%	23%	8%	15%	9%	36%	20%	11%
% Met	43%	50%	46%	69%	54%	64%	45%	60%	67%
% Above	57%	50%	31%	23%	31%	27%	18%	20%	22%
PINK SALMON						-		-	
Number Below	2	0	2	0	1	1	1	0	0
Number Met	0	3	2	3	2	2	2	2	3
Number Above	2	1	0	1	0	0	0	1	0
% Below	50%	0%	50%	0%	33%	33%	33%	0%	0%
% Met	0%	75%	50%	75%	67%	67%	67%	67%	100%
% Above	50%	25%	0%	25%	0%	0%	0%	33%	0%
OCKEYE SALMON	-		-						
Number Below	2	1	3	4	6	2	6	3	2
Number Met	5	7	7	5	4	4	3	2	4
Number Above	5	5	3	3	2	6	2	7	6
% Below	17%	8%	23%	33%	50%	17%	55%	25%	17%
% Met	42%	54%	54%	42%	33%	33%	27%	17%	33%
% Above	42%	38%	23%	25%	17%	50%	18%	58%	50%



Table 4. Assessment of whether escapements met (Met), exceeded (Over), or did not meet (Under) the escapement goal in place at the time of enumeration for salmon stocks in Central Region (Bristol Bay, Cook Inlet, Prince William Sound/Copper River) for the years 2014 to 2022 (Munro, 2023).

	-								
	2014	2015	2016	2017	2018	2019	2020	2021	2022
CHINOOK SALMON									
Number Below	12	4	8	14	21	9	13	8	8
Number Met	14	20	12	9	6	15	5	8	5
Number Above	0	1	1	1	0	0	0	1	0
% Below	46%	16%	38%	58%	78%	38%	72%	47%	62%
% Met	54%	80%	57%	38%	22%	63%	28%	47%	38%
% Above	0%	4%	5%	4%	0%	0%	0%	6%	0%
CHUM SALMON						-			
Number Below	7	3	5	0	7	7	10	8	9
Number Met	10	8	11	11	9	5	5	5	8
Number Above	2	7	3	8	3	7	4	6	2
% Below	37%	17%	26%	0%	37%	37%	53%	42%	47%
% Met	53%	44%	58%	58%	47%	26%	26%	26%	42%
% Above	11%	39%	16%	42%	16%	37%	21%	32%	11%
COHO SALMON									
Number Below	1	0	2	0	1	4	0	0	3
Number Met	2	4	2	3	5	3	4	3	0
Number Above	3	1	1	3	1	0	1	2	1
% Below	17%	0%	40%	0%	14%	57%	0%	0%	75%
% Met	33%	80%	40%	50%	71%	43%	80%	60%	0%
% Above	50%	20%	20%	50%	14%	0%	20%	40%	25%
PINK SALMON									
Number Below	5	0	12	3	6	6	3	2	9
Number Met	18	4	7	12	9	10	11	11	7
Number Above	4	22	4	11	12	10	11	13	10
% Below	19%	0%	52%	12%	22%	23%	12%	8%	35%
% Met	67%	15%	30%	46%	33%	38%	44%	42%	27%
% Above	15%	85%	17%	42%	44%	38%	44%	50%	38%
SOCKEYE SALMON									
Number Below	5	4	6	0	2	3	3	5	3
Number Met	14	13	18	21	17	15	15	9	16
Number Above	11	13	4	8	11	12	11	16	11
% Below	17%	13%	21%	0%	7%	10%	10%	17%	10%
% Met	47%	43%	64%	72%	57%	50%	52%	30%	53%
% Above	37%	43%	14%	28%	37%	40%	38%	53%	37%



Table 5. Assessment of whether escapements met (Met), exceeded (Over), or did not meet (Under) the escapement goal in place at the time of enumeration for salmon stocks in Arctic–Yukon–Kuskokwim Region for the years 2014 to 2022 (Munro, 2023).

	2014	2015	2016	2017	2018	2019	2020	2021	2022
CHINOOK SALMON	-	-	-	-		-	-	-	_
Number Below	5	3	6	3	3	3	7	6	7
Number Met	8	12	9	14	15	9	9	5	3
Number Above	7	6	3	3	2	10	0	0	1
% Below	25%	14%	33%	15%	15%	14%	44%	55%	64%
% Met	40%	57%	50%	70%	75%	41%	56%	45%	27%
% Above	35%	29%	17%	15%	10%	45%	0%	0%	9%
SUMMER CHUM SALM	ION								
Number Below	1	1	1	0	0	0	2	3	1
Number Met	1	1	2	1	0	4	3	2	3
Number Above	7	5	4	6	6	2	0	0	1
% Below	11%	14%	14%	0%	0%	0%	40%	60%	20%
% Met	11%	14%	29%	14%	0%	67%	60%	40%	60%
% Above	78%	71%	57%	86%	100%	33%	0%	0%	20%
YUKON RIVER SUMM	ER CHUM S	ALMON							
Number Below	1	0	1	0	2	1	0	3	2
Number Met	1	2	1	2	0	1	1	0	0
Number Above	0	0	1	1	1	1	0	0	0
% Below	50%	0%	33%	0%	67%	33%	0%	100%	100%
% Met	50%	100%	33%	67%	0%	33%	100%	0%	0%
% Above	0%	0%	33%	33%	33%	33%	0%	0%	0%
YUKON RIVER FALL O	HUM SALM	ION							
Number Below	1	2	0	0	1	1	2	5	5
Number Met	2	3	1	1	0	3	1	0	0
Number Above	5	3	5	5	5	1	0	0	0
% Below	13%	25%	0%	0%	17%	20%	67%	100%	100%
% Met	25%	38%	17%	17%	0%	60%	33%	0%	0%
% Above	63%	38%	83%	83%	83%	20%	0%	0%	0%
COHO SALMON									
Number Below	1	0	0	0	2	1	1	1	3
Number Met	1	2	3	2	0	2	0	1	0
Number Above	1	2	1	0	0	0	0	0	1
% Below	33%	0%	0%	0%	100%	33%	100%	50%	75%
% Met	33%	50%	75%	100%	0%	67%	0%	50%	0%
% Above	33%	50%	25%	0%	0%	0%	0%	0%	25%



Table 6. Assessment of whether escapements met (Met), exceeded (Over), or did not meet (Under) the escapement goal in place at the time of enumeration for salmon stocks in Westward Region (Alaska Peninsula/Aleutian Islands, Kodiak, and Chignik) for the years 2014 to 2022 (Munro, 2023).

	2014	2015	2016	2017	2018	2019	2020	2021	2022
CHINOOK SALMON									
Number Below	2	2	0	4	2	1	2	3	3
Number Met	1	2	3	0	1	2	2	1	1
Number Above	1	0	1	0	1	1	0	0	0
% Below	50%	50%	0%	100%	50%	25%	50%	75%	75%
% Met	25%	50%	75%	0%	25%	50%	50%	25%	25%
% Above	25%	0%	25%	0%	25%	25%	0%	0%	0%
CHUM SALMON									
Number Below	5	1	2	0	4	2	5	2	2
Number Met	3	4	4	4	2	4	2	2	4
Number Above	0	3	2	3	1	1	0	3	1
% Below	63%	13%	25%	0%	57%	29%	71%	29%	29%
% Met	38%	50%	50%	57%	29%	57%	29%	29%	57%
% Above	0%	38%	25%	43%	14%	14%	0%	43%	14%
COHO SALMON									
Number Below	0	0	2	2	3	1	1	1	2
Number Met	6	5	4	4	3	3	4	5	3
Number Above	0	0	0	0	0	0	0	0	0
% Below	0%	0%	33%	33%	50%	25%	20%	17%	40%
% Met	100%	100%	67%	67%	50%	75%	80%	83%	60%
% Above	0%	0%	0%	0%	0%	0%	0%	0%	0%
PINK SALMON									
Number Below	2	0	4	0	2	0	1	0	0
Number Met	2	1	0	0	2	3	1	2	2
Number Above	0	3	0	4	0	1	2	2	2
% Below	50%	0%	100%	0%	50%	0%	25%	0%	0%
% Met	50%	25%	0%	0%	50%	75%	25%	50%	50%
% Above	0%	75%	0%	100%	0%	25%	50%	50%	50%
SOCKEYE SALMON									
Number Below	6	5	1	1	9	5	7	5	0
Number Met	15	8	15	13	11	14	16	13	22
Number Above	8	15	13	14	7	6	3	9	5
% Below	21%	18%	3%	4%	33%	20%	27%	19%	0%
% Met	52%	29%	52%	46%	41%	56%	62%	48%	81%
% Above	28%	54%	45%	50%	26%	24%	12%	33%	19%

The Policy for the Management of Sustainable Salmon Fisheries (SSFP; 5 AAC 39.222, effective 2000, amended 2001) directs the Alaska Department of Fish and Game (ADF&G) to provide the Alaska Board of Fisheries (Board) with reports on the status of salmon stocks and identify any salmon stock that present a concern. In consultation with ADF&G, the Board may designate, amend, or discontinue Stocks of Concern based on stock status reports and recommendations from ADF&G. The SSFP defines



three levels of concern (Yield, Management, and Conservation) with yield being the lowest level of concern and conservation the highest level of concern (ADFG, 2024b).

Where escapements chronically (4–5 years) fail to meet expectations for harvestable yield or spawning escapements, ADF&G may recommend—and the BOF may adopt— a Stock of Concern (SOC) designation for those underperforming salmon stocks. "Yield concerns" arise from a chronic inability despite the use of specific management measures, to maintain specific yields, or harvestable surpluses, above a stock's escapement needs. "Yield Concern" is less severe than a Management Concern. "Management concerns" are precipitated by a chronic failure to maintain escapements within the bounds, or above the lower bound of the established goal, despite the use of specific management measures. Management Concern is not as severe as a "Conservation Concern". A "Conservation Concern" may arise from a failure to maintain escapements above a Sustained Escapement Threshold – SET, despite the use of specific management measures. Sustained escapement threshold is defined as a threshold level of escapement, below which the ability of the salmon stock to sustain itself is jeopardized; in practice, SET can be estimated based on lower ranges of historical escapement levels, for which the salmon stock has consistently demonstrated the ability to sustain itself; the SET is lower than the lower bound of the Biological Escapement Goal - BEG and lower than the lower bound of the Sustainable Escapement Goal – SEG.

Coho salmon stock never had to be adopted as a stock of concern (Munro, 2023).

GSSI

MarinTrust Standard for Responsible Supply Version 2.0 defined Limit Reference Points (LRP) as following: "LRP are maximum values of fishing mortality or minimum values of the biomass, which shall not be exceeded. Otherwise, it is considered that it might endanger the capacity of self-renewal of the stock."

The assessment team decided that a stock with a "Conservation Concern" can be considered a stock with biomass below the limit reference point. Although the stock has been failing to meet the escapement goals, considering that this stock is not classified as a stock of concern yet in Alaska, it is considered that it is above the limit reference point.

The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy). C.1.2 is met.

References											
ADFG. <u>https://ww</u>	2024a. w.adfg.alaska.gov/i	Statewide ndex.cfm?adfg=con	Salmon nmercialbyfish		oss .salmon_gro	Earnings ssearnings	by byspecies		Species.		
	2024b. State w.adfg.alaska.gov/i	of Alaska ndex.cfm?adfg=spe	Special cialstatus.akfi	Status shstocks	Species.	Fish	Stocks	of	Concern.		
		of Pacific Salmon Esp FedAidPDFs/FMS23		ils in Alask	a with a Rev	view of Esca	apements fr	om 201	4 to 2022.		
certification	n. Effective	e Supply of Marine 9 July ust%20Standard%2	2017.	https:	//www.mar	in-trust.con	n/sites/mar				
MSC. 2024. Alaska Salmon Fishery. Public Certification Report. Published on 11 th November 2024. https://fisheries.msc.org/en/fisheries/alaska-salmon/@@assessments#panelrecdocs											
Links											
MarinTrust	Standard clause			1.3.2.2							
FAO CCRF				7.5.3							

D.3.04, D5.01