

# IFFO RS V2.0



## FISHERY ASSESSMENT METHODOLOGY AND TEMPLATE REPORT

<b>Fishery Under Assessment</b>	<b>Pacific Ocean Perch (<i>Sebastes alutus</i>)</b>
<b>Date</b>	<b>September 2017</b>
<b>Assessor</b>	<b>Deirdre Hoare</b>

Application details and summary of the assessment outcome				
Name: Kodiak Fishmeal Company				
Address:				
Country:		Zip:		
Tel. No.		Fax. No.		
Email address:		Applicant Code		IFFO 131
Key Contact:		Title:		
Certification Body Details				
Name of Certification Body:		SAI Global Ireland		
Assessor Name	Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval	Whole fish / By-product
Deirdre Hoare	Virginia Polonio	1	Initial	By-product
Assessment Period	2016-2017			
Scope Details				
Management Authority (Country/State)		USA		
Main Species		Pacific Ocean Perch ( <i>Sebastes alutus</i> )		
Fishery Location		Central Gulf of Alaska		
Gear Type(s)		Demersal trawls, seines, beam and otter trawls, longlines		
Outcome of Assessment		Pass		
Overall Outcome		Pass		
Clauses Failed		None		
Peer Review Evaluation		Approve byproduct		
Recommendation		Approve byproduct		

<b>Assessment Determination</b>
<p>The State of Alaska manages groundfish fishery resources within state territorial waters (i.e. 0-3 nm from shore). The Alaska Board of Fisheries was established under Alaska Statute 16.05 and has control over the setting of fishing seasons, quotas, harvest levels, fishing methods and other aspects of Alaska fishery management. Chapter 28 of the Alaska Commercial Fisheries regulations describes a detailed framework for the regulation of Alaska groundfish fisheries (including pollock, Pacific cod, sablefish, Atka mackerel, lingcod and numerous rockfish and flatfish species). These regulations define permitted gear types, fishing regions, seasons, permit requirements, TACs and distribution of TACs between commercial and other fisheries, and landing requirements. The federal groundfish fisheries are managed as two stock complexes; the Gulf of Alaska (GOA) and the Bering Sea and Aleutian Islands (BSAI).</p> <p>Fisheries 3-200 nm from the Alaska coastline are managed by the US National Marine Fisheries Service (NMFS) under federal Fishery Management Plans. The Office of Sustainable Fisheries (OSF), which is part of the NMFS, implements the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006 by mandating annual catch limits and accountability measures.</p> <p>State regulations (i.e. fisheries 0-3 nm from the Alaska coast) are enforced by the Marine Enforcement Section of the Division of Alaska Wildlife Troopers. Federal regulations are enforced by the Alaska Division of the National Oceanic and Atmospheric Administration (NOAA) Office of Law Enforcement.</p> <p>Pacific ocean perch (POP) is managed as a component of the two groundfish complexes according to frequently updated Fishery Management Plans (FMP). POP in the BSAI is managed at the species level, with an annual quota applied and further subdivided between subareas and districts.</p> <p>Fisheries management in Alaska waters is supported by the Alaska Fisheries Science Centre (AFSC), a research branch of the National Oceanic and Atmospheric Administration’s (NOAA) National Marine Fisheries Service (NMFS). The AFSC plans, develops and manages scientific research programs, and conducts stock assessments, in support of fishery management throughout the state and federal waters off Alaska.</p> <p>The IUCN has not categorised <i>Sebastes alutus</i>, and it is not listed in the CITES appendices.</p>
<b>Peer Review Comments</b>
<b>Notes for On-site Auditor</b>

## General Results

General Clause	Outcome (Pass/Fail)
M1 - Management Framework	NA
M2 - Surveillance, Control and Enforcement	NA
F1 - Impacts on ETP Species	NA
F2 - Impacts on Habitats	NA
F3 - Ecosystem Impacts	NA

Note: This table should be completed for whole fish assessments only.

## Species-Specific Results

Category	Species	% landings	Outcome (Pass/Fail)	
Category A			A1	
			A2	
			A3	
			A4	
Category B				
Category C	Pacific Ocean Perch ( <i>Sebastes alutus</i> )		Pass	
Category D				

[List all Category A and B species. List approximate total %age of landings which are Category C and D species; these do not need to be individually named here]

## HOW TO COMPLETE THIS ASSESSMENT REPORT

This assessment template uses a modular approach to assessing fisheries against the IFFO RS standard.

### By-products

The process for completing the template for **by-product raw material** is as follows:

1. ALL ASSESSMENTS: Complete the Species Characterisation table with the names of the by-product species and stocks under assessment. The '% landings' column can be left empty; all by-products are considered as Category C and D.
2. IF THERE ARE CATEGORY C BYPRODUCTS UNDER ASSESSMENT: Complete clause C1 for **each** Category C by-product.
3. IF THERE ARE CATEGORY D BYPRODUCTS UNDER ASSESSMENT: Complete Section D.
4. ALL OTHER SECTIONS CAN BE DELETED. Clauses M1 - M3, F1 - F3, and Sections A and B do not need to be completed for a by-product assessment.

By-product approval is awarded on a species-by-species basis. Each by-product species scoring a pass under the appropriate section may be approved against the IFFO RS Standard.

## SPECIES CATEGORISATION

The following table should be completed as fully as the available information permits. All species regularly\* caught in the fishery should be listed along with an estimate of the proportion of the catch each species represents. The species should then be divided into Type 1 and Type 2. **Type 1 species must represent 95% of the total catch. Type 2 species may represent a maximum of 5% of the catch (see Appendix B).**

\*Species which make up less than 0.1% of landings do not need to be listed (NOTE: ETP species are considered separately). The table should be extended if more space is needed. Discarded species should be included when known.

The 'stock' column should be used to differentiate when there are multiple biological or management stocks of one species captured by the fishery. The 'management' column should be used to indicate whether there is an adequate management regime specifically aimed at the individual species/stock. In some cases it will be immediately clear whether there is a species-specific management regime in place (for example, if there is an annual TAC). In less clear circumstances, the rule of thumb should be that if the species meets the minimum requirements of clauses A1-A4, an adequate species-specific management regime is in place.

NOTE: If any species is categorised as Endangered or Critically Endangered on the IUCN Red List, or if it appears in the CITES appendices, it **cannot** be approved for use as an IFFO RS raw material. This applied to whole fish as well as by-products.

### TYPE 1 SPECIES (Representing 95% of the catch or more)

**Category A:** Species-specific management regime in place.

**Category B:** No species-specific management regime in place.

### TYPE 2 SPECIES (Representing 5% OF THE CATCH OR LESS)

**Category C:** Species-specific management regime in place.

**Category D:** No species-specific management regime in place.

Common name	Latin name	Stock	% of landings	Management	Category
Pacific Ocean Perch	<i>Sebastes alutus</i>	Central Gulf of Alaska		USA	C

Category A species are assessed through an examination of the data collection, stock assessment, management measures, and stock status relating to the species. Category B species are assessed using a risk-based assessment covering similar areas. Category C species are assessed on stock status only.

Category D species are assessed using a PSA analysis as described in the relevant section of this document.

## 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. 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. A Category C species does not meet the minimum requirements of clause C1 should be re-assessed as a Category D species.

<b>Species Name</b>		Pacific Ocean Perch ( <i>Sebastes alutes</i> ) - POP	
<b>C1</b>	<b>Category C Stock Status - Minimum Requirements</b>		
	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
<b>Clause outcome:</b>			Pass
<b>Evidence</b>			
<p>Fisheries management in Alaska waters is supported by the Alaska Fisheries Science Centre (AFSC), a research branch of the National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service (NMFS). The AFSC plans, develops and manages scientific research programs, and conducts stock assessments, in support of fishery management throughout the state and federal waters off Alaska. Fishery removals of Pacific Ocean Perch are included in the stock assessment process.</p> <p>Management policy is based on scientific analysis of survey and fishery data. In both the BSAI and GOA, POP is classified as a Tier 3a stock. The Tiers are based on the amount of information available for the species, Tier 3a has biomass estimate, life history information, estimates of maturity, recruitment, mortality and <math>F_{OFL}</math> is computed using the sloping control rule.</p> <p>For 2016 projected total (ages 2+) biomass was 457,768t. The Over Fishing Limit (OFL) is 28,431t and the Acceptable Biological Catch (ABC) was 24,437t.</p> <p>Therefore overfishing is not occurring, the stock is not overfished and it is not approaching an overfished condition.</p>			
<b>References</b>			
Gulf of Alaska 2016 POP SAFE report: <a href="https://www.afsc.noaa.gov/REFM/Docs/2016/GOApop.pdf">https://www.afsc.noaa.gov/REFM/Docs/2016/GOApop.pdf</a>			
<i>Standard clauses 1.3.2.1 - 1.3.2.4</i>			



## **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 A - Determining Resilience Ratings

The assessment of Category B species described in this assessment report template utilises a resilience rating system suggested by the American Fisheries Society. This approach was chosen because it is also used by FishBase, and so the resilience ratings for many thousands of species are freely available online. As described by FishBase, the following is the process used to arrive at the resilience ratings:

*“The American Fisheries Society (AFS) has suggested values for several biological parameters that allow classification of a fish population or species into categories of high, medium, low and very low resilience or productivity (Musick 1999). If no reliable estimate of  $r_m$  (see below) is available, the assignment is to the lowest category for which any of the available parameters fits. For each of these categories, AFS has suggested thresholds for decline over the longer of 10 years or three generations. If an observed decline measured in biomass or numbers of mature individuals exceeds the indicated threshold value, the population or species is considered vulnerable to extinction unless explicitly shown otherwise. If one sex strongly limits the reproductive capacity of the species or population, then only the decline in the limiting sex should be considered. We decided to restrict the automatic assignment of resilience categories in the Key Facts page to values of  $K$ ,  $t_m$  and  $t_{max}$  and those records of fecundity estimates that referred to minimum number of eggs or pups per female per year, assuming that these were equivalent to average fecundity at first maturity (Musick 1999). Note that many small fishes may spawn several times per year (we exclude these for the time being) and large live bearers such as the coelacanth may have gestation periods of more than one year (we corrected fecundity estimates for those cases reported in the literature). Also, we excluded resilience estimates based on  $r_m$  (see below) as we are not yet confident with the reliability of the current method for estimating  $r_m$ . If users have independent  $r_m$  or fecundity estimates, they can refer to Table 1 for using this information.”*

Parameter	High	Medium	Low	Very low
Threshold	0.99	0.95	0.85	0.70
$r_{max}$ (1/year)	> 0.5	0.16 - 0.50	0.05 - 0.15	< 0.05
$K$ (1/year)	> 0.3	0.16 - 0.30	0.05 - 0.15	< 0.05
Fecundity (1/year)	> 10,000	100 - 1000	10 - 100	< 10
$t_m$ (years)	< 1	2 - 4	5 - 10	> 10
$t_{max}$ (years)	1 - 3	4 - 10	11 - 30	> 30

[Taken from the FishBase manual, “Estimation of Life-History Key Facts”, <http://www.fishbase.us/manual/English/key%20facts.htm#resilience>]

## Appendix B – Background on the 5% catch rule

The proposed fishery assessment methodology uses a species categorisation approach to divide the catch in the assessment fishery into groups. These groups are:

- **Category A:** “Target” species with a species-specific management regime in place.
- **Category B:** “Target” species with no species-specific management regime in place.
- **Category C:** “Non-target” species with a species-specific management regime in place.
- **Category D:** “Non-target” species with no species-specific management regime in place

The distinction between 'target' and 'non-target' species is made to enable the assessment to consider the impact of the fishery on all the species caught regularly, without requiring a full assessment be conducted for each. Thus 'target' species are subjected to a more detailed assessment, while 'non-target' species are considered more briefly. For the purposes of the IFFO RS fishery assessment, 'target' and 'non-target' species are defined by their prevalence in the catch, by weight. Applicants must declare which species are considered 'target' species in the fishery, and the combined weight of these must be at least 95% of the annual catch. The remaining 5% can be made up of 'non-target' species. Note also that ETP species are considered separately, irrespective of their frequency of occurrence in the catch.

The proposed use of 5% as a limit for 'non-target' species is one area in which feedback is being sought via the public consultation. The decision to propose a value of 5% ensures consistency with other fishery assessment programmes, such as the MSC which uses 5% to distinguish between 'main' and 'minor' species (see MSC Standard, SA3.4 and GSA3.4.2); and Seafood Watch, which uses 5% when defining the 'main' species for the assessment (see Seafood Watch Standard, Criterion 2). The value is also consistent with the approach used in Version 1 of the IFFO RS Standard, in which up to 5% of the raw material could be comprised of 'unassessed' species.

**Comments on this proposition are welcomed along with any other feedback on the proposed approach.**