



# Ensuring the ecosystem performance indicators are clear and consistently applied

Impact Assessment Report

April 2021

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*The views and opinions expressed in this report do not necessarily reflect the official policy or position of the Marine Stewardship Council. This is a working paper, it represents work in progress and is part of ongoing policy development. The language used in draft scoring requirements is intended to be illustrative only, and may undergo considerable refinement in later stages.*

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How to reference this report: Van Wijk, J. 2021. Ensuring the ecosystem performance indicators are clear and consistently applied Impact Assessment Report. Published by the Marine Stewardship Council [www.msc.org], ([https://www.msc.org/docs/default-source/default-document-library/stakeholders/consultations/impact-assessments/msc-impact-assessment-report\\_ecosystems\\_april21.pdf](https://www.msc.org/docs/default-source/default-document-library/stakeholders/consultations/impact-assessments/msc-impact-assessment-report_ecosystems_april21.pdf)), 14 pages.

# 1. Purpose

This report presents a summary of the impact assessment undertaken for alternative policy options developed for the project [Ensuring the ecosystem performance indicators are clear and consistently applied](#), which is part of the MSC's [Fisheries Standard Review](#) (FSR).

This report provides a description of the options under consideration at the time of the impact assessment (November-December 2020) and a summary of the likely impacts for each of the different options.

The results of the impact assessment were used to inform the choice of recommended options, which were presented to the MSC's governance bodies in February 2021. This report was also presented as supporting background material.

# 2. Impact Assessment Framework

The aim of impact assessment is to provide clear information on the impacts of the options developed to sort out the policy issues identified in the project inception. It serves as a basis for comparing options against one another and against the business-as-usual scenario, and identify a preferred option if possible. It does not replace decision-making but is used as a tool to support the decision-making process and underpin evidenced based decision-making; increasing transparency, making trade-offs visible and reducing bias.

Impact assessment should help to:

- Specify how proposed options will tackle the identified issues and meet objectives
- Identify direct and indirect impacts, and how they occur
- Assess impacts in both qualitative and quantitative terms.
- Help find perverse or unintended consequences before they occur.
- Where possible, make risks and uncertainties known.

This is achieved by following MSC's Impact Assessment Framework that outlines when and how to undertake Impact Assessment. This ensures an efficient, systematic and consistent approach to policy development to underpin a responsive, robust and credible program. In particular, the Impact Assessment Framework defines the different types of impact (see below) and a suite of methodologies best suited to assessing each type.

The impact types used in the Impact Assessment are defined as follows:

- **Effectiveness:** The extent to which the change is deemed likely to be successful in producing the desired results and resolving the issue(s) originally identified.
- **Acceptability:** The extent that the change is considered tolerable or allowable, such that the MSC program is perceived as credible and legitimate by stakeholders.
- **Feasibility:** The practicality of a proposed change and the extent to which a change is likely to be successfully implemented by fisheries within a given setting and time period.
- **Accessibility & Retention:** The extent to which the change affects the ability of fisheries (both currently certified and those potentially entering assessment in the future) to achieve and maintain certification (i.e. changes in scores, conditions and pass rates).
- **Simplification:** The extent to which the change simplifies and does not further complicate the Standard such that it can be easily and consistently understood and applied.

- **Auditability:** The extent to which the change can objectively be assessed by Conformity Assessment Bodies (CABs) and Accreditation Services International (ASI) to determine whether the specified requirements are fulfilled, and CABs can provide scores.

The Impact Assessment report presents the results of this process, whereby each of the options for proposed changes to the Fisheries Standard are tested to understand their potential effects across the six defined impact types.

### 3. Problem statement

Some of the requirement language in the ecosystem Performance Indicators (PIs) 2.5.1, 2.5.2, and 2.5.3 is not very clear and has been subject to inconsistent application. A review of fisheries assessment reports demonstrated variation in the quality, scope and depth of rationales supporting scoring of the ecosystem PIs. This may have led to the inconsistency prevailing in the PI scores. The work highlighted that definitions for ‘ecosystem’ and ‘key (ecosystem) elements’ have been applied inconsistently between assessment reports. Confusion also exists around how the ‘key elements’ are to be considered within an assessment.

### 4. Objectives

The objective of the project is to improve consistent and effective application of the ecosystem PIs by clarifying how to define the ‘ecosystem under assessment’ and choice of ‘key elements’.

### 5. Options

#### 5.1. Option 0

Option 0, the business as usual scenario, is characterised by no changes to the current requirements. This option would retain the inconsistent scoring issues and misapplication of intent.

#### 5.2. Option 1

##### 5.2.1. Summary

Option 1 proposes that ecosystem requirements are scored by more experienced Principle 2 (P2) assessors. This option includes two pathways aimed at increasing the relevant ecosystem knowledge and experience of assessment teams:

- Option 1A – tightening the fishery team qualification and competency criteria (Table PC3 – 3.a) in the Fisheries Certification Process (FCP) and no change in the actual ecosystem requirements in the Fisheries Standard.
- Option 1B – developing additional training materials and/or facilitating calibration workshops for assessors who score the ecosystem requirements, aimed at improving consistent scoring. This option does not include any changes in the ecosystem requirements, but proposes complementary training supports/tools aimed at driving better application of these requirements.

##### 5.2.2. Proposal Option 1A

Current language and definitions in the ecosystem PIs are unclear and open for interpretation and therefore heavily rely on expert judgement. Requiring more experienced P2 assessors for scoring the ecosystem PIs, could result in more consistent scoring. Current assessor qualification and competency criteria (FCP v2.2 Table PC3 – 3.a), do not require assessment team members to have experience in research into, policy analysis for, or management of ecosystem interactions.

It is proposed to change the qualification criteria to ensure that assessors have competence over 75% of P2 components (rather than 50%) as per proposals in FCP Table PC3 (see [Table 1](#)).

**Table 1: Draft changes (in red) to FCPv2.2 Table PC3: Fishery team qualification and competency criteria.**

3. Fishing impacts on aquatic ecosystems	
Qualifications	
<ol style="list-style-type: none"> <li>1. 3 years' or more experience in research into, policy analysis for, or management of, the impact of fisheries on aquatic ecosystems including at least <del>two</del> <b>three</b> of the following topics: <ol style="list-style-type: none"> <li>i. Bycatch.</li> <li>ii. Endangered, threatened, or protected (ETP) species.</li> <li>iii. Habitats.</li> <li>iv. Ecosystem interactions.</li> </ol> </li> </ol>	
Competencies	
<ol style="list-style-type: none"> <li>i. Demonstrate knowledge of, and ability to interpret, scientific data relating to the impact of fisheries on at least 2 of the topics listed in a. above.</li> </ol>	
Verification mechanisms	
<ol style="list-style-type: none"> <li>0. CV.</li> <li>1. Employer's reference letter.</li> <li>2. Witness or office audits by an MSC-appointed accreditation body.</li> <li>3. CAB witness audits.</li> </ol>	

### 5.2.3. Proposal Option 1B

Additional training and/or calibration workshops for assessors on how to score the ecosystem requirements could improve consistency in scoring and improve alignment with MSC intent. Current training modules that the MSC provides to assessors do not have ecosystem focussed scoring exercises or case studies.

At this stage, training materials are yet to be developed. Depending on the options taken forward and the potential changes to the requirements, training materials will be created.

## 5.3. Option 2

### 5.3.1. Summary

Option 2 proposes clarification of existing language and definitions. This option will result in a change in requirement language and guidance in the Fisheries Standard. Clarification is proposed for the definitions of ‘ecosystem’ and ‘key (ecosystem) elements’. These changes would mean that ‘key elements’ impacted by the Unit of Assessment (UoA) should be identified and scored separately in line with existing requirements for P2 scoring elements.

### 5.3.2. Proposal

This option will clarify the definitions on ‘ecosystem’ and ‘key (ecosystem) elements’ with the aim of improving consistency and application of ecosystem PIs. Revisions have been informed through review of application of PIs 2.5.1, 2.5.3, and 2.5.3 by a consultant in 2016.

Whilst the requirement language of the ecosystem PIs is not very clear and open to interpretation, the intent that specific ecosystems should be identified, and all key ecosystem elements identified and assessed separately is clear. However, review of scoring text of PI2.5.1 showed that assessment teams do not always define what ecosystem or which key elements were considered. This option aims to clarify this intent by changes to the ecosystem requirements. Corresponding changes to the reporting template would facilitate this clarification and improve consistency in how key ecosystems elements are scored and improve alignment with MSC’s intent.

#### 5.3.2.1. Ecosystem

An exploratory review was carried out into the definitions and language used for defining ‘Ecosystem’ from a range of organisations, governments, and policies. The review showed that there is no globally recognised ecosystem classification (e.g. Large Marine Ecosystems, ecoregions, or FAO region) and therefore prescribing a list of ecosystems is challenging. The Fisheries Standard should allow flexibility when defining the ecosystem. This would allow fisheries to be assessed based on its spatial scale, on which data is collected by their management agency or scientific research in their region. The ecosystem requirements should be broadly applicable and provide a consistent framework with which ecosystem’s structure and function are assessed at the appropriate scale.

MSC’s definition of ‘ecosystem’ focuses on the ecological state of the key ecosystem elements on which the fishing activity has an indirect impact. MSC’s intent of the ecosystem PIs is that the UoA should not cause serious or irreversible harm to the key elements underlying the ecosystem structure and function.

The consultant identified that only half of the analysed fishery assessments (total of 25 fishery assessments on Default Tree v1.3) indicated which ecosystem was being considered when scoring PI2.5.1. Since defining the ecosystem is a key factor to determine the fishery’s impact, a new clause requiring the description of the ecosystem by assessment teams is proposed (see [Table 2](#)).

Table 2: Draft changes (in red) to requirements: Fisheries Standard v2.01 SA3.16 Ecosystem outcome PI.

### SA3.16 Ecosystem outcome PI (PI 2.5.1)

SA3.16.1 The team shall identify and describe the assessed ecosystem in relation to the spatial and temporal scale of the UoA and its intensity.

SA3.16.2 The team shall score the other components of the assessment (i.e., P1 target species, primary species, secondary species, ETP species and habitats) separately to this PI, which considers the wider ecosystem structure and function.

In addition, improvements to existing guidance (GSA3.16 Ecosystem outcome PI (PI 2.5.1) – Background), are also under consideration to reflect MSC’s intent to consider the spatial and temporal scale, and the intensity of the UoA when defining the ecosystem (as proposed in [Table 2](#)). The existing requirements for the Scale Intensity Consequence Analysis (FCP v2.2 Annex PF8) and key Low Trophic Level species requirements and guidance (Fisheries Standard v2.01 GSA2.2.9) could be used to reflect MSC’s intent and language on how to define and consider ecosystem as these requirements provide more specific language on the definition ‘ecosystem’.

#### 5.3.2.2. Key (ecosystem) elements

The review of the implementation of the ecosystem PIs showed that the majority of the analysed reports did not list the considered key (ecosystem) elements. Key elements which the UoA could not impact, e.g. spring blooms, were also scored. To clarify and support more consistent scoring, this option proposes to clarify that key elements should be identified and scored separately. Additionally, this change means that only key elements impacted by the UoA would be scored (rather than others which can not be impacted). A new clause is proposed in the Fisheries Standard SA3.16 Ecosystem outcome PI (PI 2.5.1), see [Table 3](#), and corresponding changes to the reporting template.

Table 3: Draft changes (in red) to requirements: Fisheries Standard v2.01 SA3.16 Ecosystem outcome PI.

SA3.16.3 The team should note that “key” ecosystem elements are the features of an ecosystem considered as being most crucial to giving the ecosystem its characteristic nature and dynamics, and are considered relative to the scale and intensity of the UoA. They are features most crucial to maintaining the integrity of its structure and functions and the key determinants of the ecosystem resilience and productivity.

SA3.16.4 The team shall identify and assess all relevant “key” ecosystem elements on which the UoA has an impact.

In addition, the project is exploring whether more examples of key ecosystem elements should be provided in guidance or within the requirements for explicit consideration. Current listed examples for key ecosystem elements are given in Fisheries Standard v2.01 GSA3.18.1:

*“Key ecosystem elements may include trophic structure and function (in particular key prey, predators, and competitors), community composition, productivity pattern (e.g., upwelling or spring bloom, abyssal, etc.), and characteristics of biodiversity”.*

It is unclear whether productivity patterns should be considered during assessment as key ecosystem elements, or whether additional guidance is required to indicate which types of ecosystems, or fisheries, should consider productivity patterns in the assessment.

## 6. Impacts

### 6.1. Impact assessment

Both risks (“-”) and benefits (“+”) are indicated in [Table 4](#).

**Table 4: Exploratory impact assessment.**

Impact Types	Option 0 Status quo	Option 1 More experienced assessor		Option 2 Clarify language & definitions
		1A – Tighten competence criteria	1B - Additional training	
<b>Effectiveness</b>	<ul style="list-style-type: none"> <li>- Review showed wide variety of detail in justification in scoring ecosystem PIs.</li> <li>- Review showed fisheries consistently scoring high and a low number of raised conditions on PI2.5.X.</li> </ul>	<ul style="list-style-type: none"> <li>- Language and definitions remain open for interpretation.</li> <li>+ The ecosystem PIs would be scored by a smaller group of experienced assessors. This may improve consistent scoring and meeting MSC’s intent.</li> </ul>	<ul style="list-style-type: none"> <li>- Language and definitions remain open for interpretation.</li> <li>+ Additional training may improve consistent scoring and meeting MSC’s intent.</li> <li>- Additional training on unclear requirements (therefore unclear MSC’s intent) could seem not to be effective in resolving inconsistent scoring. However, this option is considered to be effective when MSC’s intent is</li> </ul>	<ul style="list-style-type: none"> <li>+ More prescriptive requirements aiming for more consistent scoring and less need of interpretation/ expert judgement.</li> </ul>

Impact Types	Option 0 Status quo	Option 1 More experienced assessor		Option 2 Clarify language & definitions
		1A – Tighten competence criteria	1B - Additional training	
			clear (through e.g. clarifications).	
<b>Acceptability</b>	<ul style="list-style-type: none"> <li>- The MSC has made public statement on delivering changes to the ecosystem PIs as part of the FSR.</li> <li>+ Common agreement among P2 assessors that there is no urgent fix needed as other areas are more pressing to be improved in the Standard.</li> </ul>	<ul style="list-style-type: none"> <li>- Stakeholders might feel this option will not resolve the issue. Expectation of a more significant change to the Standard.</li> <li>- CABs might have difficulties contracting the required personnel.</li> <li>+ The intended effect of the option would be more consistently applied ecosystem requirements.</li> </ul>	<ul style="list-style-type: none"> <li>- Stakeholders might feel this option will not resolve the issue. Expectation of a more significant change to the Standard.</li> <li>- Assessor will need to follow additional training which is an extra burden on them.</li> <li>+ No foreseen impact on fishery clients.</li> </ul>	<ul style="list-style-type: none"> <li>- Stakeholders might feel this option will not resolve the issue. Expectation of a more significant change to the Standard.</li> <li>+ The intended effect of the option would be more consistently applied ecosystem requirements and appropriate scoring.</li> </ul>
<b>Feasibility</b>	+The status quo is feasible.	- Limited number of assessors with required ecosystem interactions experience. This could lead to an	+ No changes to the ecosystem requirements and therefore this option is technically	+ Clarifying the language and definition would be technically feasible for fishery partners as it does not aim to change the

Impact Types	Option 0 Status quo	Option 1 More experienced assessor		Option 2 Clarify language & definitions
		1A – Tighten competence criteria	1B - Additional training	
		<p>increase in assessment cost for the fishery clients.</p> <p>+ No changes to the ecosystem requirements and therefore this option is technically feasible for fishery partners.</p>	<p>feasible for fishery partners.</p> <p>+ No increase in cost is foreseen for fishery partners.</p>	<p>performance bar for fisheries.</p> <p>+ No increase in cost is foreseen for fishery partners.</p>
<b>Accessibility and retention</b>	<p>+ No risk. The status quo will not affect retention of fisheries in the MSC Program, accessibility is expected to remain high given the low number of set condition in current fisheries.</p>	<p>- Limited number of assessors with required ecosystem interactions experience could lead to increase in cost for the fishery client in future assessments. This could affect accessibility to the MSC Program, and the risk is potentially bigger for fisheries in the Global South.</p>	<p>+ No risk in terms of retention or accessibility is expected.</p>	<p>+ No risk in terms of retention or accessibility is expected. This option would clarify the intent on how to score the PIs and should not change the performance bar.</p> <p>- Some assessments scored ecosystem elements on which the fishery did not have an impact on, boosting the score. Impact is unknown at this stage, but is not expected to lead to major changes in final P2</p>

Impact Types	Option 0 Status quo	Option 1 More experienced assessor		Option 2 Clarify language & definitions
		1A – Tighten competence criteria	1B - Additional training	
				<p>score. More impact testing is needed.</p> <p>- Combining some of the information SIs to reduce confusion might lead to minor score changes. Impact is unknown at this stage, but is not expected to lead to major changes in final P2 score. More impact testing is needed.</p>
<b>Simplification</b>	- The status quo will result in ambiguous and redundant PIs within the Standard.	- No changes to language or definitions in the Standard and therefore no simplification of the Standard.	- No changes to language or definitions in the Standard and therefore no simplification of the Standard.	+ Clarification of the language and definitions may simplify the requirements by avoiding confusion.
<b>Auditability</b>	- Used language and definitions are open for interpretation and therefore difficult to audit by CABs.	- No changes will be made to the language or definitions and therefore are still open for interpretation by CABs.	- No changes will be made to the language or definitions and therefore are still open for interpretation by CABs.	+ Requirement language and used definitions are not yet finalised in this option, but it is not anticipated that the proposed revisions would create auditability issues.

Impact Types	Option 0 Status quo	Option 1 More experienced assessor		Option 2 Clarify language & definitions
		1A – Tighten competence criteria	1B - Additional training	
		+ As the current language relies heavily on expert judgement, having a smaller group of experienced ecosystem assessors may lead to more consistent scoring and to an improved selection of scored key elements.		

## 6.2. Consultant report

In 2016, a review was completed on the implementation of the ecosystem requirements. The consultant also recommended improvements to the current requirements on how to ensure more consistent and robust assessment outcomes. The recommendations related to the explored options (see section [5: Options](#)) include:

1. Productivity patterns (e.g., upwelling or spring bloom, etc.) should not be considered key ecosystem elements in the context of a fisheries assessment, as there is no feasible way for a fishery to disrupt these major processes to a point where there would be serious or irreversible harm. As such, any assessment team that identifies a productivity pattern as a key ecosystem element is effectively guaranteeing their fishery a scoring boost.
2. MSC guidance should be updated to include a definition of ‘ecosystem’, and the instructions in the reporting template should include a requirement to identify the ecosystem in which the fishery operates.
3. A default list of potential ecosystem elements should be provided, with assessment teams required to indicate which ones were ‘key’ ecosystem elements for the fisheries under assessment. Fisheries could then score 80 if no ecosystem elements were considered to be ‘key’ or key ones were not impacted in any significant way, but all would need to be considered to meet the SG100 level. This would also encourage assessment teams to provide a more rounded picture of the ecosystem in which the fishery operates than is necessarily the case at present.

### 6.3. P2 assessor workshop

In 2019, a P2 calibrating workshop with auditors was held to identify sources of problems in ecosystem PI scoring. Received feedback related to the explored options (see section [5: Options](#)) include:

- Current reference to "elements" and "components" not clear and not consistently applied.
- Some assessors score individual aspects of ecosystem, however others do not as it would weigh every aspects/ elements equally in the outcome.
- Scoring all listed elements could dilute the score. Noted that assessors do not feel that all listed elements in the Standard are relevant.

### 6.4. Additional options and impacts

The option to completely remove the ecosystem PIs was considered, but was dropped following exploratory consideration. It was indicated by the MSC Technical Advisory Board Working Group (TAB WG) in 2019 and assessors during the P2 workshop in 2019 to retain the ecosystem PIs. Reasons cited included that the ecosystem requirements are an important component (e.g. for Fish Aggregating Device (FAD) tuna and enhanced bivalve fisheries amongst other), and a greater understanding of ecosystem function is now being generated globally. Keeping the ecosystem PIs, the MSC would encourage this developmental process and allow requirements to be updated when best practice has been globally accepted and implemented.

## 7. Discussion and conclusion

Option 0, the business as usual scenario, would retain the inconsistent scoring issues and misapplication of intent.

Option 1A would be an extra burden for CABs and potentially a cost increase for fishery clients. Tightening the assessor competency criteria could result in difficulties for CABs when contracting the required personnel and an increase in assessment costs for fishery clients. This option would likely affect the accessibility for fisheries in the MSC program. For option 1B it is not expected that fishery clients or the accessibility of the MSC program will be affected but will improve consistent scoring.

Option 2 is considered to be effective, feasible and would simplify the Fisheries Standard. Clarifying some of the language and the definitions would allow more consistent scoring and reduce the need for expert judgement.